



Securely Deliver Apps Across Highly Distributed Cloud Environments

F5 Distributed Cloud Services simplify application security and delivery for customers, wherever they run their apps—their data center, multi-cloud environments, and/or the network or enterprise edge. Users can accelerate time-to-service, lower TCO, and improve security, because all Distributed Cloud Services are cloud-based and fully integrated through a single data path, policy engine, and management console.



KEY BENEFITS

Lower operational costs

Cut costs by up to 70% by consolidating vendors and eliminating the need to integrate services from multiple cloud providers or third-party providers.

Simplify operations

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

Improve collaboration

Improve collaboration across DevOps, NetOps, and SecOps with a shared console for application performance and security.

Upgrade application performance

Deliver content and applications closer to users by caching assets and workloads across the F5 global network.

Implement best-in-class security

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

Achieve end-to-end observability

Get a holistic view of application performance and security metrics across all cloud, on-prem and edge sites.

THE MOST SIGNIFICANT ISSUES OCCUR WHERE MODERN APPS ARE BUILT USING MICROSERVICES AND DISTRIBUTED CLUSTERS, WHICH IS LIKE TRYING TO SOLVE A JIGSAW PUZZLE BUILT ACROSS MULTIPLE TABLES.

F5 Distributed Cloud Services: Purpose-Built to Manage and Safeguard Modern Apps

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 is like 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.

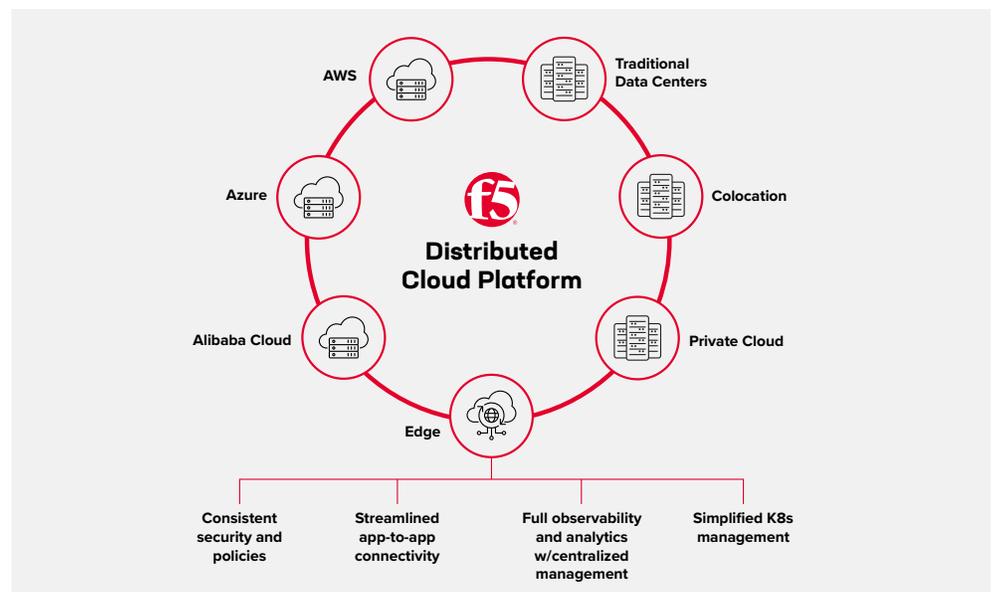


Figure 1: The F5 Distributed Cloud Platform connects, secures, and manages apps in the cloud, on-premises, and at the edge.

KEY FEATURES

Self-service capabilities

SaaS-based platform simplifies operations and lifecycle management.

Global private network

High-performance private network that accelerates workload connectivity.

Multi-tenancy with tenant isolation

Complete network and namespace isolation.

Customer Edge/Regional Edge flexibility

Customers have more flexibility to build app architectures based on their own needs, rather than a service provider's requirements.

Application-to-application connectivity

Network and security policies can be implemented at the application layer instead of "stitching together" networks at Layer 3.

Distributed application management

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

Visibility and observability

Advanced telemetry across infrastructure, applications, and network.

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

F5 Distributed Cloud Services simplify application security and delivery for customers, wherever they run their apps—their data center, multi-cloud environments, and/or the network or enterprise edge.

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

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

The F5 Distributed Cloud Platform features technologies supporting these important use cases:

WEB APPLICATION AND API PROTECTION

The visibility of data and security threats at an organization becomes fragmented as architecture is increasingly decentralized. Our WAAP solutions mitigate the risk of digital compromise and downtime, from application vulnerabilities, bad bots, and automated attacks. You can secure your APIs and third-party integrations, protect application infrastructure, and prevent DDoS attacks and client-side attacks.

Application Security: Protect apps in real-time and realize broad app security from a single SaaS-based platform. F5 Distributed Cloud solutions include:

- **Web Application Firewall:** Safeguard web apps with advanced threat detection and AI/ML intelligence.
- **API Security:** Discover API endpoints, allow legitimate transactions, and monitor environments for anomalous behaviors.
- **DDoS Mitigation:** Mitigate app-based and volumetric distributed denial of service (DDoS) attacks.
- **Bot Defense:** Gain real-time detection and mitigation of malicious bot attacks.
- **Aggregator Management:** Embrace Open Banking while managing Aggregator and Third-Party Provider (TTP) risks.
- **Client-Side Defense:** Protect customer credentials, financial details, and personally identifiable information against Magecart, Formjacking, and other client-side supply chain attacks.

Infrastructure Protection: Fortify your cloud-native infrastructure to secure your entire environment. Solutions include:

- **Application Infrastructure Protection:** Secure your modern apps and the cloud-native infrastructure they run on with high-efficacy threat detection.

Managed Services: Deploy managed services to secure and deliver any app, anywhere. With managed services, you can count on ongoing support and in-house expertise—without up-front investments in infrastructure and technology. Our managed services include:

- **DDoS Mitigation:** Fortify your defense against app-based and volumetric distributed denial of service (DDoS) attacks.
- **Web Application Firewall:** Advanced threat detection and AI/ML intelligence to protect web applications.

FRAUD AND ABUSE PREVENTION

The industrialized attack lifecycle often begins with automation – and ends in fraud. Best-in-class security risk management demands collaboration, technology convergence, and service integration. Our F5® Distributed Cloud fraud and abuse prevention solutions deter fraud and abuse while maximizing the customer experience.

Fraud and Risk: Protect ecommerce and digital properties while boosting customer loyalty and brand awareness. Solutions include:

- **Account Protection:** Powerful artificial intelligence for fraud protection.
- **Authentication Intelligence:** Increase topline digital revenue and improve customer experience by eliminating login friction for legitimate returning consumers.

MODERN APP DELIVERY

Businesses are adopting multiple cloud providers to keep up with customer demand and pushing services closer to customers. Yet cost and skills shortages are a growing barrier. How can organizations build apps closer to customers? F5® Distributed Cloud Services delivers cloud-native modern app services with performance and availability at scale, i.e., SaaS solutions that manage APIs and manage and scale at the edge.

Multi-Cloud Networking: Reduce the complexities of connecting applications and workloads across multiple cloud, on-premises, and edge environments. Solutions include:

- **Network Connect:** Build secure network connectivity between multiple public and private clouds. Increase agility and reduce complexity with simplified, integrated controls for provider networks and east-west and north-south traffic.

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

- **App Connect:** Securely connect applications and workloads across multiple clouds. Deliver applications across clouds in minutes rather than days or weeks—a fraction of the time it takes using conventional tools.

Edge Compute: Provide a secure and distributed cloud environment to deploy, secure and operate applications across diverse edge environments. Solutions include:

- **App Stack:** Deploy, secure, and operate a fleet of applications across the heterogeneous infrastructure in private, public, telecommunications, and edge clouds.

APPLICATION AND NETWORK PERFORMANCE

Business growth and global customer reach, coupled with higher customer demand, are creating added complexity and excessive costs. How do I respond to customer demand, maintain uptime, and manage costs? F5® Distributed Cloud app performance and reliability solutions accelerate application performance and optimize reliability via network and application layers. They also effectively load balance apps, increase resiliency, provide observable metrics, and secure and connect apps across distributed clouds, networks, and edge sites.

App Performance and Reliability: Ensure high availability and robust application performance in the cloud. Solutions include:

- **Content Delivery Network (CDN):** Enable rich digital experiences with a high-performing multi-cloud and edge focused CDN that integrates with app security services.
- **DNS:** Get primary or secondary DNS and boost the global performance and resilience of apps across multiple clouds and availability zones.
- **DNS Load Balancer:** Simplify cloud-based DNS management and load balancing and get disaster recovery to ease the burden on operations and development teams.

With F5 Distributed Cloud Services, you are not bound by Regional Edge or related architecture requirements that often come with vendor solutions. We offer more flexibility. You can build or enhance the technology at your Customer Edge as you see fit and connect it with our Regional Edge locations. Once you optimize your architecture for speed, performance, and security at the Customer Edge—in the cloud or in multiple clouds and/or edge sites—you can painlessly integrate it with our Regional Edge infrastructure. Speak with one of our experts to learn more.

F5 PROVIDES FULL WEB APPLICATION AND API PROTECTION (WAAP) AS WELL AS INDIVIDUAL SECURITY SERVICES—ALL AS SAAS-BASED OFFERINGS WITH END-TO-END VISIBILITY ACROSS A DISTRIBUTED DEPLOYMENT.

Conclusion

Now, customers can rapidly and securely deploy applications wherever they're needed. The 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 (WAAP) 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 for free.](#)

