Welcome to the **CaaS environment**. If you can access this document you are super lucky, please proceed with caution as the environment is not in a perfectly repeatable state, (yet).

How to use the CaaS environment

- Environment currently requires the Pivotal VPN.
- All credentials will be shared with you via lastpass, including your own PKS API username.
    - This username can be used to create-clusters, delete-clusters, resize your own clusters in a sand-boxy way. Please clean up these clusters the same day you create them.
- The **pks-admin** user will be used to go through all of the demo scripts found at https://caas-workshop.cfapps.io, (admin/alwaysbekind).
    - Please do not delete clusters ‘workshop1’ or ‘workshop2’, they have specific use cases and have FQDN configured.
        - Workshop1 is for pushing deployments/containers/load balancers, etc.
        - Workshop2 is for resizing.
- NSX-T, vxRail Manager should be considered read-only. Do not touch any resources.
- Harbor, feel free to setup your own project and push images. Do not touch the existing cass-workshop project.
- vRLI, vROM, Wavefront, feel free to edit dashboards, but don’t delete any.
- vSphere, read-only other than bosh resurrector demo.
- There is a Windows jumpbox if you want to access the environment that way, but it will bounce every third connection off. Best bet is to just bookmark all of the URLs on your local machine.

- With your pks user/password, simply execute:
    - `pks login -a api.pks.caas.pez.pivotal.io -u user -k -p pass`

- If there are any issues, just ping Mike or Steve. Good luck.

Credentials: are all stored in LastPass. Send an email to mrhodes@pivotal.io for access.

Hardware:

- 4 x Dell VxRail E460 servers
- VxRail 4.5.211-8667745

vCenter:

sc2-vc-01.caas.pez.pivotal.io / 10.193.38.11

ESXi:

sc2-esx-0[1-4].caas.pez.pivotal.io / 10.193.38.2[1-4]

Ops Mgr:

opsmgr.caas.pez.pivotal.io / 10.193.39.8

Ops Mgr - Control Foundation

om-ctrl.caas.pez.pivotal.io / 10.193.38.50

Ops Mgr - PAS Foundation

opsmgr.pas.caas.pez.pivotal.io / 10.193.39.241

Minio - Control Foundation

minio.caas.pez.pivotal.io:9000 / 10.193.38.52

Concourse - Control Foundation

Concourse.caas.pez.pivotal.io / 10.193.38.53-56 (web)

PKS API:

api.pks.caas.pez.pivotal.io / 10.193.39.10

Harbor:

harbor.caas.pez.pivotal.io / 10.193.39.11 (PKS-specific)
harbor-ctrl.caas.pez.pivotal.io / 10.193.38.59 (Control Plane)

VXRail Mgr:

sc2-vxrail-01.caas.pez.pivotal.io / 10.193.38.12

LogInsight:

sc2-syslog-infra.caas.pez.pivotal.io / 10.193.38.13

NSX-T

Manager:

sc2-nsxmgr-01.caas.pez.pivotal.io / 10.193.38.15

Controllers:

sc2-nsx-controller-0[1-3].caas.pez.pivotal.io / 10.193.38.1[6-8]

Edges:

sc2-nsx-edge-0[1-2].caas.pez.pivotal.io / 10.193.38.19 and .20

Ubuntu Jumpbox

Networking

DNS Domain: caas.pez.pivotal.io
DNS Servers: 10.192.2.10,10.192.2.11
NTP Servers: Per this doc, **time.svc.pivotal.io** should be used instead of 10.192.2.5,10.192.2.6

Networks
10.193.38.0/24

VxRail Infrastructure. You can also put additional VMs on this subnet, starting at IP .30. Gateway is .1.

- 10.193.38.60-65 - For Maggie

10.193.39.0/24

IP (Range)	Use
10.193.39.1	Gateway
10.193.39.2	HA VIP on T0
10.193.39.3	T0 uplink on Edge 1
10.193.39.4	T0 uplink on Edge 2
10.193.39.5 - 10.193.39.7	Reserved
10.193.39.8	PKS Ops manager DNAT
10.193.39.9	PKS BOSH Director DNAT
10.193.39.10	PKS API DNAT
10.193.39.11	PKS Harbor DNAT
10.193.39.12 - 10.193.39.13	Reserve for PKS
10.193.39.14	PAS Ops Manager DNAT
10.193.39.15	PAS BOSH Director DNAT

10.193.39.16	PAS Load-Balancer for GoRouters
10.193.39.17	Reserve for PKS2
10.193.39.18	Reserve for PKS2
10.193.39.19	Reserve for PKS2
10.193.39.20 - 10.193.39.240	NSX-T external-ip-pool (PKS)
10.193.39.241	PAS SNAT
10.193.39.242	Unassigned
10.193.39.243	Unassigned
10.193.39.244 - 10.193.39.253	NSX-T PAS-FLOATING-IP-POOL

Public IPs

TBD

Networking notes:

VMware HCIA Distributed Switch contains these port groups:

Portgroup Name	**Usage**	**Type/VLAN**	**CIDR**
Management Network	ESXi Host Comms	VLAN 0	10.193.38.0/24
T0-Uplink	Northbound Uplink	VLAN 1535	10.193.39.0/29
TEP	Tunnel Endpoint	VLAN 1534	172.16.0.0/24
vCenter Server Network	Infrastructure & Control components	VLAN 0	10.193.38.0/24
Virtual SAN	VSAN	VLAN 1533	172.16.2.0/24
VxRail Management	VxRail	VLAN 0	N/A
vSphere vMotion	vMotion	VLAN 1532	172.16.1.0/24

NSX Groups & Pools

Name	**Use**	**CIDR**	**Range**

external-ip-pool	PKS	10.193.39.0/24	10.193.39.20-10.193.39.240
tep-pool	NSX	172.16.0.0/24	172.16.0.21-172.16.0.30
PKS-Node-IPs	PKS	172.24.0.0/14	172.24.0.0-172.27.255.255
PKS-Pod-IPs	PKS	172.28.0.0/14	172.28.0.0-172.31.255.255
PAS-Container-IP-Block	PAS	172.32.0.0/14	172.32.0.0-172.35.255.255

NSX T1 Routers

Name	**Use**	**Logical Switches**	**Router Port**
PAS-Deployment-T1	PAS	PAS-Deployment-LS	192.168.2.1/24
PAS-Infrastructure-T1	PAS	PAS-Infrastructure-LS	192.168.1.1/24
PAS-Services-T1	PAS	PAS-Services-LS	192.168.3.1/24
T1-Router-PKS-Services	PKS	PKS-Services	172.16.2.1/24
T1-Router-PKS-Infrastructure	PKS	PKS-Infrastructure	172.16.1.1/24
PAS-DynSvcs-T1	PAS	PAS-DynSvcs-LS	192.168.4.1/24
PKS2-MGMT-T1	PKS2	PKS2-MGMT	172.16.11.1/24