



# DAF API ROADMAP 2.0

Providing the DAF with services that facilitate secure data access and software interface sharing

Increasing competition on the global stage may force the US into potential conflict against peer and near-peer adversaries. To meet the challenges of scale and interoperability with the rest of the Department of Defense (DoD) and key allies, the Department of the Air Force (DAF) must invest in centralized services in support of a modern Application Programming Interface (API) ecosystem. Adopting an API-First architecture will provide resilience and interoperability for our critical warfighting applications. The architecture will cover systems including C2 and intel systems and is designed to support organic software developers as well as commercial partners.

## Implementing an API-First Architecture is Critical for DAF Modernization

Implementing an API-First Architecture that places APIs at the core of software design will automate standards for data sharing and allow systems to communicate data in real time

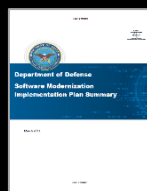
### CIO Strategy LOEs

The DAF CIO Public Strategy published in September 2022 introduced six primary Lines of Effort (LOEs) to support DAF's IT priorities for FY23-FY28.

The LOEs directly address the needs of DAF's emerging strategic and technological environment. The implementation of an API-First architecture and improved data management is critical to the advancement of the highlighted LOEs below.

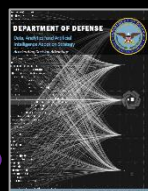
- 1 Accelerate Cloud Adoption
- 2 Future of Cybersecurity
- 3 Workforce
- 4 IT Portfolio Management
- 5 Excellence in Core IT & Mission Enabling Services
- 6 Data and AI

March 2023



**DoD Software Modernization Implementation Plan Summary**  
Defines a goal to advance access to and interoperability of software capabilities and data through an API strategy and API standards

June 2023



**DoD Data, Analytics, and Artificial Intelligence Adoption Strategy**  
Asserts that the DoD will treat data as a product by investing in infrastructure that is abundant, flexible, secure, and jointly interoperable, and scalable to all users

June 2024



**FULCRUM: The DoD IT Advancement Strategy**  
Leverages APIs as a critical measure of progress towards treating and securing data as a strategic product to effectively harness it for the decision advantage against any threat

### What is the Current State of Secure Data Access & Software Interface Sharing in the DAF?

DAF systems **do not** currently have a standard, scalable, and easy way to communicate data in real-time



#### Data Access Model

The DAF is beginning the move to a direct data access model through a decentralized, domain-driven approach that unlocks data at its sources and avoids duplicative sources



#### Secure System Communication

System to system communications in software lack a standard format and appropriate credential support for secure data sharing across the enterprise



#### Inconsistent API Offerings

Until the DAF can implement an enterprise API solution, it remains subject to the API services established by various communities as well as the API offerings of data platforms

### What does an API Roadmap Deliver?



#### Accessibility

A single SDK framework makes standardized data and software interfaces developer-friendly and eases integration across organizations



#### Interoperability

Integration standardization will reduce the burden on industry, joint DoD partners, and our allies – making the DAF a more reliable and collaborative partner



#### Security

Coupled with the ICAM solution, APIs automate formatting, access, and discovery while enforcing enterprise standards for increased security



#### Scalability

Enterprise services ensure the internal consistency, security, and ease of adoption that help API providers manage the volume of requests needed by modern DAF missions

The DAF API Roadmap 2.0 serves as the strategic guide to deliver secure data access and software interface sharing to the DAF through an API-First Architecture that connects end users and automated systems to data.



# DAF API ROADMAP 2.0

IMPACT TO DAF. . .

ACCESSIBILITY, INTEROPERABILITY, SCALABILITY, & SECURITY

Publication: October 2024

## COMPONENTS & EXPLANATIONS

**ENTERPRISE API READINESS**

Prepare Data Platforms & Data Brokers to get healthy for an API & Data Access Solution and publish a suite of standards and policy to shape the technical solution

**REQUEST MANAGEMENT**

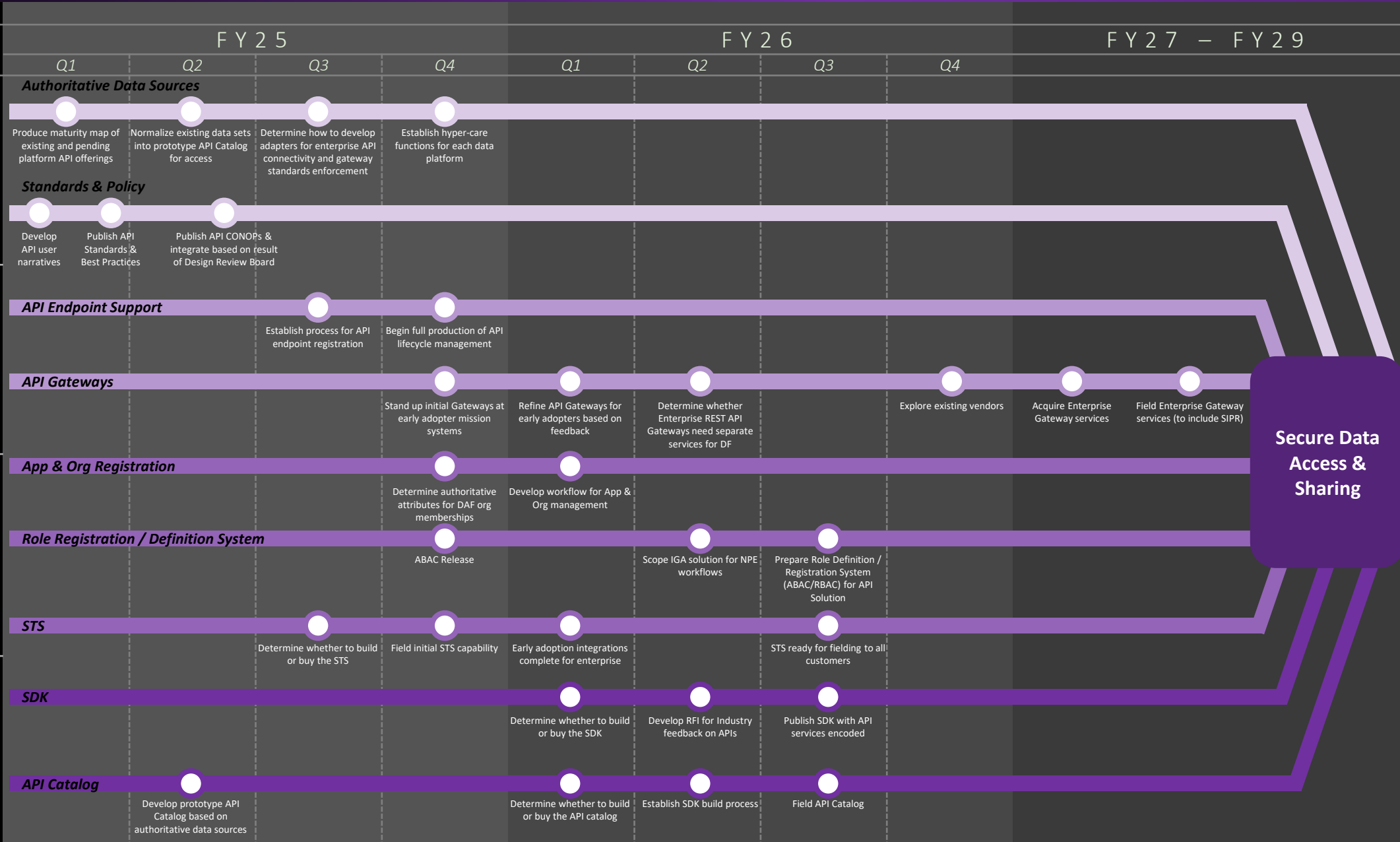
Request Management describes the services the DAF will use to handle API requests and how they are serviced

**ENTITY & ACCESS MANAGEMENT**

Entity & Access Management describes the rules and methods that govern how someone can consume an API. Entity & Access Management increases confidence in valid API requests

**INTERFACE MANAGEMENT**

Interface Management describes how to register, publish, and manage the lifecycle of an API so that consumers can incorporate APIs into their systems and access data



**Secure Data Access & Sharing**