NEWS RELEASE

AI Has Left the Lab: F5 Report Reveals 78% of Enterprises Now Run AI Inference as a Core Operation

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2026 F5 State of Application Strategy Report shows production AI model and agentic AI trends fundamentally shifting how enterprises deliver and secure apps in hybrid multicloud environments

SEATTLE--(BUSINESS WIRE)-- F5 (NASDAQ: FFIV), the global leader in delivering and securing every app and API, today released its annual **State of Application Strategy (SOAS) Report**, revealing that artificial intelligence has crossed a critical threshold: it is no longer an experimental initiative but a production workload demanding the same operational rigor as any mission-critical system. The research, based on responses from hundreds of enterprise IT and security leaders worldwide, shows that 78% of organizations are now running AI inference themselves—a clear signal that enterprises are choosing control over convenience as AI becomes central to business operations.

The findings arrive at a pivotal moment. With 93% of organizations operating across multiple clouds and 86% distributing applications across hybrid multicloud environments, the complexity of delivering and securing AI workloads has reached a new inflection point.

“AI has moved from experimentation to operations. The question now is not whether companies will use AI, but whether they can run it reliably, securely, and at scale,” said Kunal Anand, Chief Product Officer at F5. “This year’s data shows a clear shift: AI inference is becoming core to the business, which means AI delivery is now a traffic

management challenge, and AI security is now a governance and control challenge. The companies that understand this shift early will be the ones that move faster and more safely."

Key findings from the 2026 report

AI is an operational reality, not an experiment

AI is no longer a flashy experiment or future concern; it has become an operational reality deeply embedded in daily business outcomes. Organizations now coordinate an average of seven AI models in production, with 77% reporting that inference—running trained models to generate outputs—has become their dominant AI activity, surpassing model building and training. This shift emphasizes the operational governance of AI systems, treating inference as a managed, policy-driven workload integrated into the application stack and subject to the same architectural, security, and scalability demands as other production systems.

AI-as-a-Service strategies are already considered risky

AI-as-a-Service strategies are widely acknowledged as risky and misaligned with modern enterprise realities. Only 8% of organizations rely exclusively on public AI services. The overwhelming majority are building diversified model portfolios, requiring sophisticated routing, fallback, and policy controls to manage cost, accuracy, and availability.

Hybrid multicloud is the new delivery standard

This reflects the broader trend of multicloud, multi-environment operations, with 93% of enterprises leveraging multicloud setups and 86% running apps across on-prem, public cloud, and colocation environments. Similarly, AI workloads require advanced routing, fallback, and policy controls to optimize cost, accuracy, and availability. A unified delivery, security, and governance strategy across environments is now essential to manage the complexities of modern AI and application deployments.

While managing the complexities of such diverse infrastructures is essential, it must be paired with precise control across environment boundaries to ensure seamless integration, consistent policy enforcement, and unified security strategies. This balance reduces silos, minimizes operational disruptions, and maintains governance at scale, enabling enterprises to optimize cost, accuracy, and availability while unlocking the full potential of hybrid multicloud systems for AI and application deployments.

AI security and governance are now systemic requirements

As AI systems enter full-scale production, security has become an enterprise-wide priority. The report shows 88% of

organizations have faced AI-related security challenges, while 98% are preparing for agentic AI—autonomous systems needing identities, permissions, and guardrails like human users. This shifts the security perimeter to prompt, token, and identity layers, rendering traditional models insufficient and making governance across every layer essential.

Prompt and token layers: The control points driving AI delivery

The report reveals a significant shift in AI workload management, with control moving to prompts, tokens, and APIs. Nearly 29% of organizations identify prompt layers as the top delivery mechanism, while 23% prioritize token layers for delivery and security. Governing these layers is key to optimizing cost, performance, and safety, giving enterprises a competitive edge over those focused solely on infrastructure.

Why it matters

The 2026 State of Application Strategy Report offers a data-driven view of the forces reshaping enterprise technology: the rapid operationalization of AI, the permanence of hybrid multicloud, and an evolving threat landscape that demands new thinking about security and control.

AI maturity is quickly becoming a measurable indicator of operational resilience and competitive positioning. Organizations that invest in observability, authentication, and unified control across every environment where AI runs will be the ones that turn AI's promise into lasting business value.

Download the full 2026 State of Application Strategy Report to access complete findings, industry benchmarks, and strategic recommendations.

Additional resources

- Blog: **Three forces reshaping security leadership: Distributed AI inference, threat evolution, and hybrid multicloud**
- Blog: **AI inferencing has arrived, complicating an already complex IT landscape**
- Blog: **Three moves CISOs can't afford to delay**

About F5

F5, Inc. (NASDAQ: FFIV) is the global leader that delivers and secures every app. Backed by three decades of expertise, F5 has built the industry's premier platform—F5 Application Delivery and Security Platform (ADSP)—to deliver and secure every app, every API, anywhere: on-premises, in the cloud, at the edge, and across hybrid, multicloud environments. F5 is committed to innovating and partnering with the world's largest and most advanced

organizations to deliver fast, available, and secure digital experiences. Together, we help each other thrive and bring a better digital world to life.

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Source: F5, Inc.

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