



Network Definitions (Layer 2 and 3)

Table 1: Layer 2 and 3 Network Definition, on page 1 is intended to be used as a template for recording your Ultra M network Layer 2 and Layer 3 deployments.

Some of the Layer 2 and 3 networking parameters identified in Table 1: Layer 2 and 3 Network Definition, on page 1 are configured directly on the UCS hardware via CIMC. Other parameters are configured as part of the CVIM configuration. This configuration is done through various configuration files depending on the parameter:

- setup_data.yaml
- AutoVNF Configuration file for the pod

Table 1: Layer 2 and 3 Network Definition

VLAN ID / Range	Network	Gateway	IP Range Start	IP Range End	Description	Where Configured	Routeable?
External-Internet Meant for CVIM mgmt node Only							
<u>3522</u>	<u>10.86.67.0</u> <u>10.86.67.99/24</u>	<u>10.86.67.99</u>			Internet access required: - 1 IP Address for CVIM Mgmt - 1 IP for default gateway	On CVIM Manger Node hardware	Yes
External – Floating IP Addresses							

VLAN ID / Range	Network	Gateway	IP Range Start	IP Range End	Description	Where Configured	Routable?
<u>1519</u>	<u>10.84.109.64/27</u>	<u>10.84.109.65</u>			Routable addresses required: 4 Floating IP Addresses per VNF for management VMs (CF, VNFM, UEM, and UAS software modules) - 1 IP for default gateway	<i>setup_data.yaml</i>	Yes
Management/Provisioning							
<u>105</u>	192.168.50.0/24		192.168.50.100	192.168.50.254	Required to provision all configuration via PXE boot from CVIM Manager node for Micropod and Compute. Management network is used for communication between OpenStack elements using Openstack APIs	<i>setup_data.yaml</i>	No
IPMI-CIMC							
<u>106</u>	192.168.60.0/24		192.168.60.100	192.168.60.254		On UCS servers through CIMC	No
Tenant (Virtio)							
	11.117.0.0/24				All tenant networks. (MLOM)	<i>setup_data.yaml</i>	No
Storage (Virtio)							

VLAN ID / Range	Network	Gateway	IP Range Start	IP Range End	Description	Where Configured	Routable?
<u>18</u>	11.118.0.0/ 24				Transit network for storage back-end. Storage traffic between VMs and Ceph nodes (MLOM).	<i>setup_data.xml</i>	No
API (Virtio)							
3522	10.86.67.0/ 24				Clients connect to API network to interface with OpenStack APIs. OpenStack Horizon dashboard. Default gateway for HAProxy container.	<i>setup_data.xml</i>	Yes
<u>350:</u> <u>399</u>					Tenant based virtio networks on openstack.	<i>setup_data.xml</i>	
SR-IOV ((Phys-PCIe1, Phys PC1e2)							
<u>2001:</u> <u>2050</u> 2111, 2112					Tenant SRIOV network on openstack. (Intel NIC) NOTE: A unique VLAN from this range is used by each VNF for the DI-internal network.		Yes
<p>NOTE: <u>Bold underlined</u> text is provided as example configuration information. Your deployment requirements will vary.</p> <p>* You can ensure that the same floating IP address be assigned to the AutoVNF, CF, UEM, and VNF after a VM restart by configuring parameters in the AutoVNF configuration file.</p>							

