

## Mapping the Cisco IOS XRv Router Network Interfaces to the VM Network Interfaces

This chapter provides information about mapping the Cisco IOS XRv Router network interfaces to virtual network interface cards (vNICs), adding and deleting network interfaces, and mapping them to vSwitch interfaces.

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## Mapping the Cisco IOS XRv Router Network Interfaces to vNICs

The Cisco IOS XRv Router maps the Ethernet network interfaces to the logical vNIC name assigned by the VM.

When the Cisco IOS XRv Router is booted for the first time, the router interfaces are mapped to the logical vNIC interfaces that were added when the VM was created. The following figure shows the relationship between the vNICs and the Cisco IOS XRv Router interfaces. The first vNIC that is added is automatically

mapped to the Management Ethernet interface port. All the subsequent vNICs added are mapped to the router interfaces. A maximum of 128 router interfaces (including the Management Ethernet interface) are supported.

#### Figure 1: Cisco IOS XRv Router interfaces and vNICs



### Adding and Deleting Network Interfaces on the Cisco IOS XRv Router

The Cisco IOS XRv Router maps the router Ethernet interfaces to the logical vNIC name assigned by the VM, which in turn is mapped to a MAC address on the VM host.

To add or delete a vNIC from the VM, you must first power down the VM. If you delete any vNICs, the router must be rebooted. For more information about adding and deleting vNICs, see the VMware Documentation.

Caution

We recommend that you exercise caution before removing any existing vNICs on the Cisco IOS XRv Router VM. If you remove a vNIC without first updating the Cisco IOS XRv Router network interface configuration, you risk a configuration mismatch when the router reboots. When the router reboots and a vNIC is removed, the remaining logical vNIC names may get reassigned to different MAC addresses. As a result, the Ethernet network interfaces on the Cisco IOS XRv Router may get reassigned to different vNICs.

# Mapping Cisco IOS XRv Router Network Interfaces with vSwitch Interfaces

You can configure the network interfaces in the VMware ESXi in different ways to accommodate the Cisco IOS XRv Router interfaces. This figure shows a Cisco IOS XRv Router interface being mapped to a host Ethernet interface.



Figure 2: Cisco IOS XRv Router Interfaces Mapped to Individual ESXi Host Ethernet Interfaces

This figure shows multiple Cisco IOS XRv Router interfaces sharing one host VMware ESXi Ethernet interface.



Figure 3: Cisco IOS XRv Router Interfaces Sharing One ESXi Host Ethernet Interface

The figure below shows an interface of a Cisco IOS XRv Router being mapped directly to a trunk interface on the vSwitch trunk.



Figure 4: Cisco IOS XRv Router Interfaces Directly Mapped to the vSwitch Trunk