[Subnet size](https://www.reddit.com/r/networking/comments/1ekatl7/feedback_needed_on_vlan_and_subnet_design_for_our/?share_id=hWhsZW5aNAnO9oH7Z1Lpo&utm_content=2&utm_medium=ios_app&utm_name=ioscss&utm_source=share&utm_term=1) for a VLAN in a Cisco network running OpenStack:

* **/24** (255.255.255.0) → 254 usable IPs (Common choice for small to medium setups)
* Scalable but not excessive for proof of concept.
* Keeps network simple while allowing enough IPs for VMs and infrastructure.
* **/22** (255.255.252.0) → 1022 usable IPs (Better for larger deployments)
* Avoids unnecessary complexity of larger subnet masks like **/22**
* **/21** (255.255.248.0) → 2046 usable IPs (For even larger networks)

More Proof:

* [Cisco Site](https://community.cisco.com/t5/switching/subnet-size-in-modern-networks/td-p/1283674)
* [Reddit Post](https://www.reddit.com/r/Cisco/comments/y0ktxc/which_ip_address_do_i_assign_a_new_vlan/)

VLAN configuration guidance on your Cisco switches for OpenStack:

* VLAN 100 is used for OpenStack instances.
* VLAN 200 is used for OpenStack management.
* VLAN 300 is for storage traffic (if needed).
* Trunking is used to allow multiple VLANs between switches and OpenStack nodes.

Number of IP addresses required for [OpenStack on Cisco](https://www.reddit.com/r/openstack/comments/10997w2/comment/j41vlku/?utm_source=share&utm_medium=web3x&utm_name=web3xcss&utm_term=1&utm_content=share_button):

* OpenStack Controller needs 1-2 ips
* Compute Nodes needs 3 ips
* Management VLAN (VLAN 200) → For OpenStack services (Controller, Compute, Storage).
* Instance VLAN (VLAN 100) → For VM traffic.
* Storage VLAN (VLAN 300) → If using Ceph/NFS.
* External VLAN → If you need external internet access for VMs.