System Monitoring Commands

hostaction mgmt-dhcp-renew

To renew the DHCP IP address on the management interface, use the **hostaction mgmt-dhcp-renew** command in privileged EXEC mode.

hostaction mgmt-dhcp-renew

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Example

The following command renews the DHCP IP address on the management interface:

```
nfvis# hostaction mgmt-dhcp-renew
```

hostaction wan-dhcp-renew

To renew the DHCP IP address on the WAN interface, use the **hostaction wan-dhcp-renew** command in privileged EXEC mode.

hostaction wan-dhcp-renew

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Example

The following command renews the DHCP IP address on the WAN interface:

```
nfvis# hostaction wan-dhcp-renew
```

hostaction reboot

To reboot the Cisco NFVIS host, use the **hostaction reboot** command in privileged EXEC mode.

hostaction reboot

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Usage Guidelines

When you run this command, the connectivity is lost and the Cisco NFVIS host is rebooted. After the reboot is complete, you can again connect to the Cisco NFVIS host.

Example

```
nfvis# hostaction reboot
```

hostaction shutdown

To shut down the Cisco NFVIS host, use the **hostaction shutdown** command in privileged EXEC mode.

hostaction shutdown

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Usage Guidelines

After shutting down the Cisco NFVIS host, if you want to power it on again, use CIMC.

Example

```
nfvis# hostaction shutdown
```

show resources cpu-info allocation

To get information on the number of CPUs allocated to VMs and the CPUs that are already used by the VMs, use the **show resources cpu-info allocation** command in privileged EXEC mode.

show resources cpu-info allocation [**total-sockets** | **cores-per-socket** | **logical-cpus-used-by-system** | **logical-cpus-used-by-vnfs** | **logical-cpus-used-dedicated** | **logical-cpus-used-sharable** | **total-logical-cpus**]

Syntax Description

total-sockets	(Optional) Total sockets allocated.
cores-per-socket	(Optional) Number of cores per socket.
logical-cpus-used-by-system	(Optional) Number of CPUs used by the system.
logical-cpus-used-dedicated	(Optional) Number of dedicated CPUs.
total-logical-cpus	(Optional) Total number of CPUs.
logical-cpus-used-by-vnfs	(Optional) Number of CPUs used by VNFs.

Command Default

Complete information about CPU allocation to VMs.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Example

The following is the sample output from the **show resources cpu-info allocation** command:

```
nfvis# show resources cpu-info allocation
resources cpu-info allocation total-sockets 1
resources cpu-info allocation cores-per-socket 8
resources cpu-info allocation total-logical-cpus 16
resources cpu-info allocation logical-cpus-used-by-system 2
resources cpu-info allocation logical-cpus-used-by-vnfs 14
resources cpu-info allocation logical-cpus-used-dedicated 12
resources cpu-info allocation logical-cpus-used-sharable 2
```

show resources cpu-info cpus

To display information on the VMs running in all the physical CPUs or a specific physical CPU in the system, use the **show resources cpu-info cpus** command in privileged EXEC mode.

show resources cpu-info cpus [**cpu** *cpu-id*]

Syntax Description

cpu *cpu-id*	(Optional) The ID of the physical CPU.

Command Default

Display information on the VMs running in all the physical CPUs.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Example

The following is a sample output from the **show resources cpu-info cpus cpu 7** command:

```
nfvis# show resources cpu-info cpus cpu 7

CPU  SOCKET  CORE   SYSTEM                              LOW      VCPU
ID   ID      ID     USE       NAME                VCPUS  LATENCY  ID
-------------------------------------------------------------------------
7    0       7      false     1471588629.ROUTER3  4      true     0
```

show resources cpu-info vnfs

To display information on the CPUs and VCPUs that are allocated to each of the VMs, or a specific VM in the system, use the **show resources cpu-info vnfs** command in privileged EXEC mode.

show resources cpu-info vnfs [**vnf** *vnf-name*]

Syntax Description

vnf *vnf-name*	(Optional) The name of the vnf.

Command Default

Display information on the CPUs and VCPUs that are allocated to each of the VMs.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

Example

The following is the sample output from the **show resources cpu-info vnfs vnf 1472148662.ROUTER2** command:

```
nfvis# show resources cpu-info vnfs vnf 1472148662.ROUTER2
       LOW       VCPU      SOCKET        CORE     CPU
NAME                           VCPUS   LATENCY   ID        ID            ID       ID
-------------------------------------------------------------------------------------------
1472148662.ROUTER2             2       true      0         0             3        3
                                                           0             3        11

                                                           0             2        10
```

Note In the example, when low latency is true, no VCPUs are assigned to this VM; instead CPUs 3, 11 and 10 are entirely reserved for this VM.

show resources precheck vnf

To check if there are sufficient resources for the deployment of a new VM or for updating a deployed VM, use the **show resources precheck vnf** in privileged EXEC mode.

show resources precheck vnf {*vm-name flavor-name low-latency* {**true** | **false**}}

Syntax Description

vm-name	The name of the VM. For updating an existing VM, the VM name must be **deployment-name.vm-group-name**
flavor-name	The name of the flavor.
low-latency	This can be either true or false. If true, the VM needs dedicated CPUs.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.5.1	This command was introduced.

The following is a sample output from the **show resources precheck vnf newvnf csr1kv-medium true** command:

```
nfvis# show resources precheck vnf newvnf csr1kv-medium true
VNF                              SUFFICIENT
NAME  FLAVOR NAME  LOW LATENCY  RESOURCES   CAUSE
-------------------------------------------------------------------------------
newvnf     isr1kv-medium true    false  No enough CPU resources
```

The table below describes the significant fields shown in the display:

Table 1: show resources precheck Field Description

Field	Description
VNF Name	Name of the VM
Flavor Name	The flavor name of the VM.
Low Latency	If true, the VM needs dedicated CPUs.
Sufficient Resources	Sufficient resources to deploy the VM.

show system-monitoring host cpu

To display the host CPU statistics, use the **show system-monitoring host cpu** command in privileged EXEC mode.

show system-monitoring host cpu [{**stats** | **table**} [**cpu-usage** *duration* [**state** *state*]]]

Syntax Description

stats	Displays the CPU statistics.
table	Displays brief CPU statistics.
cpu-usage *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.
state *state*	Specifies the CPU state. Valid states are **non-idle**, **interrupt**, **nice**, **system**, **user**, and **wait** . Default state is **non-idle**. This parameter is available only with **stats** parameter.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring host cpu stats
system-monitoring host cpu stats cpu-usage 5min state non-idle
 collect-start-date-time 2017-03-20T08:58:40-00:00
 collect-interval-seconds 10
 cpu
 id 0
 usage-percentage "[2.11, 3.64, 1.12, 1.29, 1.16, 0.83, 1.14, 1.7, 3.27, 2.06, 2.43, 1.8,
2.52, 1.63, 1.85, 1.53, 3.38, 2.2, 2.08,
 1.74, 1.25, 1.69, 1.6, 1.51, 1.63, 1.85]"
 cpu
 id 1
 usage-percentage "[0.47, 0.2, 0.23, 0.47, 0.21, 0.32, 0.47, 0.2, 0.23, 0.48, 0.29, 0.25,
0.65, 0.2, 0.23, 0.47, 0.21, 0.32, 0.46,
 0.13, 0.41, 0.48, 0.3, 0.33, 0.55, 0.11, 0.23]"
 cpu
 id 2
 usage-percentage "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0]"
...

nfvis# show system-monitoring host cpu table
                      MIN        MAX        AVERAGE
DURATION ID STATE      PERCENTAGE PERCENTAGE PERCENTAGE
```

```
------------------------------------------------------------
5min      0  non-idle   1.25        3.38        1.93
             interrupt  0.0         0.0         0.0
             nice       0.0         0.0         0.0
             softirq    0.0         0.09        0.0
             steal      0.0         0.0         0.0
             system     0.43        1.68        0.78
             user       0.34        0.86        0.6
             wait       0.0         1.86        0.58
          1  non-idle   0.11        0.65        0.34
             interrupt  0.0         0.0         0.0
             nice       0.0         0.0         0.0
             softirq    0.0         0.01        0.0
             steal      0.0         0.0         0.0
             system     0.01        0.28        0.14
             user       0.02        0.37        0.19
             wait       0.0         0.0         0.0
```

show system-monitoring host disk

To display the statistics about the host disk, use the **show system-monitoring host disk** command in privileged EXEC mode.

show system-monitoring host disk stats [{**disk-operations** | **disk-space**} *duration* [**collect-interval-seconds** | **collect-start-date-time** | **disk** | **mount-point**]]

Syntax Description

stats	Displays the disk statistics.
disk-operations	Displays the disk operation statistics.
disk-space	Displays the disk space statistics.
duration	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.
collect-interval-seconds	Displays the collection interval in seconds.
collect-start-date-time	Displays the statistics by the start date and time of data collection.
disk	Displays the disk statistics by disk name. This parameter is available only with **disk-operations** parameter.
mount-point	Displays the disk statistics by mount name. This parameter is available only with **disk-space** parameter.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring host disk stats disk-operations 1min
system-monitoring host disk stats disk-operations 1min
 collect-start-date-time 2017-03-20T09:24:20-00:00
 collect-interval-seconds 10
 disk
 name disk-sda
 io-time-ms            [54.11, 62.98]
 io-time-weighted-ms   [4990.48, 6232.35]
 merged-reads-per-sec  [0.0]
 merged-writes-per-sec [4.77]
 bytes-read-per-sec    [0.0]
 bytes-written-per-sec [202506.24]
 reads-per-sec         [0.0, 0.0]
 writes-per-sec        [38.68, 40.05]
 time-per-read-ms      []
```

```
 time-per-write-ms     []
 pending-ops           [0.0, 0.0, 0.0]
...

nfvis# show system-monitoring host disk stats disk-space 5min
system-monitoring host disk stats disk-space 5min
 collect-start-date-time 2017-03-20T09:27:30-00:00
 collect-interval-seconds 10
 mount-point
 name /boot
 free-GB "[0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33,
0.33, 0.33, 0.33, 0.33, 0.33, 0.33, 0.33,
 0.33, 0.33, 0.33]"
 used-GB "[0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1,
 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1,
 0.1, 0.1]"
 reserved-GB "[0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03, 0.03,
 0.03, 0.03, 0.03, 0.03, 0.03, 0.03,
 0.03, 0.03, 0.03, 0.03]"
 mount-point
 name /data
 free-GB "[844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0,
844.0, 844.0, 844.0, 844.0, 844.0, 844.0,
 844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0, 844.0]"
 used-GB "[6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48,
6.48, 6.48, 6.48, 6.48, 6.48, 6.48, 6.48,
 6.48, 6.48, 6.48]"
 reserved-GB "[45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54,
 45.54, 45.54, 45.54, 45.54, 45.54, 45.54,
 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54, 45.54]"
...
```

show system-monitoring host memory

To display the statistics about the host memory, use the **show system-monitoring host memory** command in privileged EXEC mode.

show system-monitoring host memory [{**stats** | **table**} [**mem-usage** *duration*]]

Syntax Description

stats	Displays detailed memory statistics.
table	Displays brief memory statistics.
mem-usage *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring host memory stats
system-monitoring host memory stats mem-usage 5min
 collect-start-date-time 2017-03-20T09:29:40-00:00
 collect-interval-seconds 10
 buffered-MB "[261.65, 261.67, 261.69, 261.7, 261.71, 261.72, 261.74, 261.75, 261.75, 261.76,
 261.78, 261.78, 261.79, 261.79,
 261.8, 261.8, 261.81, 261.82, 261.82, 261.83, 261.84, 261.84, 261.85, 261.85, 261.86,
261.86, 261.86, 261.86]"
 cached-MB "[7191.49, 7191.49, 7191.5, 7191.5, 7191.51, 7191.5, 7191.51, 7191.5, 7191.51,
7191.51, 7191.5, 7191.51,
7191.51, 7191.51, 7191.51, 7191.51, 7191.51, 7191.51, 7191.51, 7191.51, 7191.51, 7191.51,
7191.51, 7191.51, 7191.51,
7191.51, 7191.51]"
 free-MB "[45447.74, 45447.77, 45447.96, 45447.97, 45447.79, 45447.46, 45447.37, 45447.6,
45447.76, 45447.66, 45447.97,
45447.39, 45446.85, 45446.71, 45447.98, 45447.98, 45448.18, 45446.67, 45448.17, 45447.94,
45448.23, 45447.61, 45447.74,
45447.58, 45448.39, 45448.02, 45448.05, 45448.02]"
 used-MB "[10909.11, 10908.99, 10908.7, 10908.71, 10908.85, 10909.15, 10909.13, 10909.09,
10908.87, 10908.84, 10908.64,
10909.14, 10909.76, 10909.85, 10908.65, 10908.65, 10908.46, 10909.86, 10908.41, 10908.59,
10908.32, 10908.83, 10908.75,
10909.0, 10908.17, 10908.6, 10908.6, 10908.58]"
 slab-recl-MB "[295.25, 295.25, 295.25, 295.25, 295.25, 295.25, 295.25, 295.25, 295.25,
295.25, 295.26, 295.26, 295.26,
295.27, 295.27, 295.27, 295.27, 295.27, 295.27, 295.27, 295.27, 295.27, 295.27]"
 slab-unrecl-MB "[57.19, 57.26, 57.32, 57.29, 57.32, 57.33, 57.42, 57.23, 57.27, 57.4,
57.28, 57.35, 57.25, 57.3, 57.21,
57.21, 57.2, 57.3, 57.25, 57.3, 57.26, 57.36, 57.3, 57.22, 57.24, 57.16, 57.14, 57.18,
57.28]"
```

```
nfvis# show system-monitoring host memory table mem-usage 1min
                      MIN         MAX         AVERAGE
DURATION TYPE         MIN         MAX     AVERAGE
-------------------------------------------------
1min     buffered-MB   0         0       0
         cached-MB     0         0       0
         free-MB       0         0       0
         slab-recl-MB  295.27    295.27  295.27
         slab-unrecl-MB 57.28    57.28   57.28
         used-MB       0         0       0
```

show system-monitoring host port

To display the statistics about the host ports, use the **show system-monitoring host port** command in privileged EXEC mode.

show system-monitoring host port [{**stats** | **table**} [**port-usage** *duration*]]

Syntax Description

stats	Displays detailed port statistics.
table	Displays brief port statistics.
port-usage *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Examples

```
nfvis# show system-monitoring host port stats
system-monitoring host port stats port-usage 5min
 collect-start-date-time 2017-03-20T09:42:30-00:00
 collect-interval-seconds 10
 port
 name eth0
 total-packets-per-sec "[36.82, 20.43, 17.25, 18.49, 17.55, 18.05, 18.42, 18.48, 24.75,
18.73, 27.23, 42.25, 20.83, 18.28, 17.66,
 21.24, 16.68, 20.95, 21.01, 25.17, 20.79, 20.47, 55.73]"
 rx-packets-per-sec "[36.28, 20.43, 17.22, 18.2, 17.36, 17.93, 18.15, 18.47, 24.64, 18.53,
 27.01, 41.87, 20.65, 18.26, 17.47,
21.13, 16.48, 20.75, 20.83, 25.14, 20.52, 19.84, 49.61]"
 tx-packets-per-sec "[0.54, 0.0, 0.03, 0.29, 0.19, 0.12, 0.27, 0.01, 0.11, 0.2, 0.22, 0.38,
 0.18, 0.02, 0.19, 0.11, 0.2, 0.2,
0.18, 0.03, 0.27, 0.63, 6.12]"
 total-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]"
 rx-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]"
 tx-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]"
 ...

nfvis# show system-monitoring host port table
URATION NAME COLLECT START DATE TIME SECONDS STATUS ADDRESS PACKETS PACKETS PER SEC PER SEC

-----------------------------------------------------------------------------------------------------
```

```
5min eth0 2017-03-20T09:44:10-00:00 10        up      NA      4814    55       16.6    0.19
5min eth1 2017-03-20T09:44:10-00:00 10        up      NA      5330    5        18.38   0.02
5min eth2 2017-03-20T09:44:10-00:00 10        down    NA      0       0         0.0    0.0
5min eth3 2017-03-20T09:44:10-00:00 10        down    NA      0       0         0.0    0.0
5min eth4 2017-03-20T09:44:10-00:00 10        down    NA      0       0         0.0    0.0
5min eth5 2017-03-20T09:44:10-00:00 10        down    NA      0       0         0.0    0.0
```

show system-monitoring vnf vcpu

To display the CPU statistics for VNFs running on the host, use the **show system-monitoring vnf vcpu** command in privileged EXEC mode.

show system-monitoring vnf vcpu stats [**vcpu-usage** *duration*]

Syntax Description

stats	Displays the VNF CPU statistics.
vcpu-usage *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring vnf vcpu stats
system-monitoring vnf vcpu stats vcpu-usage 5min
 vnf ISRv
 collect-start-date-time 2017-03-20T06:49:50-00:00
 collect-interval-seconds 10
 total-percentage "[55.05, 65.35, 73.35, 70.23, 58.28, 52.08, 52.23, 53.05, 52.88, 53.23,
56.28, 58.45, 54.85, 55.05, 60.03,
54.18, 33.33, 16.9, 13.33, 12.15, 12.2, 12.13, 12.0, 12.8, 12.83, 11.98, 11.98]"
 vcpu
 id 0
 vcpu-percentage "[94.55, 75.35, 66.75, 78.7, 92.8, 100.0, 100.0, 100.0, 100.0, 100.0,
100.0, 99.85, 91.25, 86.45, 83.4, 72.8,
41.0, 9.3, 5.05, 4.8, 4.85, 4.65, 4.7, 4.95, 4.85, 4.65, 4.7, 4.6, 4.95]"
 vcpu
 id 1
 vcpu-percentage "[14.2, 53.65, 78.25, 59.7, 22.9, 3.75, 4.0, 5.8, 5.6, 6.2, 12.3, 16.35,
17.1, 16.75, 19.5, 23.15, 22.05, 22.3,
21.45, 19.45, 19.55, 19.55]"
...
```

show system-monitoring vnf disk

To display the disk statistics for VNFs running on the host, use the **show system-monitoring vnf disk** command in privileged EXEC mode.

show system-monitoring vnf disk stats [**disk-operations** *duration*]

Syntax Description

stats	Displays the VNF disk statistics.
disk-operations *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring vnf disk stats
system-monitoring vnf disk stats disk-operations 5min
 vnf 1489446885.ROUTER
 collect-start-date-time 2017-03-20T09:55:30-00:00
 collect-interval-seconds 10
 disk
 disk-name vda
 bytes-read-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0]"
 bytes-written-per-sec "[92.16, 696.32, 6266.88, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 204.8, 1843.2, 0.0, 40.96, 368.64,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 30.72]"
 reads-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0]"
 writes-per-sec "[0.09, 0.08, 0.72, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.03, 0.27,
 0.0, 0.01, 0.09, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.03, 0.27]"
 disk
 disk-name hdd
 bytes-read-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0]"
 bytes-written-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0]"
 reads-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0]"
 writes-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
```

```
0.0, 0.0, 0.0, 0.0, 0.0]"
...
```

show system-monitoring vnf memory

To display the memory statistics for VNFs running on the host, use the **show system-monitoring vnf memory** command in privileged EXEC mode.

show system-monitoring vnf memory stats [**mem-usage** *duration*]

Syntax Description

stats	Displays the VNF memory statistics.
mem-usage *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring vnf memory stats
system-monitoring vnf memory stats mem-usage 5min
 vnf 1489446885.ROUTER
 collect-start-date-time 2017-03-20T09:53:20-00:00
 collect-interval-seconds 10
 total-MB "[4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0,
 4096.0, 4096.0, 4096.0, 4096.0,
4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0]"
 rss-MB "[4175.93, 4175.93, 4175.93, 4175.93, 4175.93, 4175.93, 4175.93, 4175.93,
 4175.93, 4175.93, 4175.93, 4175.93,
4175.93, 4176.13, 4177.73, 4175.95, 4175.95, 4175.95, 4175.95, 4175.95, 4175.95, 4175.95,
4175.95, 4175.95, 4175.95, 4175.95,
4175.95]"
 vnf 1489448227.OTHER
 collect-start-date-time 2017-03-20T09:53:20-00:00
 collect-interval-seconds 10
 total-MB "[256.0, 256.0, 256.0, 256.0, 256.0, 256.0, 256.0, 256.0, 256.0, 256.0, 256.0,
256.0, 256.0, 256.0, 256.0, 256.0, 256.0,
 256.0, 256.0, 256.0, 256.0, 256.0, 256.0, 256.0]"
 rss-MB "[113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66,
113.66, 113.66, 113.66, 113.66, 113.66, 113.66,
 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66, 113.66,
113.66, 113.66, 113.66]"
 vnf 1489532063.ROUTER2
 collect-start-date-time 2017-03-20T09:53:20-00:00
 collect-interval-seconds 10
 total-MB "[4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0,
 4096.0, 4096.0, 4096.0, 4096.0,
4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0, 4096.0]"
 rss-MB "[4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.98,
 4147.98, 4147.98, 4147.98, 4147.98,
4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.98, 4147.96, 4147.96, 4147.96,
```

```
4147.96, 4147.96]"
...
```

show system-monitoring vnf port

To display the port statistics for VNFs running on the host, use the **show system-monitoring vnf port** command in privileged EXEC mode.

show system-monitoring vnf port stats [**port-usage** *duration*]

Syntax Description

stats	Displays the VNF port statistics.
port-usage *duration*	Specifies the statistics duration. Valid values are **1min**, **5min**, **15min**, **30min**, **1h**, **6h**, **1d**, **5d**, and **30d**. Default duration is **5min**.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```
nfvis# show system-monitoring vnf port stats
system-monitoring vnf port stats port-usage 5min
 vnf 1489446885.ROUTER
 collect-start-date-time 2017-03-20T09:56:50-00:00
 collect-interval-seconds 10
 port
 port-name vnic0
 total-packets-per-sec "[0.78, 0.62, 0.8, 0.78, 0.64, 0.96, 0.6, 0.64, 0.96, 0.6, 0.64,
0.96, 0.62, 0.8, 0.78, 0.62, 0.8, 0.78,
0.62, 0.8, 0.78, 0.62, 0.81, 0.89]"
 rx-packets-per-sec "[0.39, 0.31, 0.4, 0.39, 0.32, 0.48, 0.3, 0.32, 0.48, 0.3, 0.32, 0.48,
 0.31, 0.4, 0.39, 0.31, 0.4, 0.39, 0.31,
 0.4, 0.39, 0.31, 0.4, 0.4]"
 tx-packets-per-sec "[0.39, 0.31, 0.4, 0.39, 0.32, 0.48, 0.3, 0.32, 0.48, 0.3, 0.32, 0.48,
 0.31, 0.4, 0.39, 0.31, 0.4, 0.39, 0.31,
 0.4, 0.39, 0.31, 0.41, 0.49]"
 total-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0]"
 rx-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0]"
 tx-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0]"
 port
 port-name vnic1
 total-packets-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0]"
 rx-packets-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
```

```
0.0, 0.0, 0.0, 0.0]"
 tx-packets-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0]"
 total-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0]"
 rx-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0]"
 tx-errors-per-sec "[0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0]"
...
```