

# Secure Applications and APIs Across Multi-Cloud Environments with the F5 Distributed Cloud Platform and Red Hat OpenShift

Connect your cloud networks and applications with end-to-end visibility to accelerate deployments and simplify management. F5 and Red Hat reduce the complexity of modern cloud network architectures to deliver secure and reliable applications.



#### KEY BENEFITS

## Improved visibility and security posture

Reduce mean time to resolution by improving network and application security and performance visibility shared across public clouds, on-premises data centers, and remote sites by NetOps, SecOps, and DevOps teams.

#### **Reduced operational complexity**

Achieve up to a 12x reduction in time-to-market with centralized management and an integrated stack for uniform services and policies across all clouds and premises.

#### Seamless connectivity

Enable DevOps autonomy with secure connectivity across applications, services, and data for any cloud provider, on-premises data centers, and remote sites.

#### **Increased productivity**

Streamline the self-service provisioning, operations, and orchestration of cloud-native network tooling across multiple public cloud providers.

## Multi-Cloud Environments Create Operational Complexity

Deploying workloads on-premises and across multiple clouds is common for most organizations with 44% using four or more providers.<sup>1</sup>

However, this approach can pose a significant challenge even for the most experienced NetOps, SecOps, and DevOps teams, leaving the environment unnecessarily exposed to cyber risk. Application and service protection solutions to counter those threats are needed, highlighted by the fact that 88% of organizations are moving to platform security to address this risk.<sup>1</sup>

To improve secure application delivery in complex multi-cloud environments, organizations need:

- Centralized management and an integrated service stack for uniform services and policies, improved scalability, and reduced complexity.
- Real-time layer 7 visibility to keep track of every version of every application running everywhere.
- Complete DevOps autonomy with automated processes to increase self-service, delivery speed, and operating reliability.
- Built-in, scalable security with industry-leading policies to automate multi-cloud services and reduce vendor sprawl.

# End-to-End Observability in a Distributed OpenShift Platform

Red Hat\* OpenShift\* is the industry's leading hybrid cloud application platform for Kubernetes, delivering a consistent experience across public cloud, on-premises, hybrid cloud, or edge architecture. It reduces friction for developing, modernizing, deploying, running, and managing applications.

While Red Hat OpenShift provides a trusted foundation for distributed application deployments across multiple clouds, adding an enterprise-grade ingress/egress gateway can discover services running on OpenShift and make them available in any location. In addition, applications running on OpenShift will benefit from unified network policies and integrated security to simplify management and reduce tool sprawl.

#### KEY FEATURES

## Granular, unified traffic steering control

Control traffic and network isolation, both at an individual location level and across multiple sites and clouds.

#### **Built-in scalable security**

Deploy a full suite of industryleading security and application service policies as you automate your multi-cloud services.

## Visibility and performance monitoring

Pinpoint cyber risk, undesirable behaviors, and performance bottlenecks to simplify troubleshooting and deploy fixes faster.

#### **Centralized management**

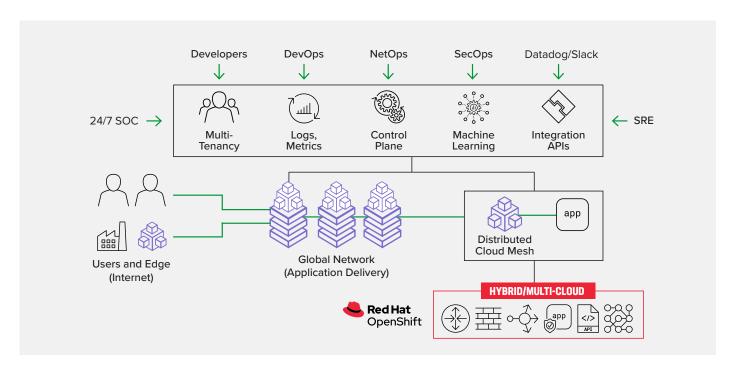
Consolidate multiple services to simplify app management, security, and network connectivity while reducing vendor and infrastructure sprawl and freeing you from cloud-provider lock-in.

# F5 Secure Multi-Cloud Networking Solutions with Red Hat OpenShift

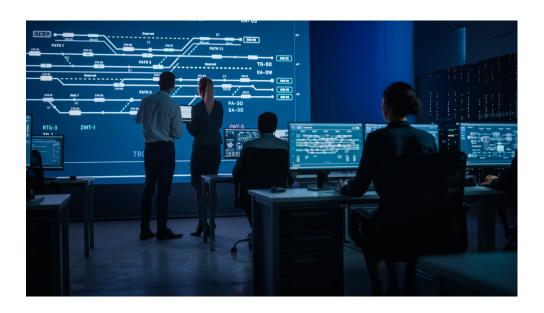
F5° Distributed Cloud Network Connect seamlessly connects public clouds, edge sites, and data centers, including Red Hat OpenShift environments, for end-to-end visibility. It provides fast and secure networking across public and hybrid clouds with rapid troubleshooting and automated provisioning to simplify operations.

It integrates with F5° Distributed Cloud App Connect to automate app deployments across clouds, data centers, and edge locations. In addition, you can secure distributed Kubernetes cluster services in Red Hat OpenShift with one-click provisioning of web application and API protection services, including web application firewalls, DDoS protection, and bot mitigation. The integrated service stack addresses both layer 3 transit and layer 7 app-to-app service networking through a single console to combine app networking and security.

The F5° Distributed Cloud Console observability portal works with other elements of the F5° Distributed Cloud Platform to enable operations teams to easily monitor health and manage the end-to-end lifecycle for distributed OpenShift-enabled workloads.



**Figure 1:** Connect F5 Distributed Cloud and Red Hat OpenShift for fast and secure application delivery in hybrid and multi-cloud environments.



# Benefits of the F5 Distributed Cloud Platform and Red Hat OpenShift

Together, F5 and Red Hat reduce the complexity of securing, deploying, scaling, and managing Kubernetes applications so you can successfully transition your business to a modern, distributed multi-cloud application infrastructure. Secure your applications in a simpler, more efficient operating model with full web application and API protection with end-to-end visibility regardless of the underlying cloud technologies.

With F5 and Red Hat, SecOps, NetOps, and DevOps can deliver secure apps faster across distributed cloud environments, reducing operational costs with fewer standalone services to purchase and support, and less time to design and troubleshoot.

Learn more about F5 and Red Hat's partnership at f5.com/redhat



<sup>&</sup>lt;sup>1</sup> F5, "2023 State of Application Strategy Report," 2023