

F5 Launches NGINX One to Simplify Application Security and Delivery Across Hybrid Environments

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IDC'S QUICK TAKE

F5 recently [announced](#) the general availability of F5 NGINX One. NGINX One is designed to optimize the security, monitoring, scaling, and management of NGINX instances regardless of whether they are on premises, in the cloud, or at the edge using a single cloud management interface integrated with F5 Distributed Cloud Services.

PRODUCT ANNOUNCEMENT HIGHLIGHTS

NGINX One consolidates formerly individual components such as NGINX App Protect and NGINX Plus into a single offering.

NGINX One key deliverables include:

- A new SaaS-based NGINX One console hosted on F5 Distributed Cloud Services that provides insights and recommendations with API and OpenTelemetry (Otel) integration with visibility into performance metrics, misconfigurations, security, and compliance
- Centralized configuration and management of traffic optimization, security, and scale
- Enterprise support across both NGINX Plus and NGINX open source
- Policy guardrails for NGINX instances across different deployment environments
- Simplified procurement with flexible consumption options and access to all the core NGINX capabilities
- Integration and enhanced performance within F5's broader ecosystem

IDC'S POINT OF VIEW

The landscape of application development is rapidly evolving with a surge in demand for cutting-edge technologies and modern solutions. Techniques like AI-generated code and no-code platforms are revolutionizing the speed and accessibility of software creation, catering to diverse market needs. The integration of DevOps practices and reusable components such as open source software and microservices, along with the widespread availability of APIs, facilitates integration across platforms, fostering innovation and rapid deployment of robust applications. Given this dynamic ecosystem, IDC recently forecasted that by 2028, over a billion net-new applications will be created.

NGINX, initially released in 2004, enhanced the scalability and performance of web servers. Today, NGINX can scale and secure applications and APIs, showcasing over 100 distinct use cases according to F5. Its impact on existing and net-new applications is significant, evident from over a billion downloads and widespread adoption across various applications and services. Most enterprise organizations have many instances of NGINX supporting existing and greenfield applications. Nearly half of NGINX deployments also leverage containers, highlighting its role in contemporary IT infrastructure.

Despite its capabilities in managing traditional and modern applications, NGINX presents challenges due to its diverse functionalities and configuration options. Matching the right NGINX product (now called components) to specific use cases, such as access control and vulnerability mitigation, can be complex for inexperienced users. Application teams using NGINX can unknowingly face issues like misconfigurations across different cloud providers and hybrid cloud architectures that could expose them to security risks and performance bottlenecks.

F5 has indicated that it created NGINX One as the next evolution of NGINX with the intent of making NGINX easier and safer to use and deploy across the enterprise. It enhances the existing NGINX capabilities with SaaS-based tools for observability, management, and security.

The NGINX One offering is made up of three main layers:

- The data plane includes API gateway, caching, load balancing, and policy enforcement.
- The management plane offers instance discovery, management, observability, insights, and policy distribution.
- The Distributed Cloud Services Console provides multicloud networking, API protection, and DNS capabilities.

Hosted on F5 Distributed Cloud Services, the new NGINX One console is delivered via SaaS to centrally manage NGINX instances, providing unified configuration, monitoring, and optimization. The console includes dashboards for actionable insights, facilitating performance monitoring, uptime tracking, and security oversight across the application life cycle. It supports multiple stakeholders with performance metrics, misconfiguration guidance, and compliance management.

Enterprises today face the challenge of delivering more applications across diverse environments, from high-performance bare metal servers and virtual machines to sprawling Kubernetes clusters and public clouds. When we asked organizations for the highest priority security risk in a recent IDC's *DevSecOps Survey*, the number 1 concern was security across multiple cloud environments (see *DevSecOps Adoption, Techniques, and*

Tools Survey, 2023, IDC #US50137623, May 2023). Ensuring consistent security, compliance, and application delivery policies across these environments is a hurdle, often compounded by the operational complexity of multicloud and hybrid approaches.

NGINX One simplifies the management of NGINX components across these different environments, offering a single console for policy enforcement, configuration guidance, and automated updates. This centralization improves security and application delivery for development, operations, and platform engineering teams by extending security policy management across all NGINX instances. Further, it helps ensure global policy compliance and establishes a unified view of all the NGINX instances alongside views of DNS, multicloud networking and traffic management, and web app and API protection (WAAP) — making it easier for organizations to do the right thing for their teams and their business.

Many organizations run both NGINX Plus and NGINX Open Source but have historically not had cross-team visibility when making changes or adding NGINX instances. These organizations have struggled with limited visibility when managing changes or adding new instances. NGINX One provides visibility for both commercial and open source users, empowering platform engineering, operations, and cloud architects with insights into their entire NGINX fleet.

NGINX One consolidates observability, licensing, and configuration into a single platform, simplifying NGINX management while leveraging new telemetry to provide insights into application performance, security, and scaling needs. It can help simplify application performance monitoring, aiding teams in diagnosing issues and enforcing stronger security measures.

The platform offers actionable recommendations to help organizations optimize their application infrastructure. It also provides adjacent access via the F5 distributed cloud services to secure multicloud networking, WAF, DNS, and other use cases powered by F5. The same WAF engine used in NGINX One also powers F5's enterprise BIG-IP solution.

Security features included with NGINX One include NGINX App Protect for API protection, as well as WAF capabilities and service protection. Visibility and management are provided through the NGINX One Console and NGINX Instance Manager, supporting instance discovery, observability insights, and policy distribution. It provides a view of NGINX instances across environments for global policy compliance alongside functionalities like DNS, multicloud networking, traffic management, and WAF and API protection.

With this new release, we see NGINX evolving from a tool used primarily by web developers and system administrators to a SaaS solution that can be used across the enterprise to facilitate application management while streamlining workflows across

teams. These capabilities enable faster deployment and integration of advanced features like AI intelligent applications. Developers still benefit from the reduced complexity by being able to deliver applications without deep NGINX expertise.

A recent IDC's *DevOps Survey* revealed that 80% of organizations are either expanding, using, or piloting platform engineering. The key tenets of platform engineering are developer self-service, automation, standardization, and security. For organizations adopting platform engineering, NGINX One can be yet another tool that can help build a platform engineering culture. It aligns multiple stakeholders in the application delivery value chain, recognizing that successful deployment involves teamwork between AppDev, DevOps, SecOps, NetOps, and procurement teams. Further, consistency will also play a key role in scaling across organizations, with prebuilt templates or user-generated configurations available out of the box.

NGINX One offers new flexible procurement options, consolidating all the NGINX components into a single offering that streamlines purchasing and deployment. The new procurement options make it easier to maintain, acquire, and renew NGINX One software. All the NGINX use cases are available with NGINX One software.

Built on F5 Distributed Cloud Services, NGINX One opens the door to integration into other cloud services in the future. Its SaaS model also enables F5 to easily roll out new capabilities over time, adding even more value to the platform by bringing together teams and tools under a single roof.

Other possible enhancements that would strengthen NGINX One could include a natural language processing (NLP) interface through GenAI. With F5's acquisition of WIB and Hey Hack in 2024, there may be opportunities to integrate those security capabilities into NGINX One as well.

KEY TAKEAWAYS

- With NGINX One, you can monitor, scale, and manage NGINX instances across on-premises, cloud, and edge environments.
- The NGINX One platform integrates components such as NGINX App Protect and NGINX Plus, allowing centralized configuration, policy enforcement, and performance analysis.
- Through its unified visibility and management system, NGINX One addresses challenges associated with managing NGINX's diverse functionalities, enhancing security and application delivery for both commercial and open source users.
- NGINX One supports platform engineering principles, offering flexible procurement options and integration with F5 Distributed Cloud Services, facilitating faster deployment and advanced feature integration.

- It behooves organizations using NGINX to explore how NGINX One can improve the management of their application estate while providing adjacent benefits to improve application delivery and security.

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