



Dell™ Failover Clusters With Microsoft® Windows Server® 2008 Operating System Important Information

Configuring IP Addresses for Dell Failover Clusters with Direct-Attached iSCSI Storage Arrays

To successfully validate Dell Failover Cluster configurations based on Direct-Attached Internet Small Computer System Interface (iSCSI) storage arrays (for example: Dell MD3000i storage arrays, Dell |EMC AX-Series storage arrays, or Dell |EMC CX-Series storage arrays), the Failover Cluster requires a different subnet address for each host-to-storage iSCSI connection.

If the two IP addresses that are used for a host-to-storage iSCSI connection are configured on the same IP subnet, and you run the **Failover Cluster Validation** wizard, the **Validate Network Communication** Test fails.

Figure 1 is a good example of a Dell Failover Cluster configuration with four different IPv4 subnets for the four NICs. If you run the **Validate Network Communication** Test on this cluster configuration, the test is successful.

Figure 1. Example of a Dell Failover Cluster Configuration with Four IPv4 Subnets for Four NICs

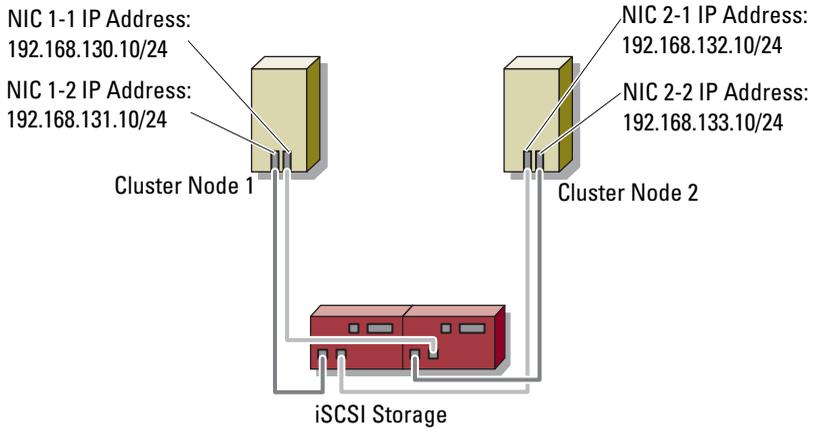
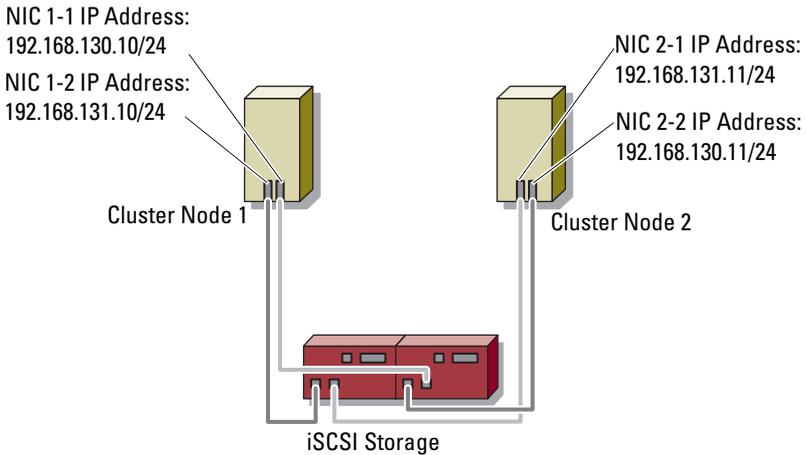


Figure 2 is an example of a misconfigured Dell Failover Cluster configuration; it has two IPv4 subnets for the four NICs instead of four separate subnets.

Figure 2. Example of a Dell Failover Cluster Configuration with Two Subnet Addresses for Four NICs



If you run the **Validate Network Communication** Test on the Failover Cluster in Figure 2, the test fails and the following message is displayed:

Network interfaces <interface 1> and <interface 2> are on the same cluster network, yet either address <address 2> is not reachable from address <address 1> or the ping latency is greater than the maximum allowed 500 milliseconds.

Where:

- <interface 1> and <interface 2> correspond to the interfaces for **Cluster Node 1 NIC 1-1** and **Cluster Node 2 NIC 2-2** (or **Cluster Node 1 NIC 1-2** and **Cluster Node 2 NIC 2-1**)
- <address 1> and <address 2> correspond to 192.168.130.10 and 192.168.130.11 (or 192.168.131.10 and 192.168.131.11).

Validate Network Communication Test detects that NIC 1-1 and NIC 2-2 are on the same subnet, and incorrectly assumes that they are used for cluster communications. When **Validate Network Communication** Test tries to test the communications between the two NICs, the test fails.

Additional Information

- The requirement for one subnet per iSCSI connection applies to the following configurations:
 - iSCSI direct-attached configurations with more than two nodes
 - iSCSI direct-attached configurations using IPv6
 - iSCSI direct-attached configurations with one iSCSI connection per host



NOTE: For iSCSI switched-attached configurations, the requirement for one subnet per iSCSI connection is not applicable.

- For information on how to configure the IP addresses for the iSCSI ports, see the iSCSI storage array documentation located on the Dell Support website at support.dell.com.
- For more information on how to identify and correct this **Validate Network Communication** error for Failover Clusters, see the Microsoft knowledge base article **KB951434** located on the Microsoft website at www.microsoft.com.

Configuring Volume Mount Point in Dell Failover Clusters Running Windows Server 2008 Operating System

To configure a volume mount point in a Dell Failover Cluster running Windows Server 2008 operating system:

- 1 Initialize the logical disk created for configuring the volume mount point.
- 2 Add the logical disk you initialized in step 1 to the **Available Storage pool** in the cluster:
 - a Open the **Failover Cluster Management Console**.
 - b Right-click the **Storage** in the cluster.
 - c Click **Add a disk**.
 - d Select the disk and click **OK**.
- 3 Create the partition and mount point on the disk using the **Disk Management Console**.
- 4 Configure the cluster disk dependency using **Failover Cluster Management Console**.

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