



# Securely Deliver Apps Across Distributed Cloud Environments

F5 Distributed Cloud Services enable customers to deploy, secure, and operate their applications in a SaaS-like manner, wherever they're needed—including the data center, multi-cloud environments, or the network or enterprise edge.



## KEY BENEFITS

### Reduce costs and number of vendors

F5's multi-tenant platform delivers up to 70% cost reduction by removing the need to integrate multiple cloud providers or third-party services.

### Simplify operations

Reduce time-to-market by up to 12 times, with an integrated, consistent set of SaaS-based services across any environment.

### Increase collaboration

Self-service with separation of duties enables developers, DevOps, NetOps, and SecOps to unite and solve issues together.

### Implement best-in-class security

Advanced AI and machine learning mitigate threats and enforce security policies across distributed environments.

### Achieve end-to-end observability

A single portal shared by NetOps, SecOps, and DevOps provides a holistic view of app security and performance.

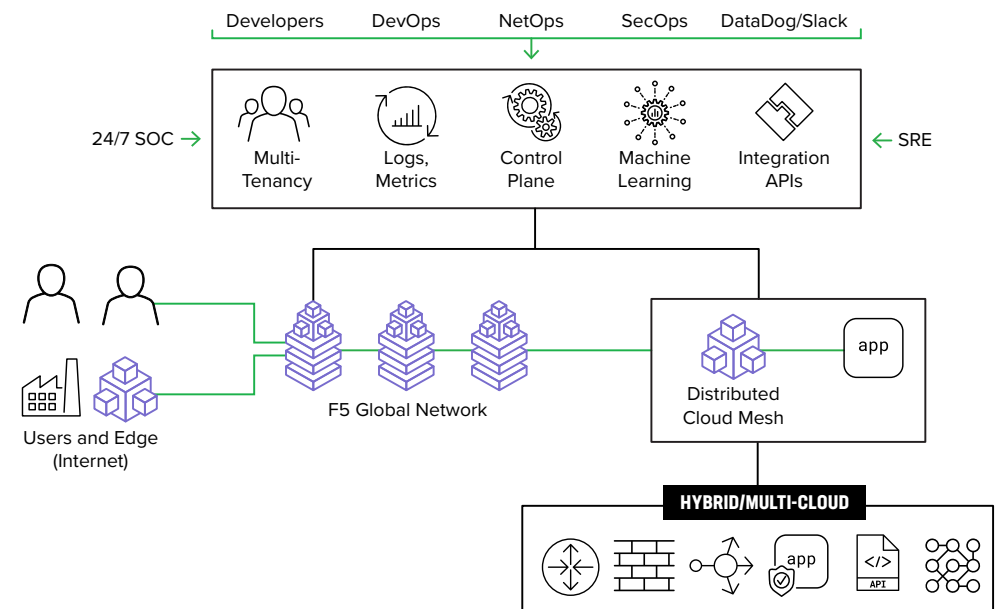
**Today's applications are becoming increasingly distributed** in modular components across multiple clusters, due to microservices and containers, and across locations such as the cloud and the edge. Because of this sea change, conventional app deployment solutions are no longer sustainable.

However, many organizations are seriously challenged by deploying apps across distributed locations, cloud providers, and environments. These implementations trigger operational complexity, and introduce security concerns, compliance requirements, and lack of visibility across environments.

The most significant issues occur where modern apps are built using microservices and distributed clusters, which can be likened to trying to solve a jigsaw puzzle built across multiple tables. The challenges also extend, and compound, across different IT teams, including DevOps, NetOps, SecOps, and cloud architects.

They also impact the targeted business outcomes of new applications and digitized business processes. Specifically, they can affect time-to-service (and thus transformation velocity), security (and thus viability) of the transformed process, and compliance, among other factors.

F5® Distributed Cloud Services have been developed to address—and overcome—all these challenges.



**Figure 1:** The F5 Distributed Cloud Platform connects, secures, and manages apps in the cloud, on-premises, and at the edge.

## KEY FEATURES

### Distributed application management

Deploy and orchestrate applications across a segment or an entire fleet of clusters from a single pane of glass.

### Application-to-application connectivity

Network and security policies can be implemented at the application layer instead of "stitching together" networks at L3.

### Multi-tenancy with tenant isolation

Tenants leverage complete network and namespace isolation.

### Global private network

F5's high-performance private network accelerates workload connectivity.

### Visibility and observability

Advanced telemetry delivered across infrastructure, applications, and network.

# Protect Apps, Expedite Time-to-Service, Lower TCO, and More

F5 Distributed Cloud Services enable customers to deploy, secure, and operate their applications in a cloud-native environment, wherever they're needed—including the data center, multi-cloud environments, or the network or enterprise edge.

Users can accelerate time-to-service, lower their total cost of operations, and improve security because all Distributed Cloud Services are SaaS-based, cloud-based, and fully integrated through a single data path, policy engine, and management console.

Dev and DevOps teams can more effectively collaborate with NetOps and SecOps teams through self-service and multi-tenancy capabilities, reducing friction and accelerating application deployments.

The F5 Distributed Cloud Platform consists of three main components:

- F5® Distributed Cloud Mesh** is a common connectivity and security stack that scales horizontally across your application portfolio. It provides a single, distributed network and application services stack to create a connectivity fabric that embeds security and critical services such as load balancing, WAF, DDoS mitigation, API gateway protection, and more. Within this environment, Distributed Cloud Mesh delivers distributed networking and security services to connect, secure, and observe applications across multiple clouds and edge sites.
- F5® Distributed Cloud App Stack** standardizes application services. With F5's application deployment model, organizations can utilize locations on F5's network where compute, network, and storage already exist to push applications closer to critical interactions. Distributed Cloud App Stack provides a virtual Kubernetes platform to automate the deployment, security, and operations of containerized applications and clusters across diverse environments. It scales to many clusters and locations with centralized orchestration, observability, and operations, simplifying the management of a fleet of distributed clusters and reducing dependencies on cloud-hosted origins.
- F5® Distributed Cloud Console** provides centralized management and visibility. A centralized controller that consolidates all telemetry, configuration, and management across business units or functional teams, Distributed Cloud Console is a SaaS-based, multi-tenant operations and observability portal to oversee infrastructure, services, and apps in the F5 stack. Users can easily monitor health and manage the end-to-end lifecycle for distributed workloads on Distributed Cloud Mesh and Distributed Cloud App Stack via role-based access control.

ALL DISTRIBUTED CLOUD SERVICES ARE CLOUD-BASED AND FULLY INTEGRATED THROUGH A SINGLE DATA PATH, POLICY ENGINE, AND MANAGEMENT CONSOLE.

## Conclusion

Now, customers can rapidly and securely deploy applications wherever they're needed. F5 Distributed Cloud Services' portfolio of cloud-native services for multi-cloud, network edge, and enterprise environments means app and ops teams are not forced to select locations based on infrastructure.

Users can secure modern and traditional applications in a simpler, yet more efficient operating model. F5 provides full web application and API protection as well as individual security services—all as SaaS-based offerings with end-to-end visibility across a distributed deployment. SecOps and DevOps teams can secure apps faster with less integration work and fewer blind spots.

Organizations can also deploy applications faster and at a lower TCO. F5 consolidates multiple standalone networking and security services into a unified and fully cloud-based offering. The result is much more rapid deployment, due to the cloud-based format and minimal integration across services. Organizations can reduce operational costs with fewer standalone services to purchase and support, and less time to design and troubleshoot.

**F5's comprehensive portfolio of application networking and security services is delivered via a SaaS-enabled platform to simplify operations and management.**

**Get started today.** Contact your F5 representative to learn more.

