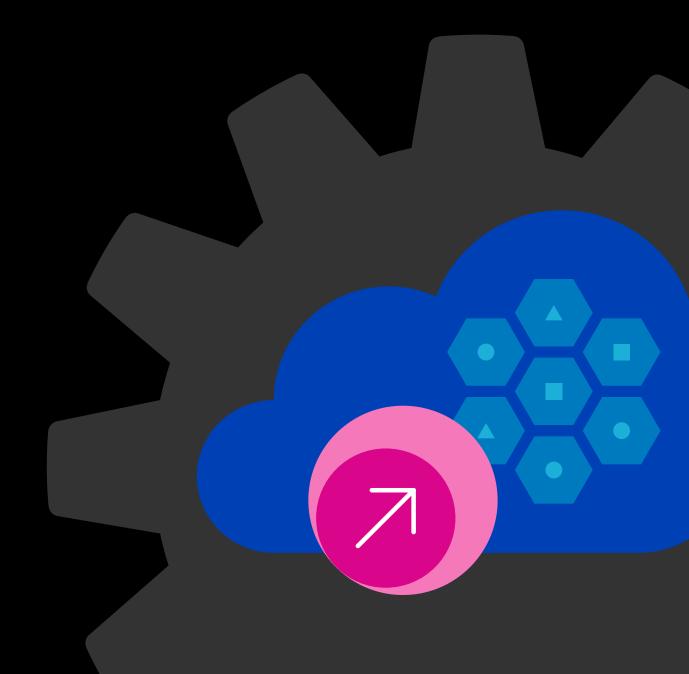
BIG-IP Next CNF

F5's market-leading solution for delivering true cloud-native capabilities, purpose-built for Kubernetes environments. F5® BIG-IP® Next™ CNF provides scalable, resource-efficient, and secure network functionality for modern service providers with capabilities that include CNF disaggregation, DNS, distributed denial-of-service (DDoS) attack protection, firewall, intrusion prevention system (IPS), and carrier-grade NAT.



Key Benefits

True Cloud-Native Architecture

Increase scalability and reliability with a solution built from the ground up as containerized, Kubernetes-native network functions.

Improved Resource Efficiency

Uses up to 33% fewer CPUs compared to virtualized solutions, delivering significant cost savings and power optimization.

Unified Subscriber Services

Consolidates multiple services into a single platform, reducing complexity and operational overhead.

Optimized Traffic

Adapts to user needs, such as rate limiting subscriber traffic during times of congestion, using intelligent traffic routing to enhance the user experience.

Advanced Security

Protects against network threats with an integrated high-performance firewall, DDoS mitigation, CGNAT, and IP intelligence.

Automation-Centric Usability

Simplifies operations, reduces human interaction, and lowers OpEx with complete management through Kubernetes APIs.

Figure 1: Simplify secure, scalable, and efficient network functionality with BIG-IP Next CNF.

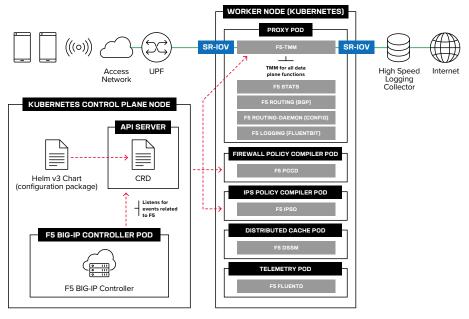
Migrating to and Managing CNF Deployments Is Complicated

Service providers today confront a landscape marked by rising costs, scaling challenges, and insufficient security measures. Traditional network solutions often fall short, relying on inefficient multi-vendor approaches or outdated virtualized architectures that struggle to adapt to modern demands. F5® BIG-IP® Next™ CNF redefines what it means to operate in Kubernetes environments, delivering a containerized, cloud-native solution that offers service providers the efficiency, scalability, and security they need to thrive.

Consolidate, Optimize, and Secure CNF Deployments

BIG-IP Next CNF consolidates critical functions—including firewall, DNS, DDoS mitigation, and traffic optimization—into a single unified platform, reducing operational complexity and resource overhead. Its true cloud-native design uses up to 33% fewer CPUs compared to virtual solutions while enabling independent scaling of the data and control planes for optimization of resources. Secure API container communication ensures reliability and system clarity, while Kubernetes-native automation reduces operational overhead.

Service providers can effortlessly scale to meet demand, whether traditional north-south communications or east-west traffic commonly seen in cloud-native architectures, deploy services closer to the edge for better user experiences, and protect infrastructure with advanced security tools such as CGNAT, IP intelligence, and a high-performance firewall. With BIG-IP Next CNF, F5 empowers organizations to reduce costs, adapt faster, and deliver superior user experiences while mitigating risks and eliminating inefficiencies.



BIG-IP Next CNF 2

Key Features

Disaggregation (DAG)

Provides horizontal "scale out" traffic steering across CNFs, maximizing flexibility and efficiency.

High-Performance DNS

Accelerates DNS delivery with caching, rapid query handling, and secure zone transfers.

Policy Enforcer

Enables advanced TCP and video optimization, URL filtering, and context-aware traffic control.

Platform Enhancements

Improves operations through resource efficiency, Kubernetesnative automation, and independent scaling of data and control planes.

Unified Usability

Streamlines operations and simplifies management for an effortless cloud-native experience.

True Cloud-Native Operations

BIG-IP Next CNF is architected from the ground up to be truly cloud-native, delivering functionality competitors cannot match. Unlike solutions that merely wrap virtual machines in containers, it features self-contained, scalable components that use secure API communication across containers for improved reliability and simplified management. Independent scaling of data and control planes creates unmatched agility and operational flexibility, while Kubernetesnative management simplifies automation, reduces overhead, and significantly reduces costs.

Scalability, Performance, and Cost Optimization

Advanced traffic-handling capabilities, consolidated subscriber services, and intelligent global server load balancing in BIG-IP Next CNF deliver optimized scalability and performance. The solution ensures infrastructure stability while lowering operational complexity and congestion through disaggregation (DAG) for efficient traffic steering, high-speed DNS responses, and reduced latency. True cloud-native functionality delivers significant CapEx and OpEx savings, helping service providers scale networks and improve customer experiences.

Advanced Security and Intelligence

BIG-IP Next CNF delivers robust security and intelligent traffic control for safer, more efficient networks. It safeguards infrastructure through enhanced DDoS mitigation, IP intelligence, efficient IPv4 address utilization via CGNAT, and deep packet inspection. The solution's granular traffic management creates resource-conscious policies, helping service providers minimize risk, enforce controls, and effectively monetize services.

Transform Network Operations with True Cloud-Native Architecture

In today's highly complex network environments, service providers struggle with escalating costs, limited scalability, and security threats that hinder operational efficiency and user experiences. BIG-IP Next CNF is built on true cloud-native architecture, delivering scalable, efficient, and secure solutions for modern operations. Unlike competitors using virtualized solutions in disguise, BIG-IP Next CNF consolidates critical functions such as firewall, DNS, and traffic optimization into a unified platform. With Kubernetes-native automation, secure API-based container communication, and independent data and control plane scalability, it reduces resource overhead, simplifies operations, and delivers robust performance at scale. These capabilities empower providers to adapt quickly, mitigate threats, and grow with confidence.

To learn more, contact your F5 representative or F5 Sales.

