



Secure, High-Performance Content Delivery from Edge to Cloud

Built on a high-performance, secure global private network, F5 Distributed Cloud CDN enables rich digital experiences for end users. The F5 CDN supports modern content types, is built with an API-first architecture, and integrates with critical app security services to empower your organization as it pursues multi-cloud and edge-based app initiatives.



KEY BENEFITS

Performance at scale

Optimize global app delivery and performance with CDN caching capabilities paired with distributed cloud and edge technology to support workloads wherever necessary.

Comprehensive security

Protect web applications and APIs with comprehensive Web App and API Protection (WAAP) capabilities that are easy to deploy and operate.

Flexibility and agility

Leverage workload and service portability with critical CDN functionality to enable microservice-based apps and workloads, security, and other app services to be deployed anywhere compute, networks, and storage are available.

Visibility and observability

Strong analytics and insightful dashboards deliver high-level observability and actionable insights for greater control in managing performance, security, and demands on applications.

Operational simplicity

Simplify app delivery and management via a single pane of glass to allow engineering teams to focus on business value creation.

As App Delivery Moves Closer to the Edge, CDNs Must Evolve

Content delivery networks (CDNs) have a place in the application delivery and performance ecosystem. Traditionally, their role has been caching and delivering static and dynamic content via a global network of points of presence (PoPs).

However, organizations and end customers are looking for more. For the next generation of application delivery, the goal must be to move workloads closer to where transactions are taking place in order to reduce application latency. Applications and architectures are evolving and so are the ways that organizations are thinking about application development and delivery.

This evolution has necessitated a shift in app development and delivery that includes apps residing at the “edge” via microservices and containers. These apps are increasingly built using distributed architectures to accommodate growing application usage and ever-increasing performance demands.

As users’ availability and performance expectations change, organizations are choosing to run lightweight applications across clouds and on-premises at branch and satellite locations to complement CDN functionality and speed up data access and processing of critical telemetry at the edge—as opposed to long hauling back to an originating cloud or data center. This has created a distributed computing problem for many organizations as they grapple with the prospects of expanding some workloads further out to the edge or struggle with managing apps and workloads in an already complex, distributed set of environments.

Teams are attempting to improve application performance themselves by piecing together a patchwork of solutions that include open source solutions and commercially available offerings from public cloud and CDN providers. These teams continue to be burdened by:

- The complexity of deploying and operating apps across multiple public, private, telco, and CDN environments.
- The difficulty of maintaining a mismatched stack of app services and consistent policies across apps and environments, including CDNs, cloud providers, and on-premises solutions.
- Code modifications or rewrites to support deployments at the edge required by serverless applications and nascent edge platforms—leading to potential vendor lock-in.

KEY FEATURES

Secure multi-cloud and edge app delivery

Leverage integrated security services including WAF, DDoS mitigation, API security, and bot defense from the same platform that is purpose-built for multi-cloud and microservices-based edge workloads.

Global availability

Efficient global delivery via the high-capacity F5 Global Network backbone with high availability leveraging F5's DNS and load-balancing services to effectively route traffic across multiple origin servers in public or private clouds.

Centralized control plane

Reduce operational complexity, optimize application performance, and increase the security efficacy of your app by observing application traffic and events end-to-end.

Easy to configure caching policies

Caching policies are easy to configure and simple to use. F5 CDN avoids "bias" by caching only what the origin tells it to cache.

Supports modern content

Supports modern content types, including video on demand, live streaming, and other content required for websites, as well as API traffic. Optimized performance based on file type.

Cloud agnostic

Get more flexibility across public and hybrid cloud solutions, fewer limitations on deploying app security, greater control over traffic routing, and command over where workloads are deployed.

- A lack of unified visibility across an ever-expanding ecosystem that includes on-premises, data centers, CDNs, and edge locations. Lack of flexibility and agility in serverless architectures often limit deployment of workloads to the providers' footprint (the providers' CDN, edge or network PoPs), tying virtually all compute and deployment to one providers' infrastructure.

Top of mind for organizations when they deliver their apps globally is availability, security, and performance. CDN plays a major role in that effort for apps of all kinds, but organizations need a more advanced (or evolved) set of capabilities and approach for modern app delivery—which F5® Distributed Cloud CDN and the platform's rich set of services delivers.

Update Your Network for Modern App Delivery across Environments

Modern app delivery is about more than just serving up content. It is about security, multi-cloud and edge connectivity, APIs, and the ability to deploy microservice-based apps anywhere. It is also about availability and performance.

Leveraging the tools and technologies in the F5® Distributed Cloud Platform, F5 Distributed Cloud CDN provides an integrated set of capabilities to address an organization's application availability, security, and performance needs.

With the F5 Global Network, a high capacity and performant backbone, organizations can efficiently deliver their applications globally. With F5 Distributed Cloud CDN, you can:

- **Connect environments, apps, and workloads.** A unified service mesh across multi- and hybrid-cloud environments includes a centrally managed distributed proxy, service discovery, networking, and security services for modern and legacy applications.
- **Secure apps and workloads with multi-layered web app and API protection.** Enforce appropriate security policies and protect against automation and unwanted traffic, malware, and other threats anywhere with a unified set of app security controls, including web application firewall (WAF), DDoS mitigation, API security, and bot defense.
- **Run critical microservices and Kubernetes-based workloads wherever required.** Leverage a complete range of services to support and automate app and infrastructure deployment, scaling, and lifecycle management with centralized orchestration.
- **Optimize static and dynamic content delivery for web apps and workloads.** Content delivery is paired with primary and secondary authoritative DNS services and intelligent load-balancing via F5's global anycast network, including built-in DDoS protection.

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- **Monitor all distributed apps, services, and infrastructure.** Get end-to-end app visibility and reporting of security services, network, app performance, and system health.

The F5 Distributed Cloud Platform consolidates CDN and other services to support all apps across monolithic and microservices-based architectures to simplify management and upgrade security and network connectivity. You'll be well-positioned to support all your modern app needs, regardless of where you are in your digital transformation journey

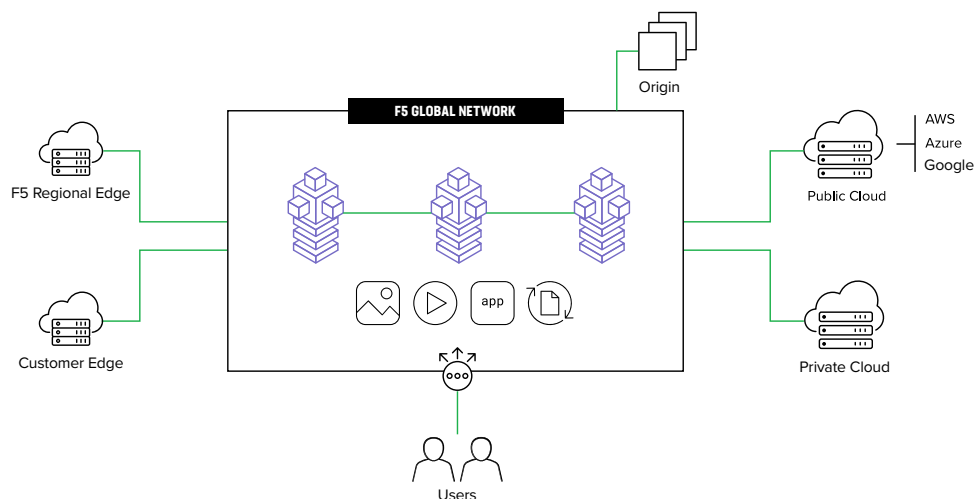


Figure 1: As a cloud-agnostic solution, F5 Distributed Cloud CDN offers more flexibility with public and hybrid cloud solutions and fewer limitations on how and where traffic is routed and where workloads are deployed.

Conclusion

F5 Distributed Cloud CDN is part of the broader Distributed Cloud Platform that offers SaaS-delivered app services and critical capabilities to support modern, multi-cloud, and edge-delivered apps. This platform enables your organization to accelerate app delivery, optimize performance, and reduce operational complexity across operations, engineering, architecture, and network teams.

The F5 CDN can be purchased with the Distributed Cloud Platform, with Distributed Cloud WAAP, or as a standalone service, and offers options for integrating with companies' existing infrastructure. Customers can try CDN for free before deciding whether to purchase.

Sign up for a **free trial** or contact your local **F5 representative** for a demo and more details.

