Configure peer relationships (ONTAP 9.2 and earlier)

System Manager Classic

NetApp
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A peer relationship defines network connections that enable clusters and SVMs to exchange data securely. You must create a cluster peer relationship before you can create an SVM peer relationship.

Create intercluster interfaces on all nodes (ONTAP 9.2 or earlier)

Clusters communicate with each other through logical interfaces (LIFs) that are dedicated to intercluster communication. You must create an intercluster LIF within each IPspace that will be used for peering, on each node in each cluster for which you want to create a peer relationship.

Before you begin

You must have identified the subnet and ports, and optionally the IP addresses, that you plan to use for the intercluster LIFs.

About this task

You must perform this procedure on both clusters for which you want to create a peer relationship. For example, if you have a four-node cluster that you want to peer with cluster X over IPspace A, and peer with cluster Y over IPspace Y, then you need a total of eight intercluster LIFs; Four on IPspace A (one per node), and four on IPspace Y (one per node).

Steps

1. Create an intercluster LIF on one node of the source cluster:
   a. Navigate to the **Network Interfaces** window.
   b. Click **Create**.

      The Create Network Interface dialog box is displayed.

   c. Enter a name for the intercluster LIF.

      You can use “icl01” for the intercluster LIF on the first node, and “icl02” for the intercluster LIF on the second node.

   d. Select **Intercluster Connectivity** as the interface role.
   e. Select the IPspace.
   f. In the **Add Details** dialog box, select **Using a subnet** from the **Assign IP Address** drop-down list, and then select the subnet that you want to use for intercluster communication.

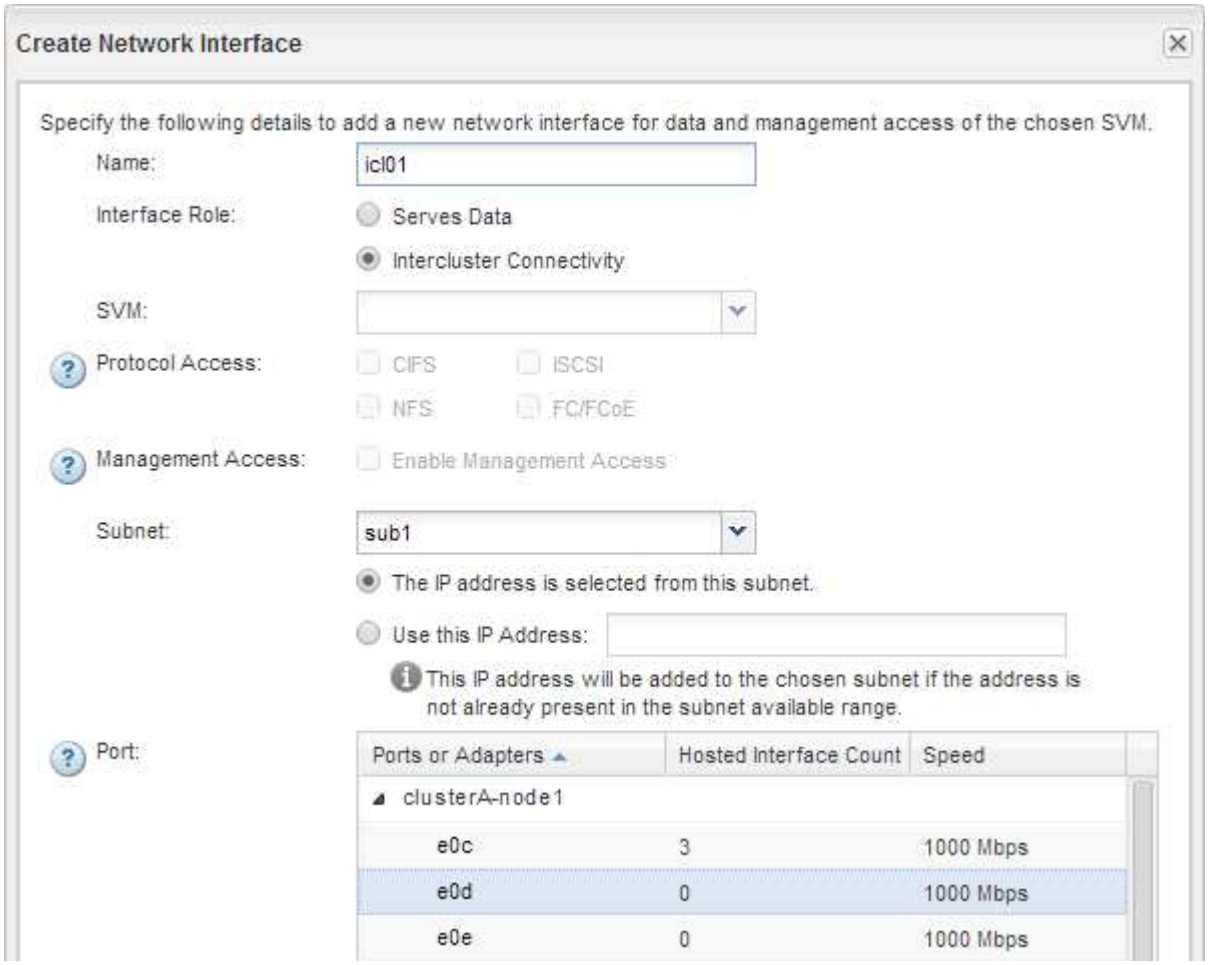
      By default, the IP address is automatically selected from the subnet after you click **Create**. If you do not want to use the IP address that is automatically selected, you must manually specify the IP address that the node uses for intercluster communication.

   g. If you want to manually specify the IP address that the node uses for intercluster communication, select **Use this IP Address**, and type the IP address.

You must ensure that the IP address that you want to use either is already available in the subnet or can be added to the subnet later.

h. In the **Ports** area, click the node that you are configuring, and select the port that you want to use for this node.

i. If you decided not to share ports for intercluster communication with data communication, confirm that the selected port displays “0” in the **Hosted Interface Count** column.



j. Click **Create**.

2. Repeat Step #STEP_E3AF9C0B3C474E49A20489FF21727472 for each node in the cluster.

   Each node in the cluster has an intercluster LIF.

3. Make a note of the IP addresses of the intercluster LIFs so that you can use them later when you create peer relationships with other clusters:

   a. In the **Network Interfaces** window, in the **Role** column, click , clear the **All** check box, and then select **Intercluster**.

      The Network Interfaces window displays only intercluster LIFs.

   b. Note down the IP addresses that are listed in the **IP Addresses/WWPN** column, or leave the **Network Interfaces** window open so that you can retrieve the IP addresses later.

      You can click the column display icon ( ) to hide the columns that you do not want to view.

Results

All of the nodes in each cluster have intercluster LIFs that can all communicate with each other.

Create a cluster peer relationship (ONTAP 9.2 or earlier)

You can create a cluster peer relationship between two clusters by entering a predetermined passphrase and the IP addresses of the intercluster LIFs of the remote cluster, and then verifying that the relationship was created successfully.

Before you begin

- You must know the IP addresses of all of the intercluster LIFs of the clusters that you want to peer.
- You must know the passphrase that you will use for each peer relationship.

About this task

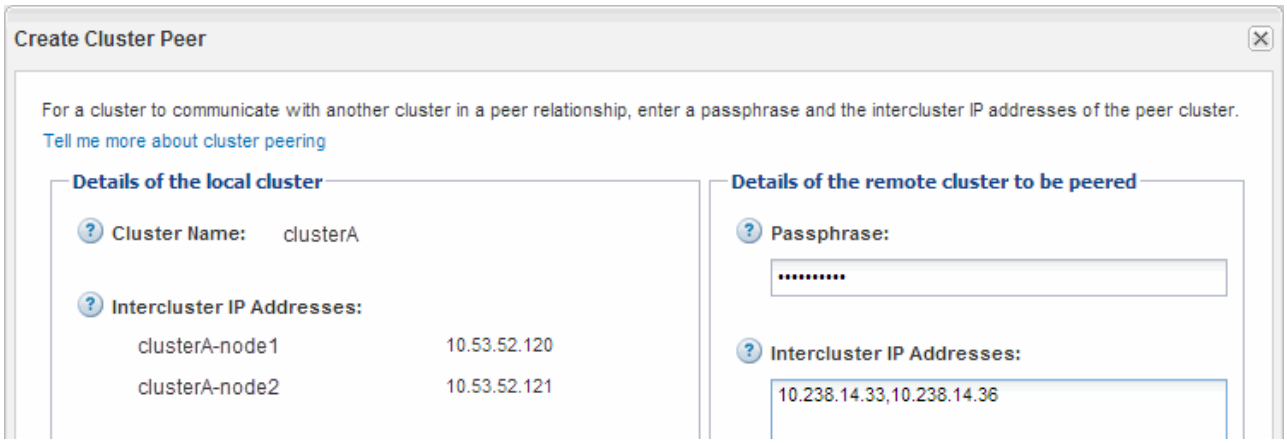
You must perform this procedure on each cluster.

Steps

1. From the source cluster, create a cluster peer relationship with the destination cluster.
   a. Click the **Configurations** tab.
   b. In the **Cluster Settings** pane, click **Cluster Peers**.
   c. Click **Create**.

      The Create Cluster Peer dialog box is displayed.

   d. In the **Details of the remote cluster to be peered** area, specify the passphrase that both peers will use to ensure an authenticated cluster peer relationship.
   e. Enter the IP addresses of all of the intercluster LIFs of the destination cluster (one per node) separated by commas.



   f. Click **Create**.

      The authentication status is `pending` because only one cluster has been configured.

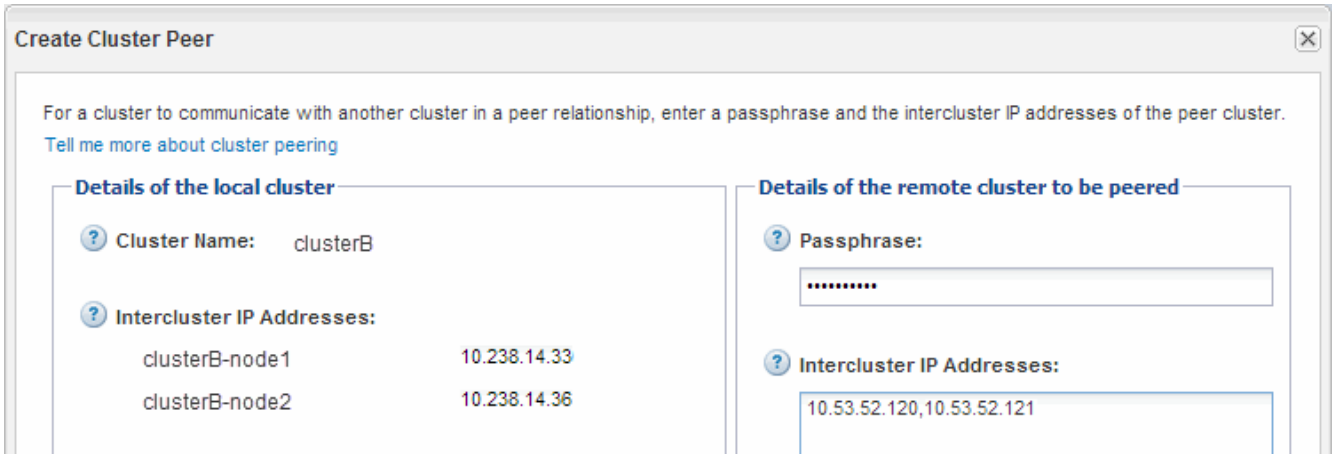
2. Switch to the destination cluster, and then create a cluster peer relationship with the source cluster:
   a. Click the **Configurations** tab.

b. In the **Cluster Settings** pane, click **Cluster Peers**.

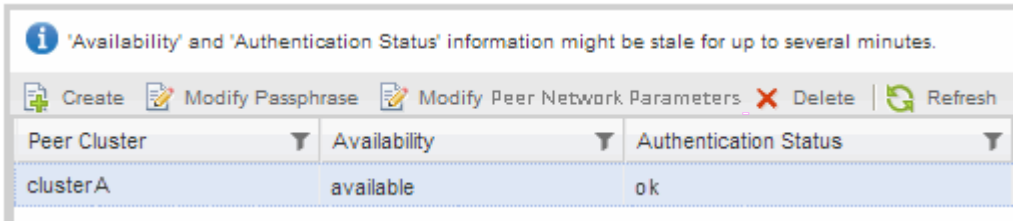
c. Click **Create**.

The Create Cluster Peer dialog box is displayed.

d. In the **Details of the remote cluster to be peered** area, specify the same passphrase that you specified in step #STEP_36B845A20DD84114916BBE2844EEE1F2 and the IP addresses of the intercluster LIFs of the source cluster, and then click **Create**.



3. From the **Cluster Peers** window of the destination cluster, confirm that the source cluster is `available` and that the authentication status is `ok`.



You might have to click **Refresh** to view the updated information.

The two clusters are in a peer relationship.

4. Switch to the source cluster, and confirm that the destination cluster is `available` and that the authentication status is `ok`.

You might have to click **Refresh** to view the updated information.

What to do next

Create an SVM peer relationship between the source and destination SVMs while creating a data protection relationship between the source volume and the destination volume.

Volume backup using SnapVault

Volume disaster recovery preparation