

AGILE DEVELOPMENT AND F5: SCALE AND SECURE YOUR OPENSHIFT CONTAINER APPLICATIONS

Red Hat OpenShift Container Platform (OCP) is the most widely used distribution of Kubernetes in the market. Included in the OCP platform is ADC functionality from HAproxy, which might only be sufficient for in-cluster deployments. The problem is, today's modern applications are complex, spanning multiple clusters and requiring the same levels of security as the monolithic applications they replace.

CHALLENGE

Many customers, particularly in the financial services industry (FSI) are looking to adopt agile development techniques so they can scale their environments more effectively. A crucial facet of agile deployment is to have mirrored blue\green or canary type environments for testing code, managing traffic and then scaling in production. Many of these blue\green microservices environments must span multiple OCP clusters and have external ADC devices with the intelligence to direct traffic to the right application environment.

SOLUTION

F5® BIG-IP® Local Traffic Manager[™] (LTM), F5® BIG-IP® DNS, and NGINX Plus work together to provide the features needed to scale, secure, and optimize Agile application management and deployment across OCP clusters:

- Granular north-south traffic control and cross-cluster application delivery (BIG-IP LTM, BIG-IP DNS, and F5[®] Container Ingress Services)
- Site failover and regional availability (BIG-IP DNS)
- · East-west traffic management within the cluster (NGINX Plus)
- Full automation and deployment of all components via Ansible



Figure 1: Geo-location based traffic routing

CONCLUSION

Agile deployment methods, microservices, and containers combine to establish a new paradigm for application development. F5 technologies help customers flexibly adopt microservices by providing granular insights into transactions that are crucial to secure and scale multi-cluster OpenShift deployments.

RELATED RESOURCES

f5.com/redhat

f5.com/ansible

github.com/f5devcentral/f5-bd-mcd



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