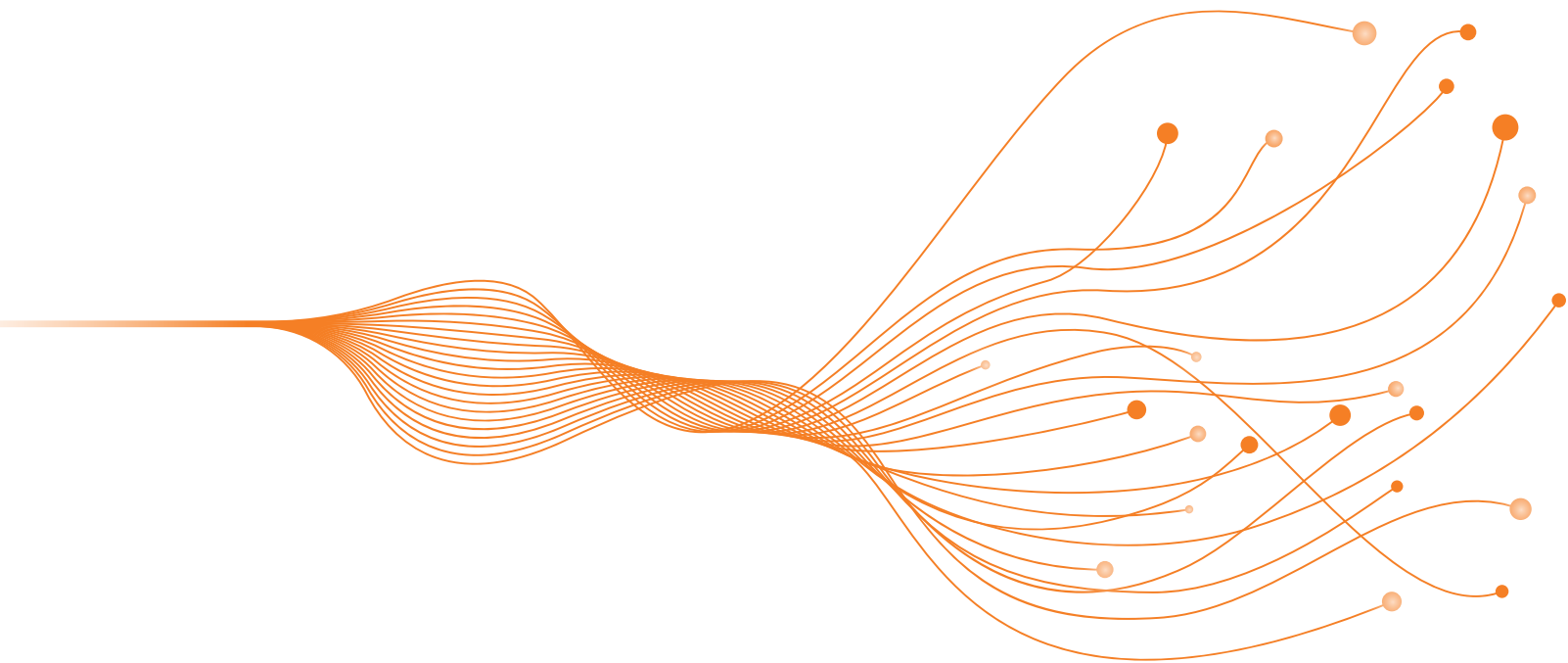


Modernizing Federal ICAM Programs: Enabling Zero Trust and Mission Resilience with Cayosoft



Executive Summary

Identity, Credential, Access, Management (ICAM) has become the operational backbone of U.S. federal cybersecurity, resilience, and mission assurance. Federal agencies are required to adopt ICAM-aligned architectures under **OMB M-19-17, EO 14028, and NIST SP 800-207**, transforming how identities are established, credentials are verified, and access is authorized across enterprise, mission, and D/DIL environments.

While the frameworks are clear, practical implementation remains complex. Most agencies maintain hybrid ecosystems spanning **Active Directory (AD), Entra ID, Microsoft 365, Exchange Online, and Intune**, supported by a patchwork of **legacy tools and PowerShell scripts**. These environments increase operational overhead, limit auditability, and expose agencies to unnecessary risk.

Cayosoft bridges this gap by providing a unified platform purpose-built for **hybrid Microsoft identity environments (on-premises and cloud)**. It automates identity lifecycle management, enforces Zero Trust access policies, and offers continuous auditing, governance, and recovery capabilities - all within a single tool.

With Cayosoft, federal agencies achieve:

- **Operational Efficiency:** Automation eliminates reliance on scripts and manual tasks, reducing consulting and administrative labor costs by up to **40%**.
- **Zero Trust Alignment:** Delegation and conditional access enforce least privilege, reducing insider threat exposure by **60%**.
- **Audit & Compliance Readiness:** Immutable logs and automated reports shorten compliance cycles, cutting audit preparation costs by **\$100K+ annually**.
- **Mission Continuity & Resilience:** Identity forests and objects can be restored in **minutes**, ensuring uninterrupted access during outages or cyber incidents.
- **Strategic Cost Control:** Consolidating multiple legacy tools into one platform delivers **\$1.2M–\$2.5M in average three-year savings** while improving security posture.

In short, Cayosoft transforms ICAM from a policy requirement into an **operational capability** - enabling agencies to enforce Zero Trust principles, maintain compliance, and ensure resilient mission execution across both cloud and on-prem environments.

Federal ICAM Framework Overview

ICAM establishes the foundation for Zero Trust by ensuring that only authorized users, devices, and systems can access enterprise, mission, and D/DIL resources based on verified identity, trusted credentials, governed entitlements, and continuously validated access policies.

Identity Management (IDM)

Defines **who** a user, system, or device is.

- Centralized identity directories (e.g., Active Directory, Entra ID)
- Identity lifecycle management (onboarding, role changes, offboarding)
- Federation and single sign-on (SSO) to streamline secure access

Credential Management

Determines **how** identities are verified and trusted.

- Public Key Infrastructure (PKI), digital certificates, and smart cards
- Multi-Factor Authentication (MFA) and derived credentials
- Credential issuance, renewal, and revocation lifecycle

Access Management

Controls **what** actions users can perform and **under what conditions**.

- Role-Based Access Control (RBAC) and Attribute-Based Access Control (ABAC)
- Policy enforcement and continuous authentication
- Context-aware and risk-based authorization decisions

Governance

Establishes **how identity, access, and privilege decisions are monitored, approved, and aligned** with mission policy and compliance frameworks.

- Role and entitlement certification and attestation
- Access policy governance (e.g., NIST 800-53, OMB M-19-17, DoD ZTRA)
- Segregation of Duties (SoD) and least-privilege enforcement
- Automated access request, approval, and recertification workflows
- Centralized reporting for compliance and accountability

Auditing

Provides **continuous validation and visibility** across the entire ICAM ecosystem.

- Centralized logging and event correlation across identity, access, and privilege systems
- Continuous monitoring for anomalous or unauthorized activities
- Integration with SIEM/SOAR and threat-hunting platforms
- Periodic access reviews, compliance reporting, and control verification
- Forensic traceability supporting ATO, FISMA, and CMMC assessments

Use Case: Federal Agency Selects Cayosoft to Replace Legacy Tool Set

A leading **Federal Agency** selected **Cayosoft** to replace its legacy identity management tool set, modernizing its **Active Directory** and **hybrid identity infrastructure** in alignment with federal **Zero Trust** and **ICAM** mandates. **Cayosoft uniquely supports hybrid environments by integrating on-premises and cloud systems into a single management platform** to deliver **real-time visibility, automation, and security controls across Active Directory, Entra ID, and Microsoft 365**.

This unified approach eliminates the complexity and silos of traditional tools while enhancing **auditing, governance, and access management capabilities**. The modernization enables faster compliance with **OMB M-19-17, EO 14028, and NIST 800-207**, reduces operational overhead, and lowers the total cost of ownership. This transition underscores a growing federal shift toward **simplified, secure, and cloud-ready ICAM solutions** that strengthen mission resilience and accelerate Zero Trust adoption.

Strategic Benefits for Federal ICAM Programs

1. Operational Efficiency

Federal agencies realize immediate efficiency gains by replacing fragmented identity tools and manual PowerShell scripts with a unified, policy-driven platform.

- Eliminates fragile script dependencies and manual workflows - reducing administrative labor by up to **30–40%** annually.
- Cuts external consulting costs for routine identity operations by an estimated **\$250K-\$500 per year**, depending on agency size.
- Centralized management across **on-premises and cloud** environments reduces complexity and risk of configuration drift.

2. Zero Trust Alignment

Cayosoft supports the direct implementation of the DoD Zero Trust Reference Architecture (ZTRA) and the **OMB M-19-17 ICAM** principles.

- Delegation models enforce **least privilege** and align with **NIST SP 800-207 and EO 14028**.
- Conditional access policies and granular **RBAC/ABAC** models minimize privilege creep across mission systems.
- Continuous monitoring and event correlation detect anomalous access behaviors in near real-time, reducing insider threat exposure by up to **60%**.

3. Audit and Compliance Readiness

Automated compliance reporting and immutable logging streamline and support FISMA, SOX, HIPAA, and **IRS Pub 1075** control validations.

- Audit report generation times are reduced from weeks to hours, lowering compliance labor costs by **\$100K+ annually**.
- Recovery drills and validation testing demonstrate **ATO** and **CMMC Level 2** readiness.
- Shortened compliance cycles free resources for mission-critical security operations.

4. Mission Continuity and Resilience

Ensures **identity survivability** in enterprise, mission, and D/DIL environments.

- Domain or forest recovery can be executed in **minutes instead of days**, eliminating downtime that impacts mission operations.
- Near-real-time **RPO/RTO** metrics ensure minimal data loss across hybrid infrastructure.
- Integrated hybrid recovery supports both **Active Directory and Entra ID**, sustaining continuity through cyber or ransomware events.

5. Strategic Cost Control

Consolidating identity, governance, and auditing capabilities into a single platform yields measurable financial and operational benefits.

- Retires redundant legacy tools, achieving up to **50% savings in licensing and maintenance** costs.
- Predictable subscription pricing eliminates “per-incident” professional services dependence.
- Average three-year savings for mid-sized agencies range from **\$1.2M–\$2.5M**, depending on user count and legacy footprint.

Conclusion

Cayosoft delivers a unified, modern ICAM platform designed for the complexity of **federal hybrid environments**. It aligns directly with Zero Trust mandates, enforces least-privilege policies, and provides continuous auditing and governance capabilities that withstand the demands of today’s cyber landscape.

For agencies seeking to **operationalize ICAM principles, reduce costs, and ensure mission resilience**, Cayosoft provides a **proven path forward**, transforming compliance frameworks into actionable, measurable, and sustainable security outcomes.