

# Accelerate public sector modernization and cloud Al adoption

Deliver resilient, optimized digital services in the AI era with F5 and Google Cloud

# Trending use cases1

## **Multimodal Al**

Al trained using image, video, audio, and text data sourced at the local and state level can help inform decisions.

# Al agents

Autonomous processes can handle complex tasks such as coding and managing applications.

# Al-powered search

Agencies can make data more accessible with semantic search and automated metadata tools.

# Improved user experiences

Constituents can use AI to navigate websites, services, and applications more easily and in multiple languages, 24/7.

# **Enhanced security**

Automated threat detection can keep systems safe while helping identify deepfakes and disinformation.

# Driving change through modernization

Public sector organizations are aligning their visions for modernization with the possibilities of cloud Al. To be successful, they need to address increasingly sophisticated cybersecurity threats and technical debt from legacy systems, while staying on the lookout for new cost efficiencies.

#### Attacks on the rise

With over 900 public sector data breaches from November 2023 to October 2024, it has never been more important to get digital transformation right. Credential abuse, vulnerability exploitation, and phishing are popular attack techniques, with ransomware seeing a 37% increase from 2023 to 2024.<sup>2</sup> Breaches involving third parties and espionage are also on the rise.

# Skilled staffing shortages

While leaders believe their agencies will benefit from emerging technologies, barriers remain, starting with the workforce. Public sector leaders say one of the biggest barriers to modernization is a shortage of skilled employees (38% for federal, 46% for state and local) and insufficient training (36% for federal, 43% for state and local).<sup>3</sup>

# **Multicloud complexity**

Multiple cloud deployments have become the new norm, offering a flexible approach to embracing the latest digital services. But as applications and digital services sprawl, managing and securing multiple clouds gets complex and costly.

Top priorities for state and local IT decision makers:4

**56**%

**54**%

47%

Reducing costs

Improving cybersecurity

Modernizing legacy systems

# **Key features**

# **Defend against cyberattacks**

Protect apps, APIs, and networks from automated attacks and OWASP Top 10 threats.

### Develop and deploy with speed

Integrate performance, security, and compliance to drive innovation across app development pipelines.

# Maintain zero trust security

Meet stringent security and compliance protocols, such as NIST, FIPS140-2, CSfC, Common Criteria, and more.

# Accelerate innovation with F5 and Google Cloud

F5 and Google Cloud fuel digital transformation journeys by ensuring mission-critical services stay secure, available, and fast across any environment. With F5 and Google Cloud, you can rapidly develop and deploy new services, actively defend apps, APIs, and networks from advanced attacks, and implement consistent security controls across new and legacy environments.

# Accelerate AI development with Google Cloud

Google Cloud eliminates the traditional barriers to building Al-powered applications.

Developers can leverage the Google Cloud Vertex Al platform for end-to-end machine learning model development and deployment. Pre-trained first- and third-party models serve as a starting point for agencies to build, fine-tune, and deploy Al using Google Kubernetes Engine (GKE).

# Protect AI models and apps without impacting speed

F5 solutions provide layered protection for AI models, API connections, and distributed networks, allowing agencies to meet compliance requirements and innovate without compromise. Wherever AI is deployed, F5 provides consistent security policies along with capabilities that optimize traffic flow, control resource utilization, and provide deep visibility into operations.

# Optimize AI application performance and cost

Cost is a top concern for AI workloads. F5® AI Guardrails enables smart traffic management combined with rate limiting and semantic caching to maximize the value of cost-intensive Tensor Processing Units (TPUs) and NVIDIA GPUs on Google Cloud, while keeping AI services responsive for end users.

# Securely advance the modernization agenda with F5 and Google Cloud

Together, F5 and Google Cloud deliver the security, protection, and connectivity that public sector agencies need to fully embrace multicloud Al.

All 15 executive departments of the U.S. Cabinet rely on F5.

Get started with F5 solutions on the Google Cloud Marketplace.

1 Google Cloud, <u>5 Al trends shaping the future of the public sector in 2025</u>, Feb 2025

2 Verizon, 2025 Data Breach Investigations Report, Public Sector Snapshot, May 2025

3 EY, 2024 EY federal, state and local trends report, Feb 2024

4 EY, Government State and Local 2025 Survey Findings, June 2025

