Network Group	VLAN type	Interface	Multiple networks per group?
IPMI/iLO	untagged	IPMI/iLO	Possible
CONF	untagged	hed3	No *
MANAGEMENT	untagged	bond0	Possible
OCTAVIA-MGMT	tagged	bond0	Possible
Provider VLANs	tagged	bond0	n/a
GUEST	tagged	bond0	Possible
ISCSI	tagged	bond0	No *
SWIFT	tagged	bond0	Possible
INTERNAL-API	tagged	bond0	No *
EXTERNAL-API	tagged	bond0	No *
EXTERNAL-VM	tagged	bond0	No *

Routing Notes:

- EXTERNAL-API must be reachable from EXTERNAL-VM so in-cloud VMs can use the OpenStack APIs via their publicURL.

- INTERNAL-API must be reachable from MANAGEMENT so services on the MANAGEMENT network can use the OpenStack APIs via their InternalURL or AdminURL.

- When there are multiple networks in a network-group, each network in the group must be reachable from other networks in that group.

- IPMI/iLO must be reachable from CONF for os-install.

- Other networks may be routed as Administrator requires.

* Regarding multiple networks per group, some groups contain only a single network due to application constraints:

- VSA nodes share a cluster virtual IP addresses on the ISCSI network, the virtual IP addresses may be hosted by any VSA node.

- Core API nodes share a cluster virtual IP addresses on both the INTERNAL-API and EXTERNAL-API networks; the virtual IP addresses may be hosted by any core API node.

- Neutron expects the EXTERNAL-VM network to span all compute nodes and network service nodes for floating IPs and router default SNAT IP addresses.

- The lifecycle-manager provides PXE boot services on CONF.