

PRIVATE CLOUD BUILD AND MANAGED SERVICES

for a Telecom Service Provider



Services: Private Cloud Build, Network Service Integration, Managed Services

OVERVIEW

Client is **\$7billion** Telecommunications Network Equipment Supplier with operations worldwide, with DCs located in Asia and Europe

- ▶ Build Private Cloud environment using Openstack platform
- ▶ Create two sub domains using ESXi and KVM as hypervisor
- ▶ Integrate with 3rd party tools for configuration management, IPAM, Mail server and metering and charge back
- ▶ Create multi POD (Performance Optimized DC) environment for IT domain & establish communication to Telco domain

CHALLENGES



Data leakage due to cross communication between IT domain and Telecom domain

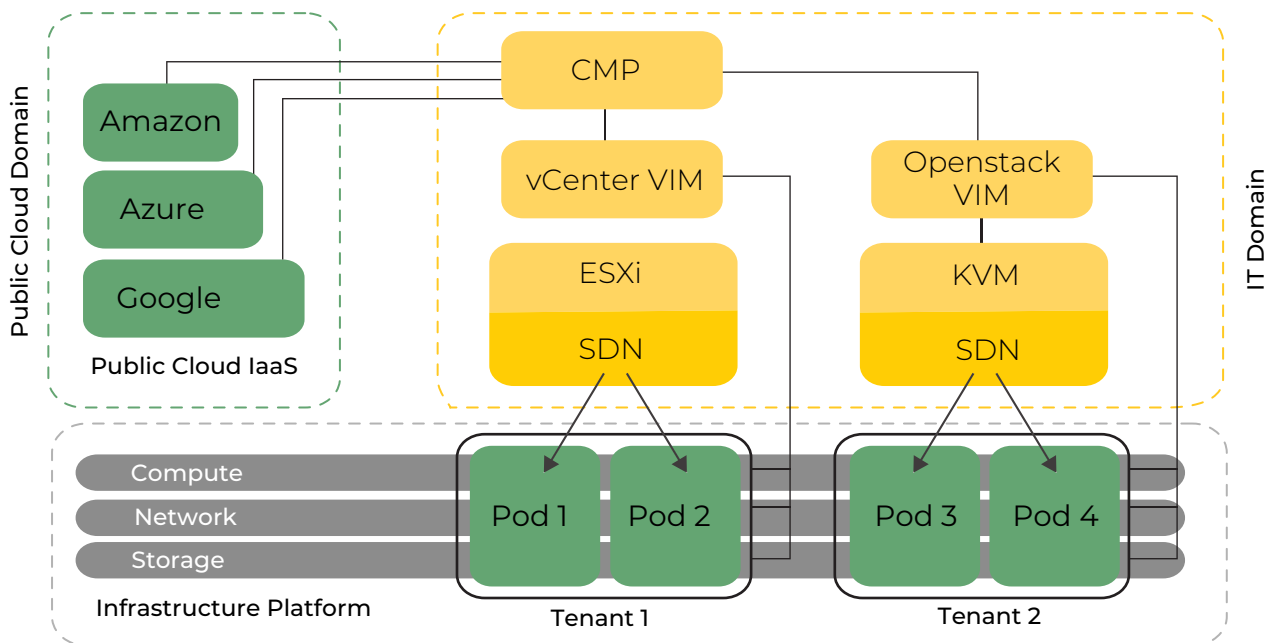


Inability to Orchestrate workload provisioning in Public Cloud environment

SOLUTION

- 1 Deployment and configuration of Cloud Forms components such as Virtual Intelligence, Services Infrastructure, Control, and Optimize to manage infrastructure
- 2 3x Controller nodes (running in an HA cluster). The OpenStack controller servers will also host the Red Hat Ceph Storage MONs for this cluster
- 3 Network Automation and configuration using different SDN controllers for each domain
- 4 Service catalogue and workflow automation using Cloud forms CMP
- 5 Service integration for IP address management, firewall as a service, HA proxy and load balancer as services for application load balancing
- 6 9X5 Managed Services model for Multi POD Private Cloud across the region

SOLUTION OVERVIEW AND SERVICE INTEGRATION POINTS



Service Integration with Private Cloud

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| <ul style="list-style-type: none"> ➤ Integration with directory service (LDAP) to define and authenticate users | <ul style="list-style-type: none"> ➤ Integration with patch management for Linux and windows (RedHat Satellite) |
| <ul style="list-style-type: none"> ➤ Integration With Configuration Management Database (BMC Remedy) | <ul style="list-style-type: none"> ➤ Integration with backup solution for data protection and disaster recovery (Zerto) |
| <ul style="list-style-type: none"> ➤ Integration With Help Desk and Ticketing System (BMC Remedy) | <ul style="list-style-type: none"> ➤ Integration with IT financial systems for chargeback (AMDOCS) |
| <ul style="list-style-type: none"> ➤ Integration with mail server (SCOrch) | <ul style="list-style-type: none"> ➤ Integration with IPAM (InfoBlox) |

HIGHLIGHTS

- 1 Compute:**
Red Hat Enterprise Linux
image for VM services
- 2 Storage:**
Ceph storage
- 3 Network:**
VMware NSX and Ericsson SDN
controllers
- 4 Cloud Environment (IaaS):**
VMware vSphere/vCloud,
OpenStack, ESXi, KVM

OUTCOMES

- › Service portal for end-to-end service provisioning and work flow automation
- › Private Cloud with extension of Public Cloud infrastructure
- › Private Cloud based on Openstack delivering IaaS services
- › Platform readiness for Docker, PaaS and Public Cloud integration
- › Service delivery adhering to industry/local EU regulation