

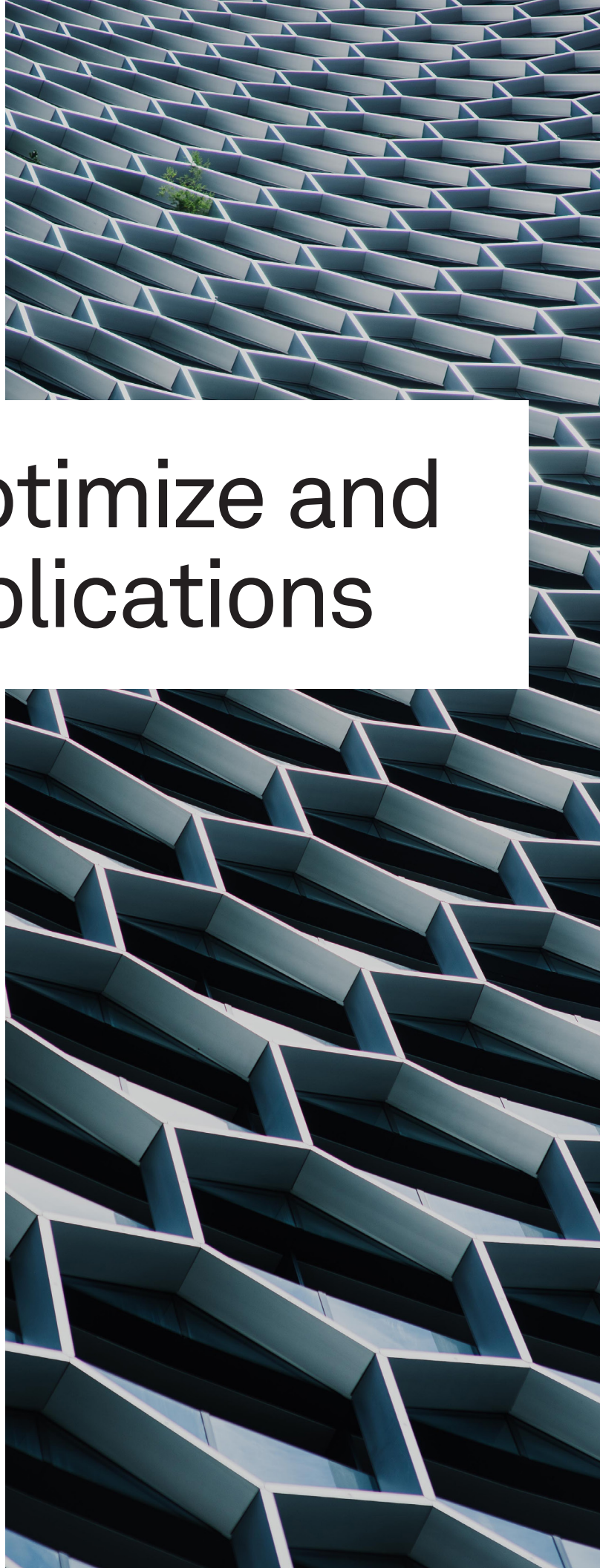
F5 aims to optimize and secure AI applications

May 19, 2025

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The company has unveiled several new solutions and capabilities as part of its commitment to innovation in the F5 Application Delivery and Security Platform. These solutions leverage AI to reduce complexity, simplify operations and enhance security for applications.

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Introduction

F5 Inc. has unveiled new solutions and capabilities as part of its commitment to innovation in the F5 Application Delivery and Security Platform. The company also introduced the VELOS CX1610 chassis and BX520 blade to optimize data-intensive workloads, and announced general availability of the F5 AI Gateway to streamline interactions between applications, APIs and large language models. An AI assistant for BIG-IP and NGINX One will also be released, providing automation and intelligence to improve application delivery and security management. These innovations aim to address the challenges of hybrid multicloud architectures and unlock the full potential of AI for enterprises.

THE TAKE

F5's new attempts to optimize insecure AI traffic should provide a runway for innovation into the future. While it has always appealed to the engineering mindset in enterprise IT, it has had a more difficult time breaking into the mind share of developers. F5 is likely to have an equally difficult time creating awareness with AI architects because that is a set of constituents it does not normally talk to. However, its brand awareness with enterprise IT may help it over that hurdle. Its acquisition of NGINX opened doors to a wider set of customers that were using the open-source software as an on-ramp to commercial services and forms the foundation of their cloud-delivered services. Harmonizing its BIG-IP-based hardware and software platforms with the cloud-delivered SaaS will provide an on-ramp for existing customers to new operational models. F5 still faces competition with vendors in the microservices software space, particularly with service mesh. Its distributed cloud services networking service is an untapped application-delivery resource for edge compute AI applications and any scenario where well-performing wide-area networking (WAN) is required.

Context

F5 is a prominent application networking and security vendor with a broad strategy of delivering, monitoring and securing applications wherever they reside. The company has spent the last several years adapting to the new realities of application delivery, security and environments. Its reimagined vision of application delivery controllers is critical for organizations adapting to these changes. The company has been offering and delivering ADCs for nearly 30 years, and its new vision for ADC technology is its attempt to address the complex challenges of deploying and securing AI applications on-premises and in the cloud.

Its Application Delivery and Security Platform includes AI tools to help simplify operations, and introduces insights and efficiencies that can reduce risks and save costs. It combines high-performance load balancing; multicloud networking; and security measures for all apps, APIs and components, and AI gateway capabilities into a single solution, in addition to rich analytics, unified management and deployment flexibility across diverse IT environments.

F5's vision includes a new reference architecture and strategic partnerships to support enterprises in deploying secure AI applications. The company emphasizes the need for ADCs to evolve, offering solutions that provide consistency, flexibility and visibility across IT landscapes. F5's initiatives aim to help organizations tackle the challenges of AI application deployment, helping to ensure secure and efficient digital experiences. F5's acquisition of Volterra in 2021 (now Distributed Cloud Services) gave the company its own networking capabilities that can be used to deliver application-delivery and -security services to the network edge.

F5's new platform-based approach integrates high-performance application delivery with advanced security capabilities, offering a comprehensive solution for the AI era. This transformation is supported by a new reference architecture and strategic partnerships, enabling enterprises to secure and deliver AI applications efficiently. F5's vision for ADC 3.0 emphasizes the convergence of load balancing and cybersecurity to meet the evolving needs of distributed applications. The company is committed to helping enterprises navigate the challenges of AI application deployment, helping ensure strong security and seamless delivery across diverse IT landscapes.

F5 Distributed Cloud Platform has partnered with Prompt Security to offer an AI firewall that secures generative AI applications. This partnership enhances F5's application security offerings — including web application firewalls, bot defense, distributed-denial-of-service protection and API security — across various environments. The Prompt Security firewall inspects inbound and outbound AI interactions to prevent prompt injections, data leaks and harmful content, thereby ensuring data privacy and governance. By securing generative AI applications, organizations can improve productivity and maintain data governance, leveraging F5's extensive security and automation capabilities.

Products

F5 offers a number of networking, application, and security products aimed at the enterprise, service providers and managed service providers, and cloud providers. F5 is best known in the enterprise for its ADC broken out into three main lines: its BIG-IP products that built the company, F5 Distributed Cloud SaaS services and its NGINX, which is more targeted at born-in-the-cloud companies and those with microservices applications.

Competition

F5's traditional rivals are other ADC specialists, including A10 Networks Inc., Citrix and Kemp Technologies. The company's Distributed Cloud Services differentiates it from the breadth of capabilities offered by other ADC contenders. Additionally, F5 plans to add more of its BIG-IP- and NGINX-based capabilities to further separate itself from fellow ADC vendors. Its Distributed Cloud Services, however, vie more with cloud-delivered security applications from companies such as Aryaka, Cato Networks and Zscaler Inc. F5 appears to be ahead of its competitors when it comes to addressing the performance and security demands of AI applications as the need to address application architecture and software development decreases.

Multicloud networking widens F5's competitive exposure to include multiple types of networking as a service from providers such as Alkira, Aviatrix, Cloudflare Inc., PCCW Global (Console Connect), Epsilon (now owned by KT Corp.), Kaloom, Megaport Ltd. and PacketFabric. Unlike pure software vendors like Alkira and Aviatrix, F5 owns its own infrastructure, allowing it to control performance and reliability up and down the stack. Its multicloud networking also vies with managed service provider offerings from telcos and other traditional service providers, but it more closely resembles the as-a-service vendors in terms of offering a cloudlike user experience.

Distributed Cloud Services puts F5 on a collision course with the major content-delivery networks, which deploy distributed edge networks to deliver a variety of services. In particular, their offerings overlap with F5's in the security space (e.g., web application firewalls, distributed-denial-of-service protection), as well as functions such as Domain Name System and rate limiting for API endpoints. One contender, Cloudflare, even offers connectivity services that could compete with F5's multicloud networking.

SWOT Analysis

STRENGTHS

F5 has a successful history in the application performance and security product segments, and as a rich and versatile product and services suite that address pressing needs for enterprises, MSP/SPs and cloud companies alike. It is executing a strategy to bring similar capabilities to microservices architectures.

WEAKNESSES

F5 has an engineering focus on application delivery and security, which makes it well suited to meet the needs of IT departments, but it has an Achilles' heel with application architects and software developers — as do all ADC vendors — because F5 is seen as external to the application environment. Even with its open-source NGINX proxy as an on-ramp, F5 and its products are brought in late — potentially too late for the latest breed of influencers.

OPPORTUNITIES

F5 can take better advantage of its Secure Multi-Cloud Networking cloud networking service to bring an integrated edge-to-edge experience to enterprises. Providing a rapidly deployable WAN service that meets the performance and management demands of the modern enterprise gives F5 a unique advantage.

THREATS

F5's threats come mainly from indirect competitors like advances in distributed application architecture, native performance capabilities in microservices architectures and services, cloud services, and native capabilities built into or adjacent to container environments like Kubernetes.

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