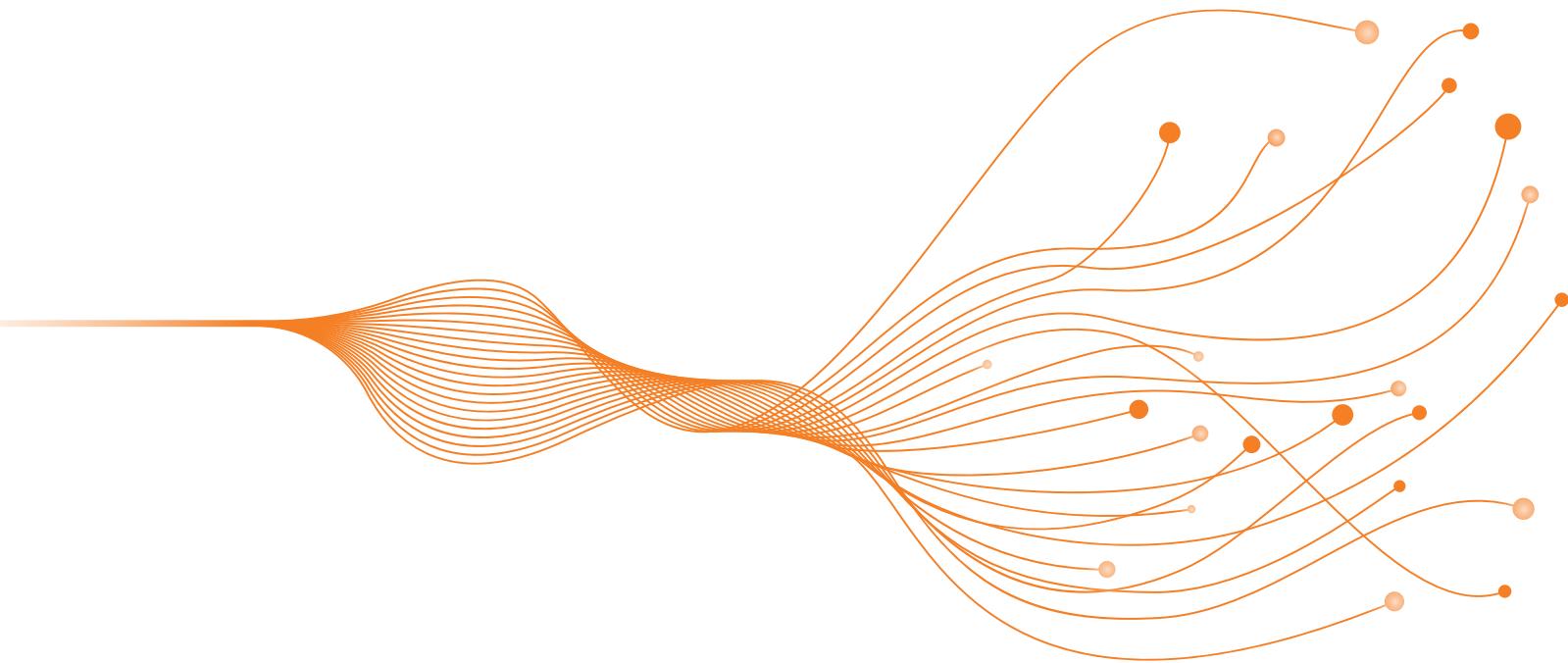


# **Modernizing Federal ICAM Programs: Enabling Zero Trust and Mission Resilience with Cayosoft**



# 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.

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To see how Cayosoft can help your organization build a resilient Active Directory environment, contact us at