



# **Data and management traffic separation**

## **ONTAP Select**

NetApp  
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# Data and management traffic separation

Isolate data traffic and management traffic into separate layer-2 networks.

ONTAP Select external network traffic is defined as data (CIFS, NFS, and iSCSI), management, and replication (SnapMirror) traffic. Within an ONTAP cluster, each style of traffic uses a separate logical interface that must be hosted on a virtual network port. On the multinode configuration of ONTAP Select, these are designated as ports e0a and e0b/e0g. On the single node configuration, these are designated as e0a and e0b/e0c, while the remaining ports are reserved for internal cluster services.

NetApp recommends isolating data traffic and management traffic into separate layer-2 networks. In the ONTAP Select environment, this is done using VLAN tags. This can be achieved by assigning a VLAN-tagged port group to network adapter 1 (port e0a) for management traffic. Then you can assign a separate port group(s) to ports e0b and e0c (single-node clusters) and e0b and e0g (multinode clusters) for data traffic.

If the VST solution described earlier in this document is not sufficient, collocating both data and management LIFs on the same virtual port might be required. To do so, use a process known as VGT, in which VLAN tagging is performed by the VM.



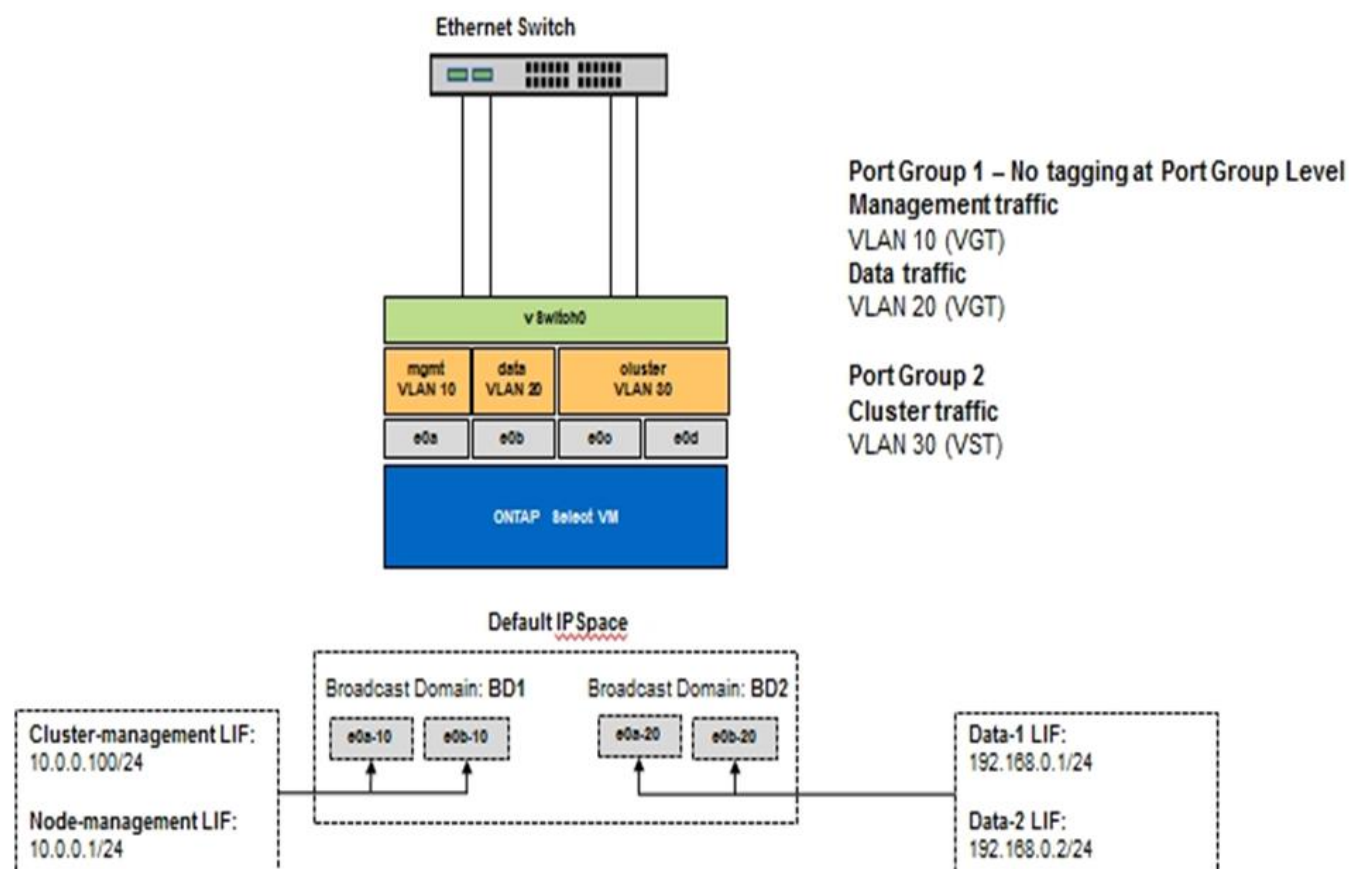
Data and management network separation through VGT is not available when using the ONTAP Deploy utility. This process must be performed after cluster setup is complete.

There is an additional caveat when using VGT and two-node clusters. In two-node cluster configurations, the node management IP address is used to establish connectivity to the mediator before ONTAP is fully available. Therefore, only EST and VST tagging is supported on the port group mapped to the node management LIF (port e0a). Furthermore, if both the management and the data traffic are using the same port group, only EST/VST are supported for the entire two-node cluster.

Both configuration options, VST and VGT, are supported. The following figure shows the first scenario, VST, in which traffic is tagged at the vSwitch layer through the assigned port group. In this configuration, cluster and node management LIFs are assigned to ONTAP port e0a and tagged with VLAN ID 10 through the assigned port group. Data LIFs are assigned to port e0b and either e0c or e0g and given VLAN ID 20 using a second port group. The cluster ports use a third port group and are on VLAN ID 30.

## Data and management separation using VST





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