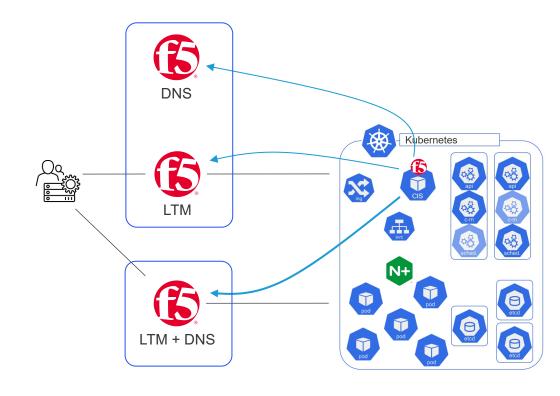


F5 AAKC – Active-Active Kubernetes Cluster

CHAPTER 6

What Have Been Done So Far

Deploy F5 CIS, IPAM and ExternalDNS.

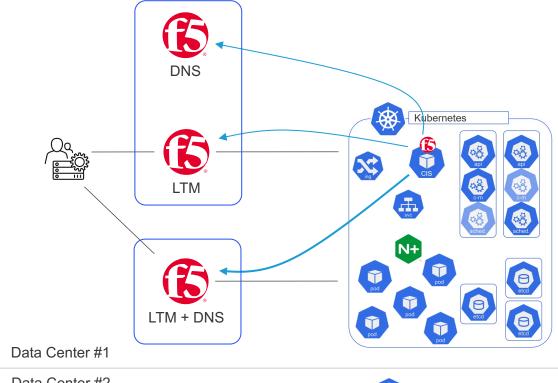




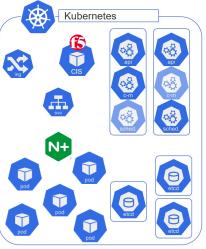
Real Live Scenario

In real live scenario, there always been multiple data centers.

K8s cluster follows the same pattern.



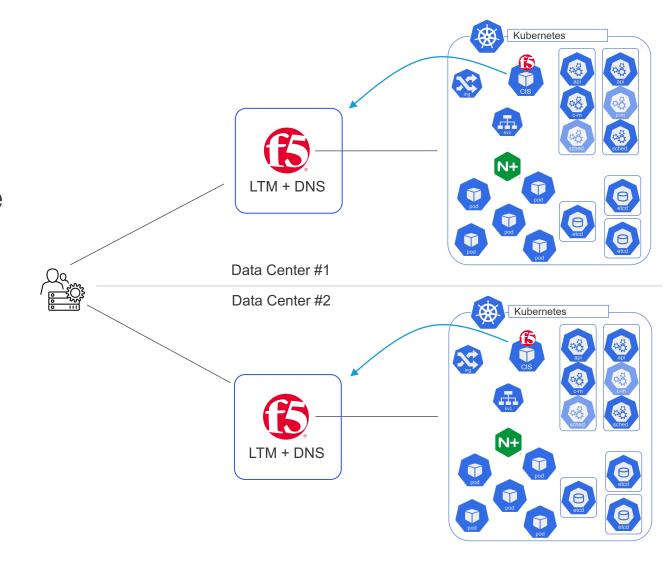
Data Center #2



Real Live Scenario

Active-Active Data Center (AADC) is the well-known concept to provide DC resilience.

We extend this concept to cover K8s clusters. Hence,
Active-Active Kubernetes Clusters

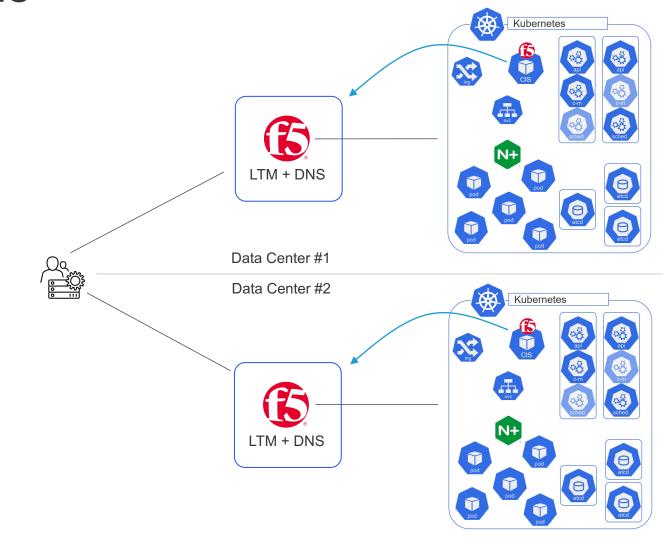




GSLB Result on Normal Time

During the normal time, both K8s clusters from different DC are ready.

GSLB replies with both IP addresses of the LTM VS.

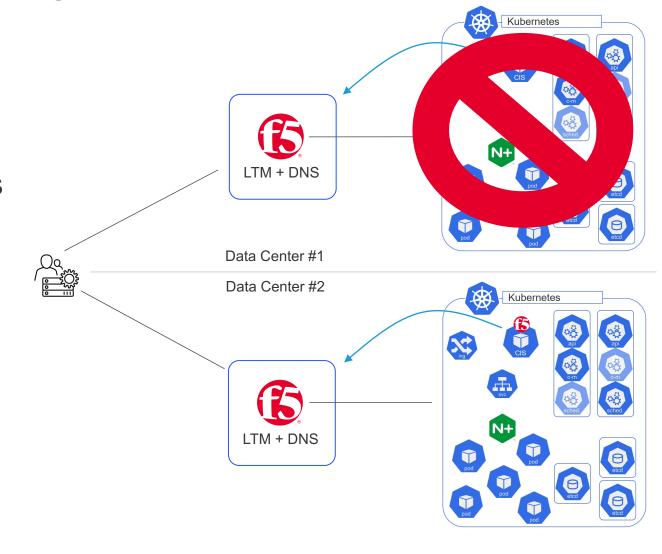




GSLB Result on Abnormal Time

During the abnormal time, one of the K8s clusters might be unavailable.

GSLB replies with IP address of the LTM VS where the K8s is still healthy.







Lab 6 – AAKC

Lab 6.1 – ExternalDNS

Lab Tasks

6.1.1) Confirm the CIS + IPAM deployment in 2 K8s clusters.

6.1.2) Deploy the application in both K8s clusters.

6.1.3) Test the HA scenarios.



Summary

What We Have Learned in This Chapter

- Real live scenario requires 2 data centers and minimum a K8s cluster in each data center.
- Active-Active Data Center concept has been providing great benefit in DC resilience.
- Active-Active Kubernetes Cluster using F5 solutions enhance the K8s cluster's resilience.





Quiz Time!!!

