

Managing VMkernel NICs

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About VMkernel NICs

The VMware VMkernel networking interface provides network connectivity for the host, and handles VMware vMotion, traffic management, and fault tolerance.

VMware vMotion, lets you migrate powered on virtual machines with no downtime.

See About VMware vMotion and vCenter Storage vMotion.

VMware vCenter version 5.5 supports the following VMkernel traffic options:

- vMotion—Enables the VMkernel adapter to advertise itself to another host as the network connection where vMotion traffic is sent. vMotion migration to the selected host is not possible if the vMotion service is not enabled for any VMkernel adapter on the default TCP/IP stack, or if there are no adapters using the vMotion TCP/IP stack.
- Management Traffic—Enables the management traffic for the host and VMware vCenter server. A VMkernel adapter is typically created when the ESXi software is installed. You can create another VMkernel adapter for management traffic on the host to provide redundancy.
- Fault Tolerance—Enables fault tolerance logging on the host. You can use only one VMkernel adapter for fault tolerance traffic per host.
- Virtual SAN Traffic—Enables the Virtual SAN traffic on the host. Every host that is part of a Virtual SAN cluster must have a VMkernel adapter.
- vSphere Replication Traffic—Handles the outgoing replication data that is sent from the source ESXi host to the VMware vSphere replication server.

VMware vCenter versions 6.0 and later support the following VMkernel traffic options, in addition to those supported in version 5.5:

- Provisioning Traffic—Handles the data transferred for virtual machine cold migration, cloning, and snapshot creation.
- vSphere Replication NFC Traffic—Handles the incoming replication data on the target replication site.

You can view the traffic options that are enabled for a VMkernel NIC in the VMKNICs report.

Modifying VMkernel NIC Port Properties

You can modify the port properties of a VMkernel NIC. The VMKNICs report lists the traffic options that are enabled for a VMkernel NIC.

- Step 1 Choose Virtual > Network.
- **Step 2** On the **Network** page, choose the cloud.
- Step 3 On the Network page, click vmkNICs.
- **Step 4** Click the row with the VMkernel NIC for which you want to modify the port properties.
- **Step 5** Click **Modify Port Properties**.
- **Step 6** On the **Modify Port Properties** screen, click the traffic options that you want to enable on the VMkernel NIC.
- Step 7 Click Submit.