Example Host Network Layout (Physical)

Public Subnet: 209.229.131.0/24 Management Subnet: 192.168.1.0/24 Storage Subnet: 172.16.0.0/24 Default Guest Subnet: 10.0.1.0/24

Network Terminology

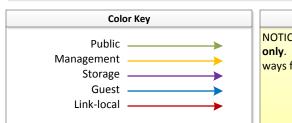
Public Subnet – Network directly on either the public internet or with public access. If CloudStack is in a completely private environment (e.g. inside a corporate network) this is the outward facing address assigned to the virtual router that all traffic is NAT'd through

Management Subnet – Somewhat self explanatory but this is the network that the management server lives on, as well as your VM hosts and anything else for CloudStack to management.

Storage – As it relates to CloudStack, this is an optional network dedicated to secondary storage. If not specified, the management network will be assumed for this role.

Guest Subnet – Unless a custom network is created, this subnet is used for the network and VLAN created for the guest VMs within a domain, project, and/or account.

Link Local – A special type of virtual interface that exists only between the host and VM. This interface is created on all system VMs as a way to interact with it securely. *NOTE: VMware does not support link-local interfaces so this interface will not exist if you are running VMware.

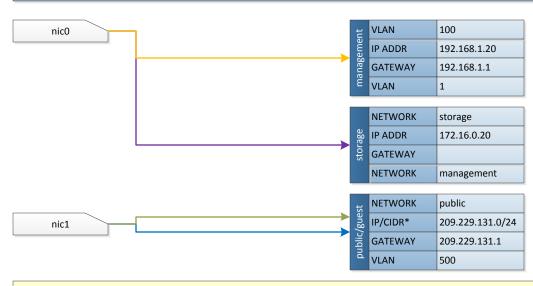


Network Terminology

NOTICE: This documentation is for example/education purposes only. Your environment may differ either completely or in small ways from the examples provided here.

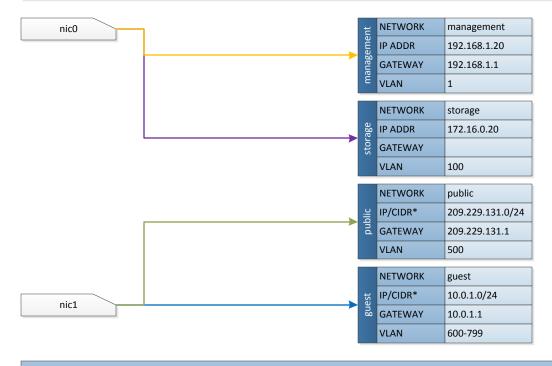
*Note – Where a CIDR is specified it is because those virtual interfaces are created and managed by CloudStack so IP address assignment is done at a guest (VM) level and therefore no configuration is required on the hypervisor directly. It is noted for reference. Where an IP address is specified, that interface would be configured on the hypervisor/host directly to provide that host with direct access to that network.

Basic Networking Host with 2 Physical NICs

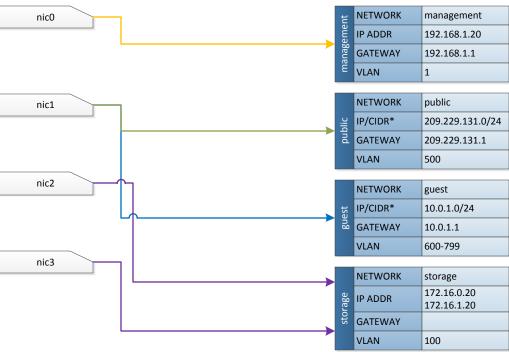


*Basic Networking Note – In basic networking the "guest" and "public" networks are the same as guests are directly assigned public addresses and guest segregation/security is achieved through the use of security groups. In advanced networking mode guest segregation is achieved through the use of VLANs.

Advanced Networking Host with 2 Physical NICs



Advanced Networking Host with 4 Physical NICs



Note – In this example we are doing MPIO to the storage network. NIC bonding for performance and/or redundancy

nic2 to a dedicated guest network and nic3 to storage.

would work as well but would include just a single IP address instead of 2. Another alternative would be to connect