Using the Cisco IMC CLI to Configure the RoCEv2 Interface

Configuring RoCEv2 Interface Using Cisco IMC CLI

Use the following steps to configure RoCEv2 interface using Cisco IMC CLI interface.

Before you begin

- Ensure that you are familiar with Cisco IMC CLI interface.
- You must log in with admin privileges.

SUMMARY STEPS

1. server # **scope chassis**
2. server/chassis # **scope adapter** *index_number*
3. server/chassis/adapter # **create host-eth-if** *vNIC_name*
4. server/chassis/adapter/host-eth-if *# **set rocev2 enabled**
5. server/chassis/adapter/host-eth-if *# **set rdma-cos 5**
6. server/chassis/adapter/host-eth-if *# **set rdma_mr 131072**
7. server/chassis/adapter/host-eth-if *# **set rdma_qp 1024**
8. server/chassis/adapter/host-eth-if *# **set rdma_resgrp 8**
9. server/chassis/adapter/host-eth-if *# **scope comp-queue**
10. server/chassis/adapter/host-eth-if/comp-queue *# **set cq-count 2**
11. server/chassis/adapter/host-eth-if/comp-queue *# **exit**
12. server/chassis/adapter/host-eth-if *# **scope trans-queue**
13. server/chassis/adapter/host-eth-if/trans-queue *# **set wq-count 1**
14. server/chassis/adapter/host-eth-if/trans-queue *# **set wq-ring-size 256**
15. server/chassis/adapter/host-eth-if/trans-queue *# **exit**
16. server/chassis/adapter/host-eth-if *# **scope interrupt**
17. server/chassis/adapter/host-eth-if/interrupt *# **set interrupt-count 256**

18. server/chassis/adapter/host-eth-if/interrupt *# **set interrupt-mode MSIx**
19. server/chassis/adapter/host-eth-if/interrupt *# **commit**

DETAILED STEPS

	Command or Action	Purpose
Step 1	server # **scope chassis**	Enters chassis command mode.
Step 2	server/chassis # **scope adapter** *index_number*	Enters the command mode for the adapter card at the PCI slot number specified by *index_number.* **Note** Ensure that the server is powered on before you attempt to view or change adapter settings. To view the *index* of the adapters configured on you server, use the **`show adapter`** command.
Step 3	server/chassis/adapter # **create host-eth-if** *vNIC_name*	Creates a vNIC.
Step 4	server/chassis/adapter/host-eth-if *# **set rocev2 enabled**	Enables RoCEv2 on vNIC.
Step 5	server/chassis/adapter/host-eth-if *# **set rdma-cos 5**	Sets **RDMA CoS** 5 for RoCEv2 vNIC.
Step 6	server/chassis/adapter/host-eth-if *# **set rdma_mr 131072**	Sets **RDMA Memory Region** as 131072 for RoCEv2 vNIC.
Step 7	server/chassis/adapter/host-eth-if *# **set rdma_qp 1024**	Sets **RDMA Queue Pairs** as 1024 for RoCEv2 vNIC.
Step 8	server/chassis/adapter/host-eth-if *# **set rdma_resgrp 8**	Sets **RDMA Resource Groups** as 8 for RoCEv2 vNIC.
Step 9	server/chassis/adapter/host-eth-if *# **scope comp-queue**	Enters the **Completion Queue** command mode.
Step 10	server/chassis/adapter/host-eth-if/comp-queue *# **set cq-count 2**	Sets **Completion Queue Count** as 2 for vNIC.
Step 11	server/chassis/adapter/host-eth-if/comp-queue *# **exit**	Exits to host Ethernet interface command mode.
Step 12	server/chassis/adapter/host-eth-if *# **scope trans-queue**	Enters the **Transmit Queue** command mode.
Step 13	server/chassis/adapter/host-eth-if/trans-queue *# **set wq-count 1**	Sets **Transmit Queue Count** as 1 for vNIC.
Step 14	server/chassis/adapter/host-eth-if/trans-queue *# **set wq-ring-size 256**	Sets **Transmit Queue Ring Buffer Size** as 256 for vNIC.
Step 15	server/chassis/adapter/host-eth-if/trans-queue *# **exit**	Exits to host Ethernet interface command.
Step 16	server/chassis/adapter/host-eth-if *# **scope interrupt**	Enters Interrupt command mode.
Step 17	server/chassis/adapter/host-eth-if/interrupt *# **set interrupt-count 256**	Sets **Interrupt Count** as 256 for vNIC.
Step 18	server/chassis/adapter/host-eth-if/interrupt *# **set interrupt-mode MSIx**	Sets the **Interrupt Mode** as MSIx

	Command or Action	Purpose
Step 19	server/chassis/adapter/host-eth-if/interrupt *# **commit**	Commits the transaction to the system configuration. **Note** The changes take effect when the server is rebooted.

Example

```
server# scope chassis
server/chassis # scope adapter 1
server/chassis/adapter # create host-eth-if vNIC_Test
server/chassis/adapter/host-eth-if  *# set rocev2 enabled
server/chassis/adapter/host-eth-if  *# set rdma-cos 5
server/chassis/adapter/host-eth-if  *# set rdma_mr 131072
server/chassis/adapter/host-eth-if  *# set rdma_qp 1024
server/chassis/adapter/host-eth-if  *# set rdma_resgrp 8
server/chassis/adapter/host-eth-if  *# scope comp-queue
server/chassis/adapter/host-eth-if/comp-queue  *# set cq-count 2
server/chassis/adapter/host-eth-if/comp-queue  *# exit
server/chassis/adapter/host-eth-if  *# scope trans-queue
server/chassis/adapter/host-eth-if/trans-queue  *# set wq-count 1
server/chassis/adapter/host-eth-if/trans-queue  *# set wq-ring-size 256
server/chassis/adapter/host-eth-if/trans-queue  *# exit
server/chassis/adapter/host-eth-if  *# scope interrupt
server/chassis/adapter/host-eth-if/interrupt  *# set interrupt-count 256
server/chassis/adapter/host-eth-if/interrupt  *# set interrupt-mode MSIx
server/chassis/adapter/host-eth-if/interrupt  *# commit
```

Deleting RoCEv2 Interface Using Cisco IMC CLI

SUMMARY STEPS

1. server # **scope chassis**
2. server/chassis # **scope adapter** *index_number*
3. server/chassis/adapter # **scope host-eth-if** *vNIC_name*
4. server/chassis/adapter/host-eth-if # **set rocev2 disabled**
5. server/chassis/adapter/host-eth-if *# **commit**

DETAILED STEPS

	Command or Action	Purpose
Step 1	server # **scope chassis**	Enters the chassis command mode.
Step 2	server/chassis # **scope adapter** *index_number*	Enters the command mode for the adapter card at the PCI slot number specified by *index_number.*

	Command or Action	Purpose
		Note Ensure that the server is powered on before you attempt to view or change adapter settings. To view the *index* of the adapters configured on you server, use the **show adapter** command.
Step 3	server/chassis/adapter # **scope host-eth-if** *vNIC_name*	Enters the command mode for the vNIC specified by *vNIC_name*.
Step 4	server/chassis/adapter/host-eth-if # **set rocev2 disabled**	Disables RoCE properties on the vNIC.
Step 5	server/chassis/adapter/host-eth-if *# **commit**	Commits the transaction to the system configuration. **Note** The changes take effect when the server is rebooted.

Example

```
server# scope chassis
server/chassis # scope adapter 1
server/chassis/adapter # scope host-eth-if vNIC_Test
server/chassis/adapter/host-eth-if # set rocev2 disabled
server/chassis/adapter/host-eth-if *# commit
```