



ARCHITECTURE DECISION RECORD (ADR)

Decision Summary: Designate ArcGIS as an Enterprise Standard Utility within SWF category Geospatial and Mapping Analysis

Approved by the VA Chief Architect (OIT/OCTO) in March 2024

Context

VA programs increasingly depend on geospatial capabilities to support operational planning, benefits delivery, analytics, and Veteran-facing services. Without an enterprise-aligned geospatial standard, programs risk introducing fragmented mapping tools, inconsistent spatial data models, and duplicative integrations.

The Software Factory (SWF) includes a Geospatial and Mapping Analysis category; however, a formal enterprise designation is required to guide reuse, improve discoverability, and ensure architectural alignment.

ArcGIS is currently deployed within VA, integrated with enterprise data assets, approved within the VA Technical Reference Model (TRM), and supported by the Enterprise Geospatial Team (EGT). This ADR formalizes its designation as the Enterprise Standard Utility within the SWF Geospatial and Mapping Analysis category.

Decision

ArcGIS is designated as the Enterprise Standard Utility for the Software Factory (SWF) category Geospatial and Mapping Analysis.

ArcGIS will serve as the default enterprise geospatial capability for mapping, spatial analysis, and geospatial service integration across VA programs. Alternative geospatial tools may be considered but require architectural justification during intake and review.

This designation supports enterprise reuse, reduces duplicative tooling, and strengthens alignment across VA's geospatial initiatives.

Rationale

Designating ArcGIS as the Enterprise Standard Utility aligns with VA's architectural principles of reuse, standardization, and shared enterprise capability.



ArcGIS is already integrated into VA enterprise environments and supported through centralized licensing and governance structures. Leveraging this established platform:

- Reduces duplication of geospatial tooling
- Promotes consistent spatial data models and services
- Improves interoperability across systems
- Enables shared geospatial services across programs
- Simplifies governance during architecture intake

Formal designation within SWF ensures consistent architectural alignment while allowing flexibility for justified exceptions.

Impact(s)

Operational Impacts

- ArcGIS continues to operate under the existing VA Enterprise License.
- The Enterprise Geospatial Team (EGT) remains the centralized support and governance body.
- New geospatial solution requests will align with the designated Enterprise Standard Utility.

Architectural Impacts

- Establishes a default geospatial standard within SWF.
- Reduces introduction of duplicative mapping technologies.
- Improves spatial data consistency and interoperability across VA systems.
- Strengthens reuse and architectural governance during solution intake and review.

For questions or further clarification, contact the Enterprise Architecture team at ea@va.gov.

Sam Kaldawi
Chief Architect
Office of the Chief Technology Officer (OCTO)



Architecture and Engineering Services (AES)
Office of the Chief Technology Officer (OCTO)
Office of Information and Technology (OIT)

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