



Ports and Port Channel Commands

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hostaction pnic-breakout

To change the PNIC mode from 2x40G to 4x10G or from 4x10G to 2x40G, use the **hostaction pnic-breakout device** command in privileged EXEC mode.

hostaction pnic-breakout device *number* **mode** *pnic mode*

Syntax Description	pnic-breakout Changes the PNIC mode from 2x40G to 4x10G or vice-versa.				
	device <i>number</i> Specifies the number of devices on which the mode must be changed.				
	mode <i>pnic mode</i> Specifies the desired PNIC mode (4x10 or 2x40).				
Command Default	None				
Command Modes	Privileged EXEC (#)				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.7.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.7.1	This command was introduced.
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Example

```

nfvis# hostaction pnic-breakout device 1 mode 4x10
Warning: Will reboot the system after the mode is changed on the 40G PNIC. All PNIC
configuration like adminstatus, duplex, lldp, promiscuous, speed, sriov, track-state
will be lost and set to default.
Are you sure you want to perform the PNIC breakout? [no,yes] yes

System message at 2021-06-02 21:15:36...
Commit performed ny via tcp using system.

Broadcast message from root@nfvis (Wed 2021-06-02 21:15:36 UTC):

The system is going down for reboot at Wed 2021-06-02 21:16:36 UTC!

```

hostaction pnic-breakout force

To forcefully breakout from 2x40G mode to 4x10G mode or vice-versa, use the **hostaction pnic-breakout force** command in privileged EXEC mode. This command is used exclusively for return merchandise authorization (RMA) cases.

```
hostaction pnic-breakout force device number mode pnic mode
```

Syntax Description

pnic-breakout	Changes the PNIC mode from 2x40G to 4x10G or vice-versa.
force	Forces the PNIC mode change.
device number	Specifies the number of devices on which the mode must be changed.
mode pnic mode	Specifies the desired PNIC mode (2x40 or 4x10).

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
4.7.1	This command was introduced.

Example

```
nfvis# hostaction pnic-breakout force device 1 mode 4x10
Warning: Will reboot the system after the mode is changed on the 40G PNIC. All PNIC
configuration like adminstatus, duplex, lldp, promiscuous, speed, sriov, track-state
will be lost and set to default.
Are you sure you want to perform the PNIC breakout? [no,yes] yes

Broadcast message from root@nfvis (Wed 2021-06-02 21:38:53 UTC):

The system is going down for reboot at Wed 2021-06-02 21:39:53 UTC!
```

pnice

To modify the configuration of an Ethernet port or to create a port channel, use the **pnice** command. To set an Ethernet port to its default settings or to delete a port channel, use the **no** form of the command.

```
pnice name [adminstatus {up | down}] [type {ethernet | port_channel}] [bond_mode
{active-backup | balance-slb | balance-tcp}] [lacp_type {active | passive | off}] [member_of
portchannel_name] [trunks vlan_num] [lldp {enabled | disabled}]
```

```
no pnice name [adminstatus] [type] [bond_mode] [lacp_type] [lldp] [member_of
portchannel_name]
```

Syntax Description

<i>name</i>	Specifies the name of the port.
adminstatus	Brings a port up or down administratively. Valid values are up and down . Note adminstatus is not supported on port channel.
type	Specifies the type of the port. Valid values are ethernet and port_channel . To create a port channel, you must specify the value as port_channel .
bond_mode	Specifies the bond mode for a port channel. Valid values are active-backup , balance-slb , and balance-tcp . Default is balance-tcp .
lacp_type	Specifies the LACP type for a port channel. Valid values are off , active , and passive . Default is off .
member_of <i>portchannel_name</i>	Adds the port to the specified port channel.
trunks <i>vlan_num</i>	Specifies the VLANs. Valid range is from 1 to 4096. Default is VLAN 1. Enter VLANs separated by commas, VLAN ranges separated by dashes, or a combination of both.
lldp	Enables or disables LLDP on a port. Valid values are enable and disable . Default is disable . Note lldp is not supported on port channel.

Command Default

None

Command Modes

Global configuration (config)

Command History

Release Modification

3.7.1 This command was introduced.

Example

```
nfvis# config
nfvis(config)# pnic pc type port_channel
nfvis(config-pnic-pc)# commit
nfvis(config-pnic-pc)# end
```

Example

```
nfvis# config
nfvis(config)# no pnic eth2 member_of pc
nfvis(config-pnic-eth2)# commit
nfvis(config-pnic-eth2)# end
```

show nic

To display the various NIC cards inserted in the CSP device, use the **show nic** command in privileged EXEC mode.

show nic

Syntax Description This command has no keywords or arguments.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	4.7.1	This command was introduced.

Example

```

nfvis# show nic
SLOTID  ADAPTER                                VENDOR  DEVID  MODE  DEVNO  PNICs
-----
1       Intel X520 dual port adapter                8086    10fb   NA    NA     ['eth1-1', 'eth1-2']
3       Intel X710-DA4 Quad Port 10Gb SFP+        8086    1572   NA    NA     ['eth3-1', 'eth3-2',
    converged NIC                               'eth3-3', 'eth3-4']
2       Intel XL710-QDA2 Dual Port 40Gb           8086    1583   2x40  1      ['eth2-1', 'eth2-2']
    QSFP converged NIC
5       Intel i350 Quad Port 1Gb Adapter           8086    1521   NA    NA     ['eth5-1', 'eth5-2',
    'eth5-3', 'eth5-4']
4       Intel X520 dual port adapter                8086    10fb   NA    NA     ['eth4-1', 'eth4-2']
6       Intel X520 dual port adapter                8086    10fb   NA    NA     ['eth6-1', 'eth6-2']

```

show pnic

To display all statistics or only specific information about a port or all ports, use the **show pnic** command in privileged EXEC mode.

```
show pnic [name] [{adminstatus | link_state | mac_address | mtu | operational-speed |
passthrough | pch_state | refcnt | speed | sriov_intf | stats}]
```

Syntax Description	<i>name</i>	Specifies the name of the port for which the information is displayed.
	adminstatus	Displays the up or down status.
	link_state	Displays the link state.
	mac_address	Displays the MAC address.
	mtu	Displays the maximum transmission unit (MTU) size.
	operational-speed	Displays the operational speed.
	passthrough	Displays the passthrough mode.
	pch_state	Displays the port channel state.
	refcnt	Displays the reference count.
	speed	Displays the interface speed.
	sriov_intf	Displays the SRIOV interface.
	stats	Displays the statistics.

Command Default None

Command Modes Privileged EXEC (#)

Command History

Release Modification

3.7.1 This command was introduced.

Example

```
nfvis# show pnic
Name          Link  Admin  MTU    Mac                               Passthrough  Speed  Op-speed  Rx
Bytes         Packets  Errors  Dropped  Mbps  Broadcast Multicast TX Bytes  Packets
Errors       Dropped  Collisions  Mbps  Broadcast Multicast
-----
eth0          up     up     9000   d8:b1:90:ff:f5:88  none         1G     1000
1469476983   17749881  0      0      0      14156964  2888574  198310581
272571       0        0
68440
eth1          up     up     9000   d8:b1:90:ff:f5:89  none         1G     1000
```

show pnic

```

19826137      329353      0      0      0      325498      4180179      27586
0
0      27586
eth2          down    up      9000      d8:b1:90:ff:d8:3c none      1G      0      0
0      0      0      0      0      0      0      0
0
eth3          down    up      9000      d8:b1:90:ff:d8:3d none      1G      0      0
0      0      0      0      0      0      0      0
0
eth4          down    up      9000      d8:b1:90:ff:d8:3e none      1G      0      0
0      0      0      0      0      0      0      0
0
eth5          down    up      9000      d8:b1:90:ff:d8:3f none      1G      0      0
0      0      0      0      0      0      0      0
0
0      0
0      0

```

Example

```
nfvis# show pnic stats
```

Name	Rx Bytes	Packets	Errors	Dropped	Mbps	Broadcast	Multicast	Tx Bytes
	Packets	Errors	Dropped	Collisions	Mbps	Broadcast	Multicast	
eth0	1469743586	17753343	0	0	0	14159834	2889066	198318715
	272603	0	0		40	68450		
eth1	19830637	329428	0	0	0	0	325573	4181034
	27591	0	0		0	27591		
eth2	0	0	0	0	0	0	0	0
	0	0	0		0	0		
eth3	0	0	0	0	0	0	0	0
	0	0	0		0	0		
eth4	0	0	0	0	0	0	0	0
	0	0	0		0	0		
eth5	0	0	0	0	0	0	0	0
	0	0	0		0	0		
	0							

Example

```
nfvis# show pnic eth1 stats
```

```

stats receive bytes 19862257
stats receive packets 329955
stats receive errors 0
stats receive dropped 0
stats receive broadcast 0
stats receive multicast 326100
stats transmit bytes 4187361
stats transmit packets 27628
stats transmit errors 0
stats transmit dropped 0
stats transmit broadcast 0
stats transmit multicast 27628

```


show pnic-breakout

To display the 40G NIC mode and adapter information, use the **show pnic-breakout** command in privileged EXEC mode.

show pnic-breakout

Syntax Description This command has no keywords or arguments.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	4.7.1	This command was introduced.

Example

```
nfvis# show pnic-breakout
DEVNO  PCI  VENDOR  DEVID  ADAPTER                                MODE  PNICS
-----
1      5e   8086    1583   Cisco(R) Ethernet Converged NIC XL710-QDA2  2x40  ['eth2-1',
'eth2-2']
```

show port-channel

To show configured port channels, use the **show port-channel** command in privileged EXEC mode.

show port-channel

Syntax Description	This command has no keywords or parameters.
---------------------------	---

Command Default	None
------------------------	------

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	3.7.1	This command was introduced.

Example

```
nfvis# show port-channel
---- bondtrue ----
bond_mode: active-backup
bond may use recirculation: no, Recirc-ID : -1
bond-hash-basis: 0
updelay: 0 ms
downdelay: 0 ms
lacp_status: off
active slave mac: 00:00:00:00:00:00 (none)

slave eth1: disabled
  may_enable: false

slave eth2: disabled
  may_enable: false
```

show lldp stats

To display LLDP statistics, use the **show lldp stats** command in privileged EXEC mode.

show lldp stats

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Privileged EXEC (#)

Command History

Release	Modification
3.7.1	This command was introduced.

Example

```

nfvis# show lldp stats
TX          DISCARD  ERROR  RX          DISCARDED  UNREC
NAME  FRAMES  RX      RX      FRAMES  TLVS      TLVS  AGEOUTS
-----
eth0  23      0       0       19667   0         0     0
eth1  0        0       0        0        0         0     0
eth2  0        0       0        0        0         0     0
eth3  0        0       0        0        0         0     0
eth4  0        0       0        0        0         0     0
eth5  0        0       0        0        0         0     0

```

show lldp neighbors

To display information about LLDP neighbors, use the **show lldp neighbors** command in privileged EXEC mode.

show lldp neighbors

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release Modification

3.7.1 This command was introduced.

Example

```
nfvis# show lldp neighbors
```

NAME	DEVICE ID	ID	HOLDTIME	CAPS	PLATFORM	PORTID	DESCRIPTION
eth0	Switch1623	120		Bridge, Router	Cisco IOS Software, Catalyst L3 Switch Software (CAT3K_CAA-UNIVERSALK9-M), Version 15.0(1)EX3, RELEASE SOFTWARE (fc2)	GigabitEthernet1/0/4	Ifname: Gi1/0/4
eth1	None	0		None	None	None	None
eth2	None	0		None	None	None	None
eth3	None	0		None	None	None	None
eth4	None	0		None	None	None	None
eth5	None	0		None	None	None	None