DESCRIPTION

Physical Network and VLANs

VLAN 1532 – vMotion (172.16.1.0/25)
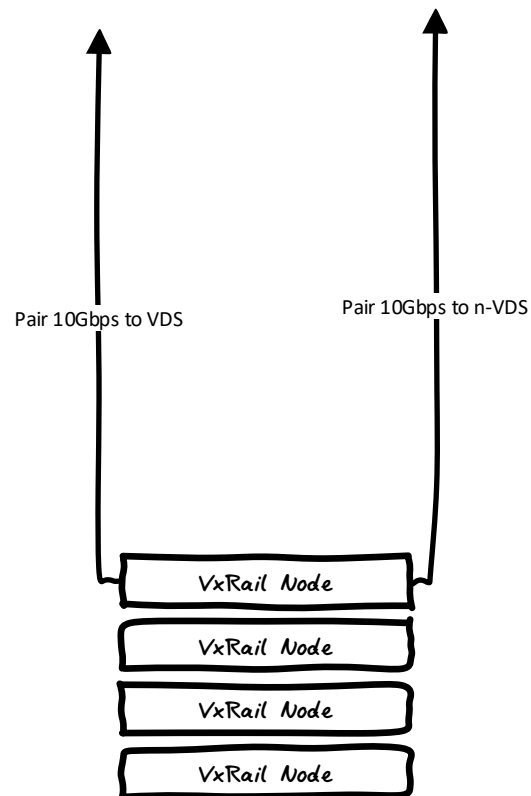VLAN 1533 – VSAN (172.16.2.0/24)
VLAN 1534 – TEP (172.16.0.0/24)
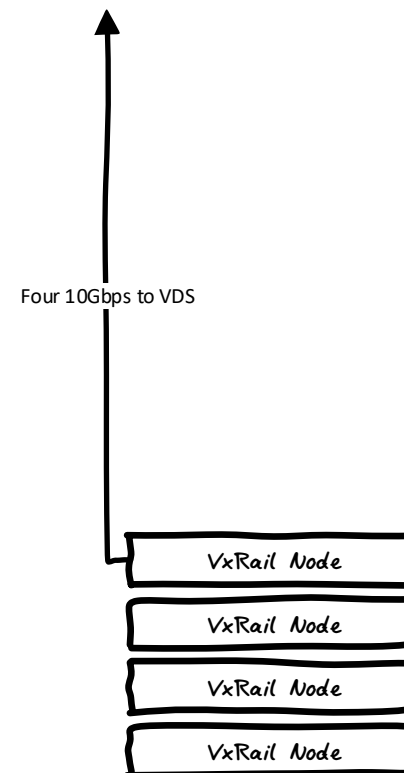VLAN 1535 – Uplink/Extra (10.193.39.0/24 10.193.39.1/29 for uplink)
VLAN 1536 – Edge TEP (172.16.3.0/24)
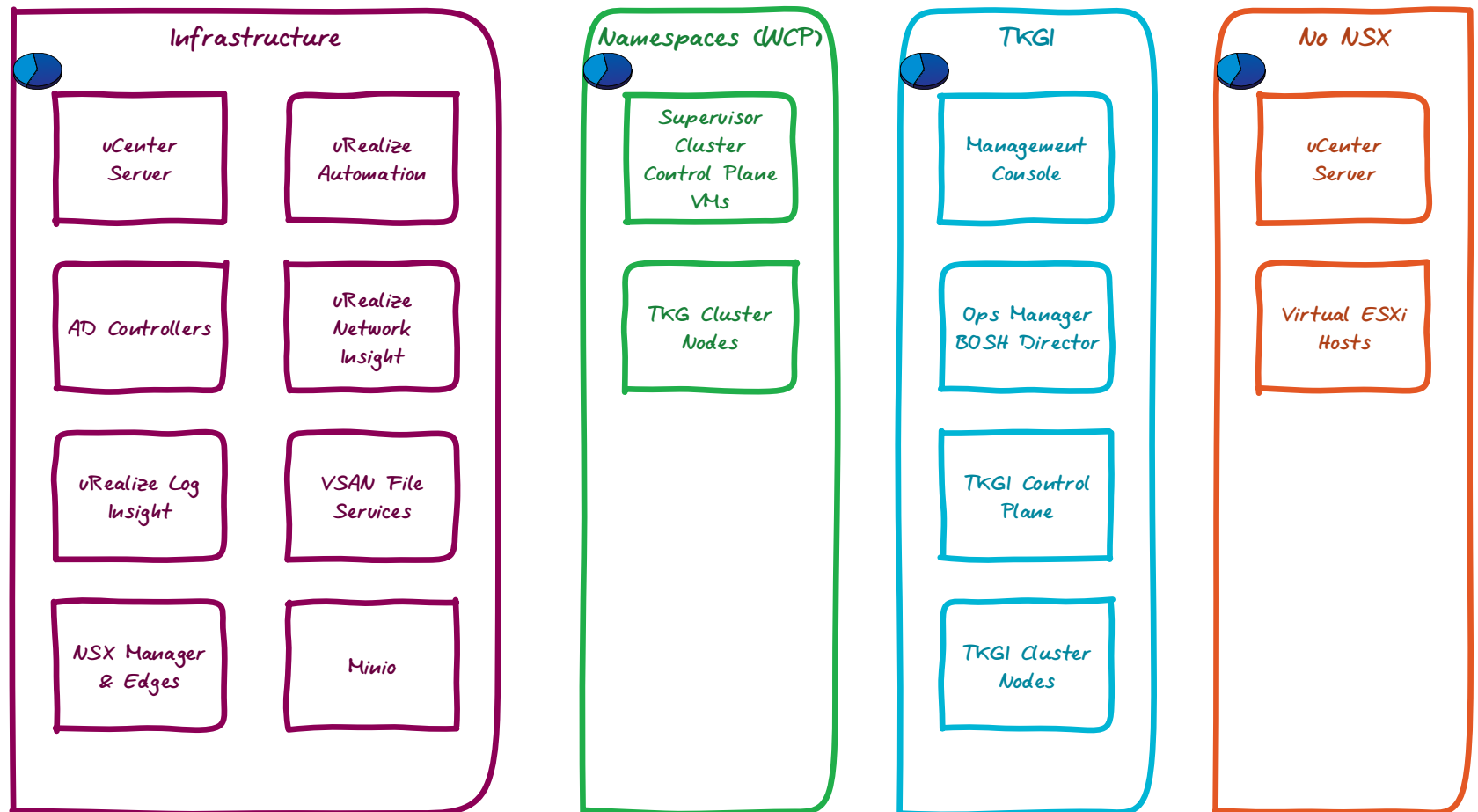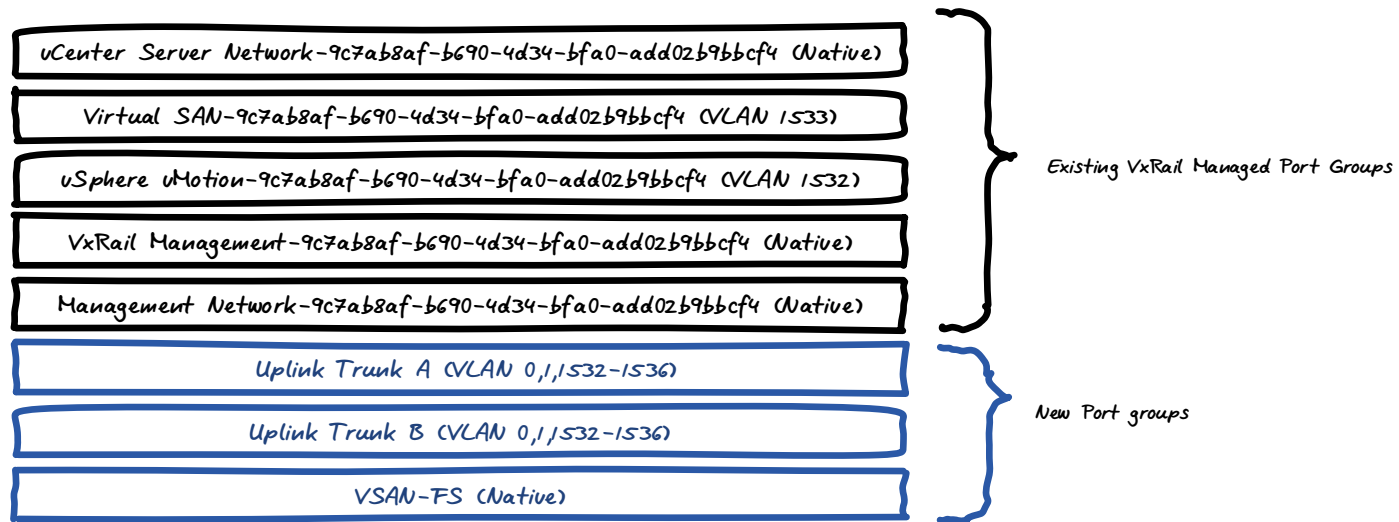Native VLAN – MGMT/VxRail/Vcenter Server (10.193.38.0/24)

Today

Converged

Pair 10Gbps to VDS

Pair 10Gbps to n-VDS

Four 10Gbps to VDS

VxRail Node

VxRail Node

VxRail Node

VxRail Node

VxRail Node

VxRail Node

VxRail Node

VxRail Node

vmware® *vSphere Cluster*

Infrastructure

vCenter Server	vRealize Automation
AD Controllers	vRealize Network Insight
vRealize Log Insight	VSAN File Services
NSX Manager & Edges	Minio

Namespaces (WCP)

- Supervisor Cluster Control Plane VMs
- TKG Cluster Nodes

TKGI

- Management Console
- Ops Manager BOSH Director
- TKGI Control Plane
- TKGI Cluster Nodes

No NSX

- vCenter Server
- Virtual ESXi Hosts

vCenter Server Network-9c7ab8af-b690-4d34-bfa0-add02b9bbcf4 (Native)

Virtual SAN-9c7ab8af-b690-4d34-bfa0-add02b9bbcf4 (VLAN 1533)

vSphere vMotion-9c7ab8af-b690-4d34-bfa0-add02b9bbcf4 (VLAN 1532)

VxRail Management-9c7ab8af-b690-4d34-bfa0-add02b9bbcf4 (Native)

Management Network-9c7ab8af-b690-4d34-bfa0-add02b9bbcf4 (Native)

Existing VxRail Managed Port Groups

Uplink Trunk A (VLAN 0,1,1532-1536)

Uplink Trunk B (VLAN 0,1,1532-1536)

VSAN-FS (Native)

New Port groups
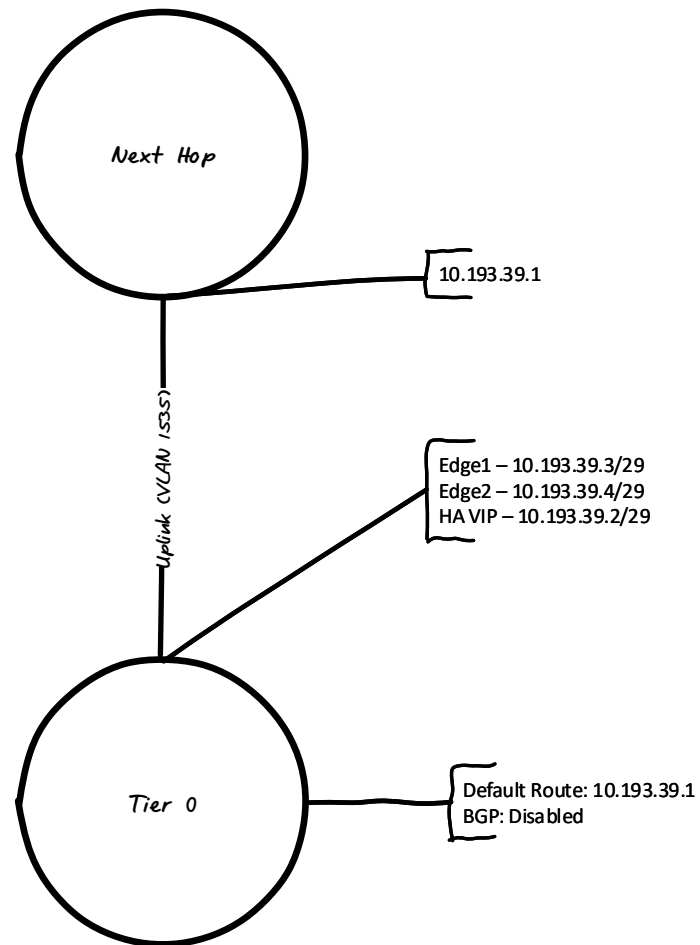
TEP Pool: 172.16.0.21–172.16.0.31 CIDR: 172.16.0.0/24

External IP Pool: 10.193.39.20–10.193.39.240 CIDR: 10.193.39.0/24

Next Hop

10.193.39.1

Uplink (VLAN 1535)

Edge1 – 10.193.39.3/29
Edge2 – 10.193.39.4/29
HA VIP – 10.193.39.2/29

Tier 0

Default Route: 10.193.39.1
BGP: Disabled

DESCRIPTION

NEW NSX-T Config

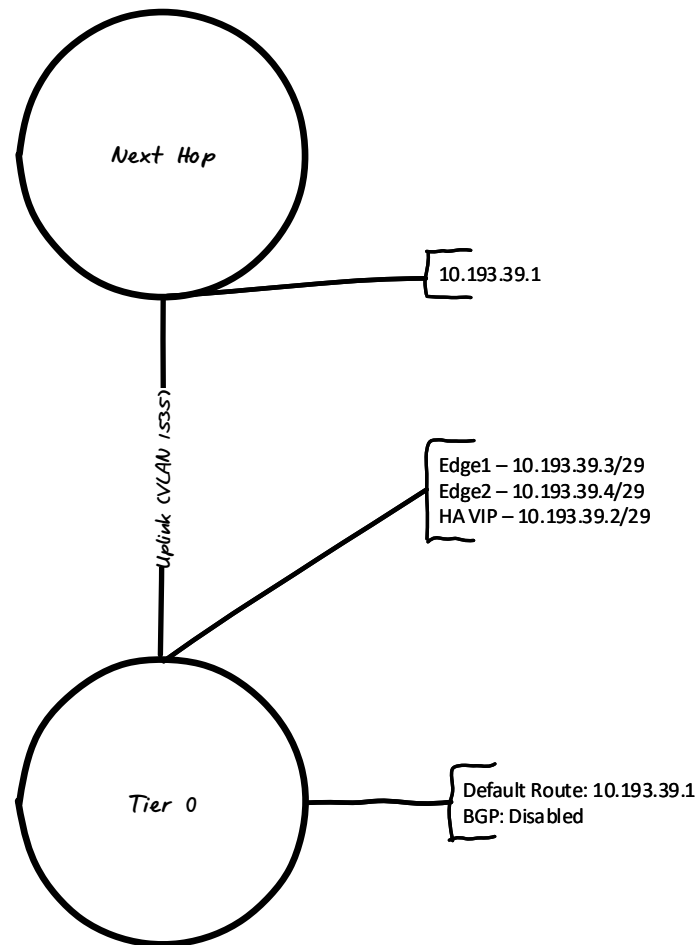Host TEP Pool: 172.16.0.21-172.16.0.31 CIDR: 172.16.0.0/24 GW: 172.26.0.1
Edge TEP Pool: 172.16.3.21-172.16.3.31 CIDR: 172.16.3.0/24 GW 172.16.3.1

Ingress CIDR: 10.193.39.32/27 10.193.39.33-62
Egress CIDR: 10.193.39.64/27 10.193.39.65-94

TKGI NAT Pool: 10.193.39.128/26 10.193.39.129-190
Reserved: 10.193.39.192/26 10.193.39.193-254

Next Hop

10.193.39.1

Uplink (VLAN 1535)

Edge1 – 10.193.39.3/29
Edge2 – 10.193.39.4/29
HA VIP – 10.193.39.2/29

Tier 0

Default Route: 10.193.39.1
BGP: Disabled

DESCRIPTION

Kubernetes

vSphere with Tanzu

Supervisor Cluster With NSX-T

Workload

Tanzu-1

ns

Demo

Demo Clusters

ns

SharedServices

Service-1

Monitoring

ns

Supervisor Cluster With HAProxy
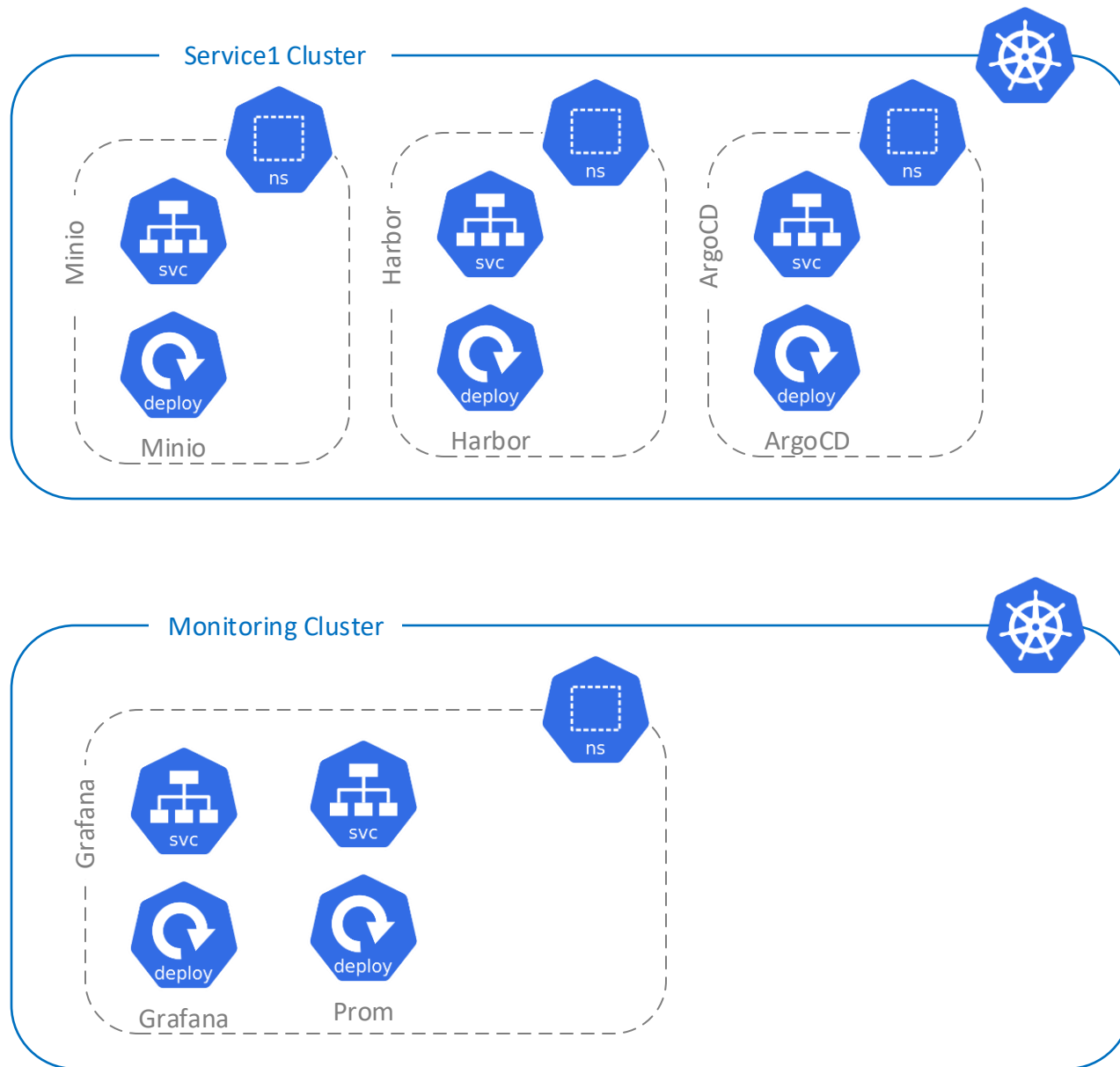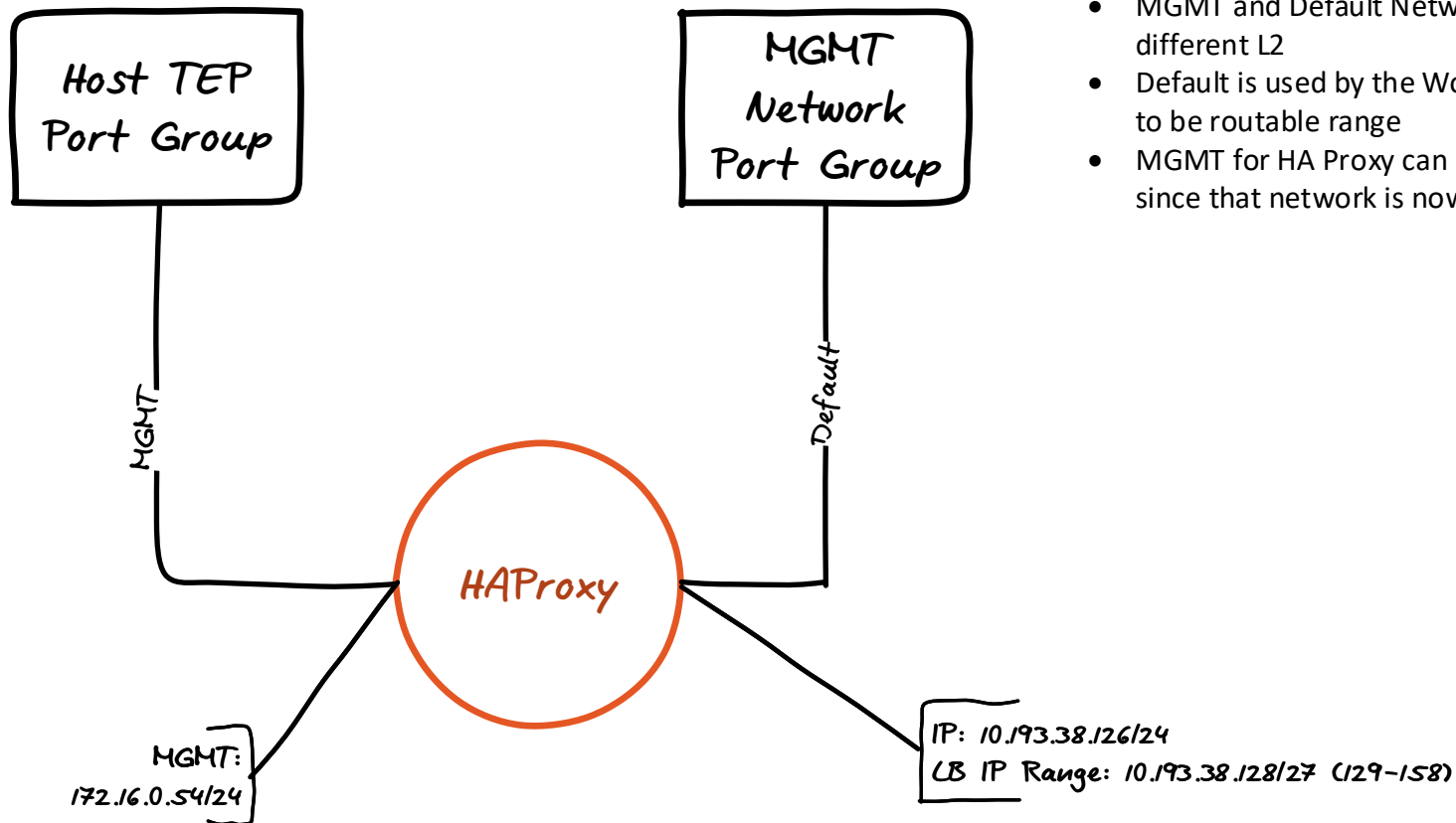
Workload

Tanzu-3

ns

Demo

Demo Clusters

ns

TKGI

TKGI-WS1

TKGI-WS2

Demo Clusters

DESCRIPTION
Shared Services

Service1 Cluster

Minio

ns

svc

deploy

Minio

Harbor

ns

svc

deploy

Harbor

ArgoCD

ns

svc

deploy

ArgoCD

Monitoring Cluster

Grafana

ns

svc

svc

deploy

deploy

Grafana

Prom

Host TEP Port Group

MGMT Network Port Group

MGMT

Default

HAProxy

MGMT:
172.16.0.54/24

IP: 10.193.38.126/24
LB IP Range: 10.193.38.128/27 (129-158)

- MGMT and Default Networks need to be in different L2
- Default is used by the Workload/LB, so needs to be routable range
- MGMT for HA Proxy can reside in Host TEP since that network is now routed by next hop