TWICS 2024

THE FUTURE OF DAF IT

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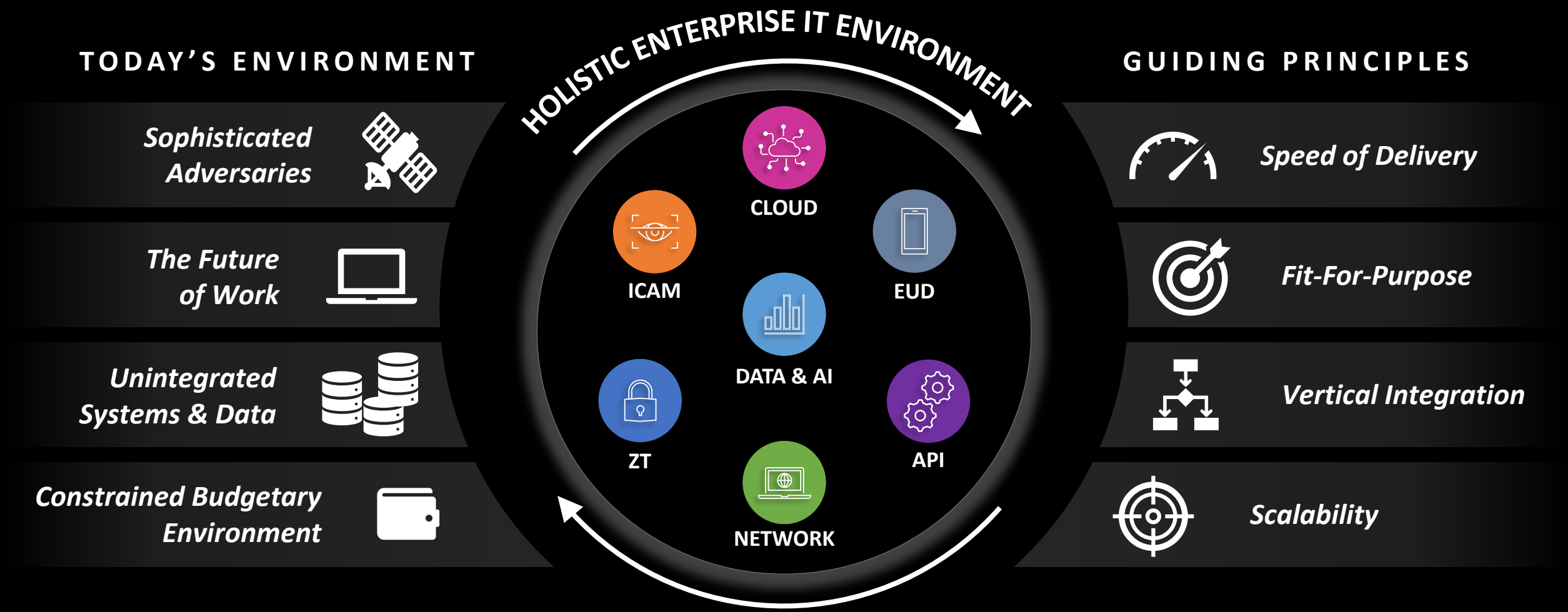
WHAT DOES A HOLISTIC ENTERPRISE IT ENVIRONMENT LOOK LIKE?

A holistic approach is imperative to keeping the DAF Enterprise IT environment agile. Modernization and improvement of each component must consider its impact on the other distinct components.

ZT

DATA & AI

EUD

API

ICAM

CLOUD

NETWORK

EUD at Home | EUD at the Edge | EUD on Base

Data Centric Software

Authenticates Users | Supports Security Decisions

Resilient Computing | Data & AI Scalability

Low Cost Classified Networks | High Data Demand
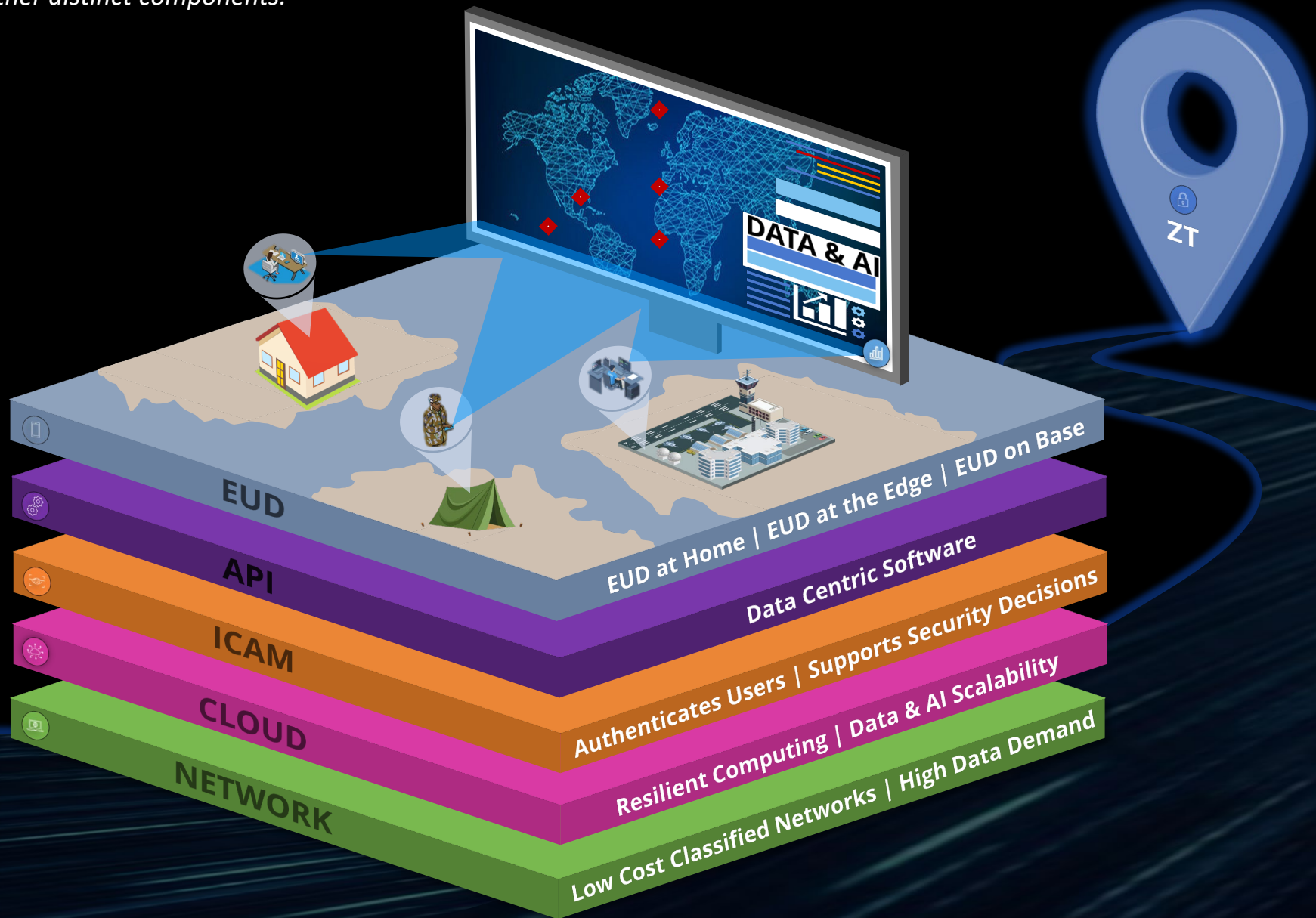
COMPONENT: NETWORK | FOUNDATIONS
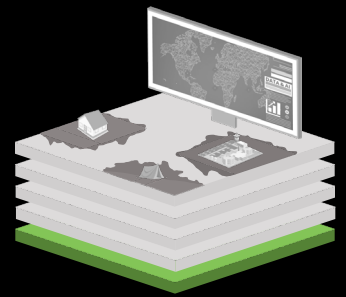
Underlying all other IT efforts, the Network of the future delivers resilient connectivity to data within – and outside – the Cloud while supporting the demands of increasing data flows for users at home and at the edge.

NETWORK OF THE FUTURE

ABMS DI Network for C2 Traffic

BIM secured with NGG improves secure connection

SD WAN & Transport intelligently control data movement

CSFC with Black Core secures data
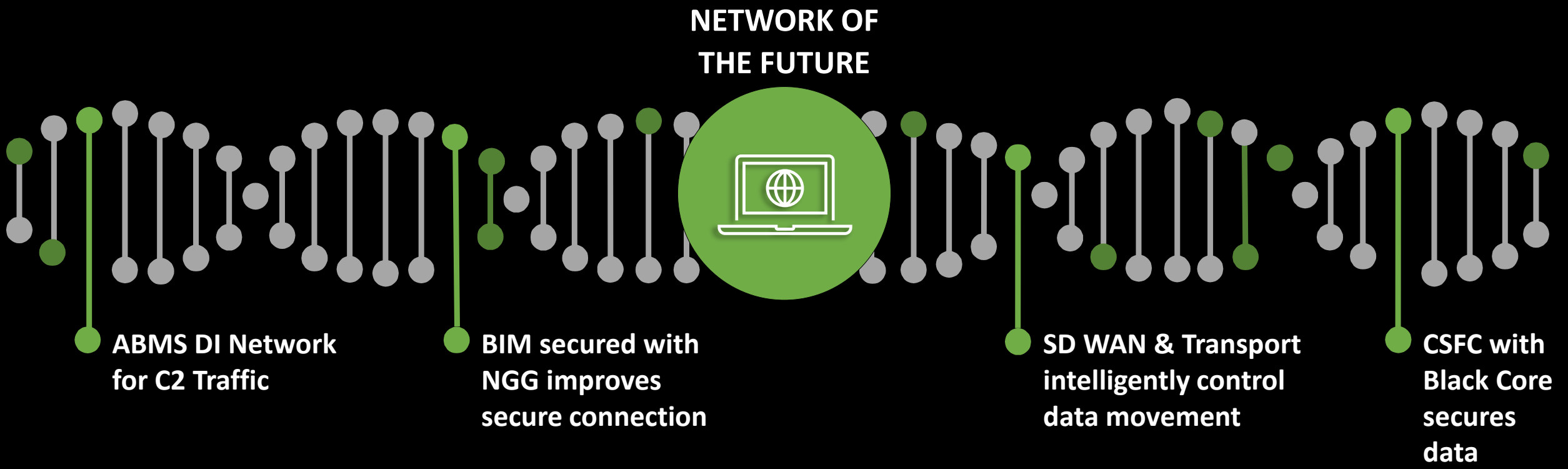
Where We're Headed...

Reduced emphasis on specialized network connections to take advantage of the resilience of commercial infrastructure

COMPONENT: CLOUD | RESILIENCE & ADOPTION
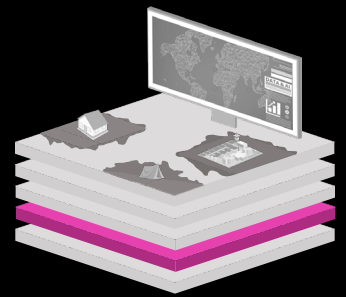
The Cloud supports the scalability the Air and Space Force's technology base by providing support for vast amounts of data, flexibility for End User Devices, and a foundation for Zero Trust strategy in a cost-effective and efficient manner.
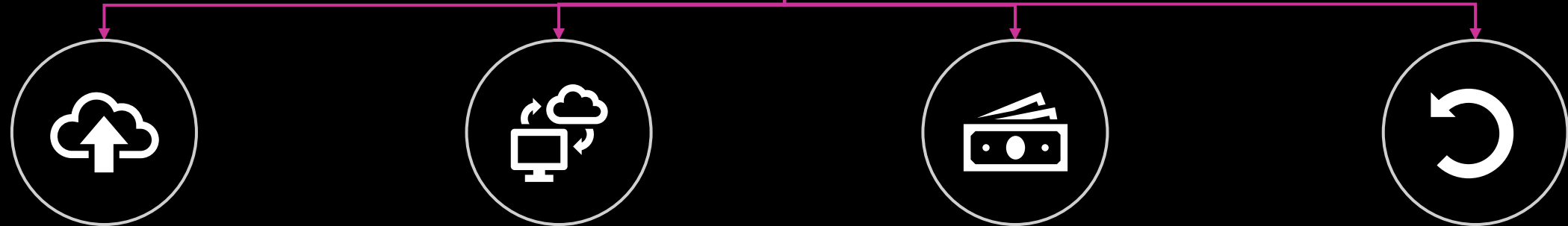
Cloud One provides guardrails to facilitate and standardize Cloud adoption

Service alignment between DAF Cloud Works and Cloud One maximizes portability & interoperability

FinOps supports cost-efficient Compute & Store

Cloud-connected hardware brings resilience to the warfighting edge

Where We're Headed...

Resilient infrastructure supporting cross-collaboration in data rich environment

COMPONENT: ICAM | AUTHENTICATION
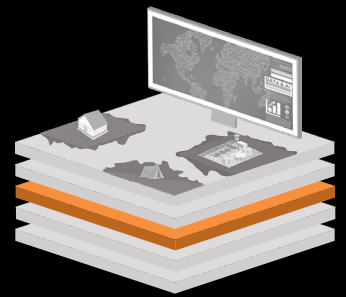
ICAM is fundamental to DAF IT improvement, providing a means of security and auditability for all authorized users that access DAF systems, while also protecting those systems from both insider threats and external adversaries.

- CREDENTIAL LIFECYCLE MANAGEMENT
- PRIVILEGED ACCESS MANAGEMENT
- IDENTITY PROVIDER
- FEDERATION
- IDENTITY GOVERNANCE & ADMIN
- IDENTITY DATA SERVICES
- DYANMIC ACCESS MANAGEMENT

CONVENIENT AND CENTRALIZED METHODS TO REQUEST ACCESS

BASELINE FOR COALITION AND JOINT USERS

PROVIDES AUDITABILITY FOR FINANCIAL SYSTEMS

PROVIDES STRONG IDENTITY FOR ZERO TRUST SECURITY DECISIONS

Where We're Headed...

Strong identity with a unified enterprise ICAM solution that balances convenience with security

COMPONENT: API | INTEROPERABILITY
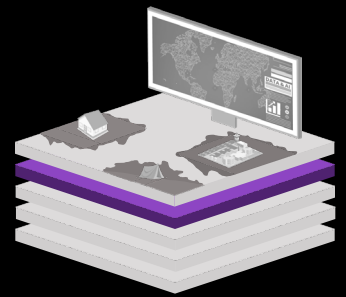
APIs and Data Access, coupled with the enterprise ICAM solution, enables secure data and software interface access between systems and organizations, delivering the secure interoperability necessary to win the future fight.

Self Services manage registration

Enterprise ICAM secures requests

API Catalog exposes APIs

Consistent SDKs facilitate requests

Enterprise Gateways manage traffic to Endpoints

API Endpoints
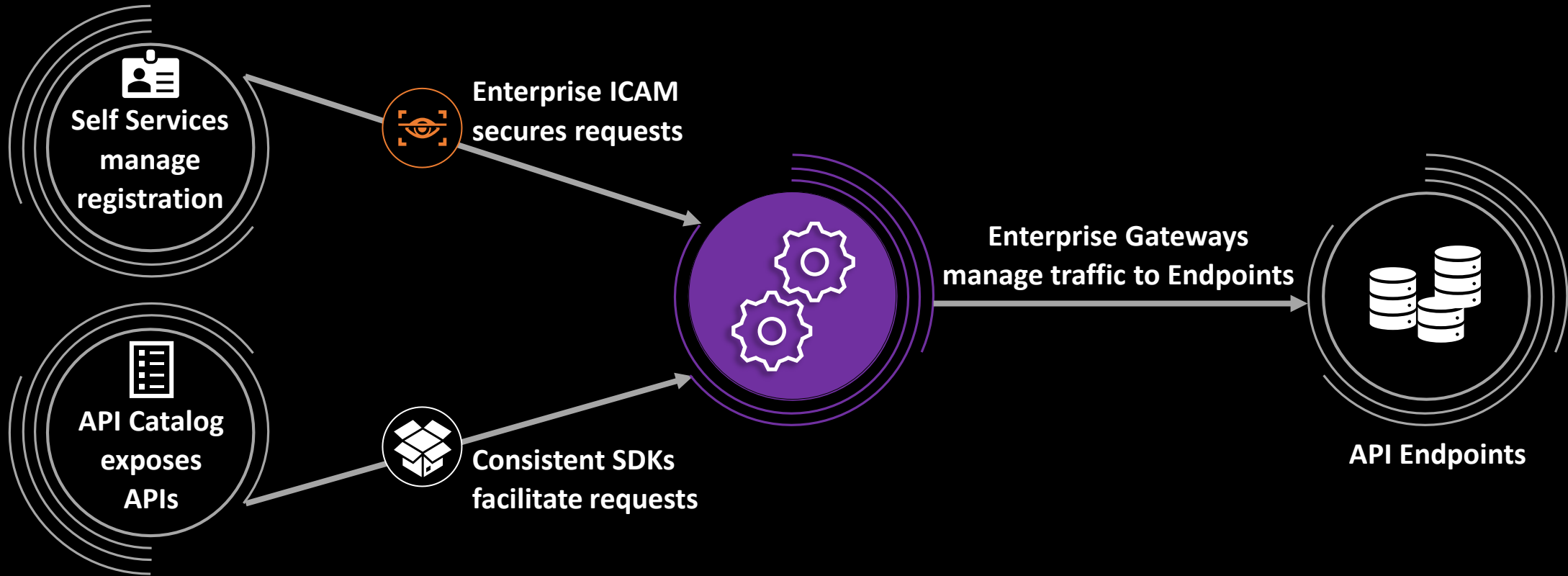
Where We're Headed...

Standardize application and data interfaces to deliver security, accessibility, interoperability, and scalability

Success in End User Devices measures the success of all other IT efforts: through a user's ability to access networks at a low cost to the enterprise, to work effectively at home and at the tactical edge, to realize the benefits of data-empowered decision making, and to work without concern for cyber threats.

SIPR mobility on future Network

C2C to ensure device health

Move away from VPN solutions
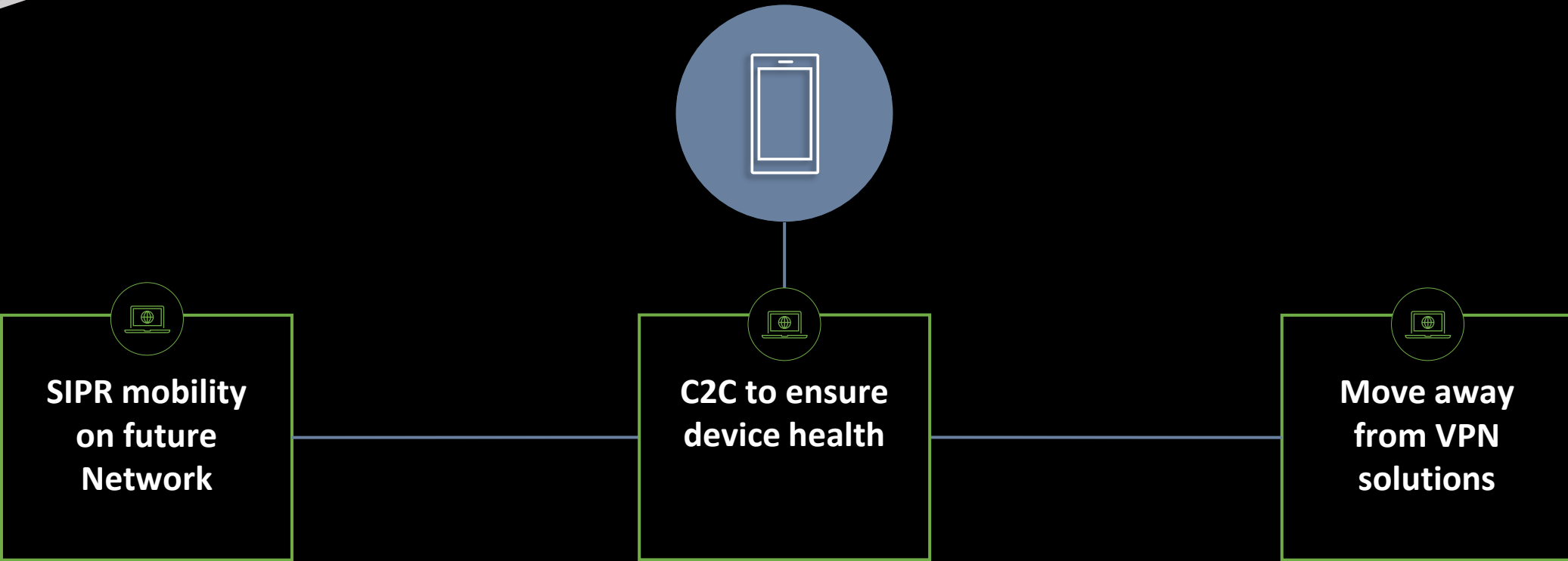
Centrally managed EUDs will evolve alongside the Network of the Future

Where We're Headed...

The ability to take advantage of the holistic IT environment that balances cost, security, and convenience

COMPONENT: DATA & AI | ENHANCED ANALYSIS

Securely bringing together data from every corner of the DAF and its Cloud environments through APIs enables the DAF to take full advantage of AI, harnessing the decision-making power of its people.
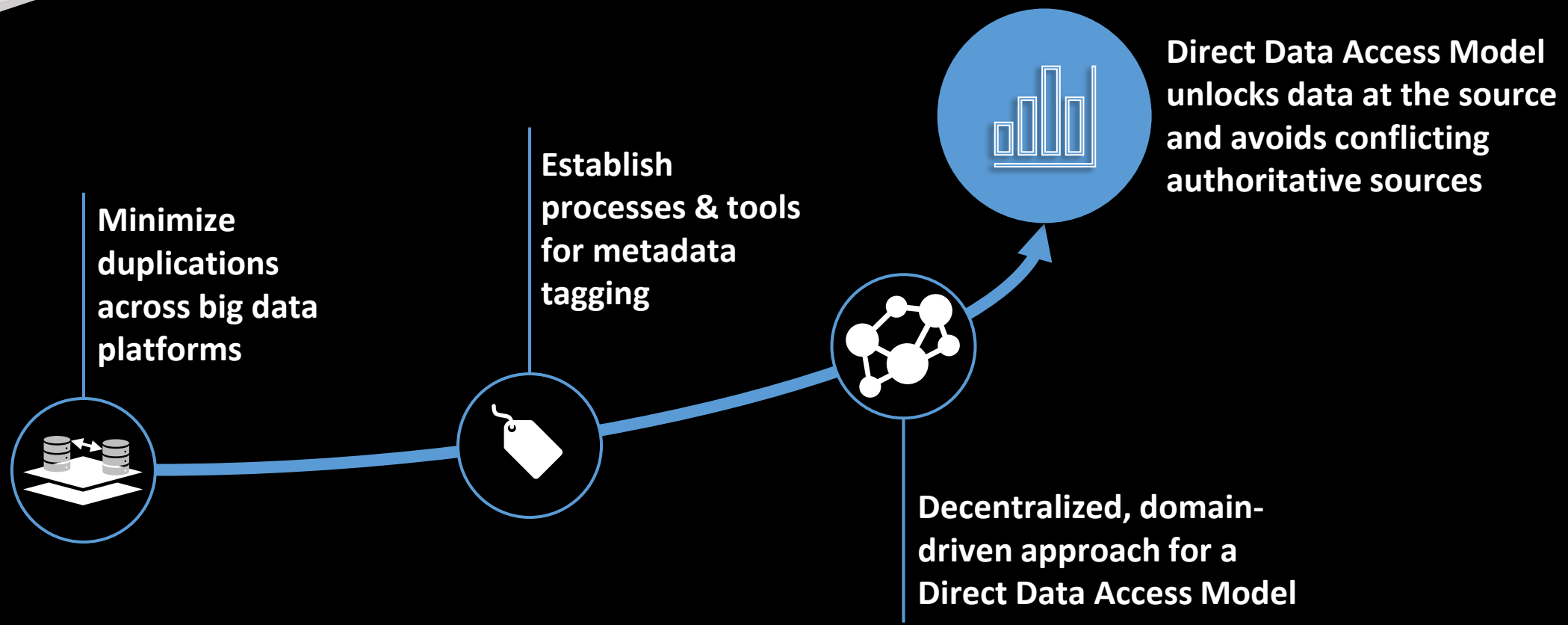
Direct Data Access Model unlocks data at the source and avoids conflicting authoritative sources

Establish processes & tools for metadata tagging

Minimize duplications across big data platforms

Decentralized, domain-driven approach for a Direct Data Access Model

Where We're Headed...

COMPONENT: ZERO TRUST | MODERN CYBERSECURITY

Zero Trust sits at the heart of DAF IT modernization efforts, providing cyber readiness and resilience for users on all devices in the face of threats through ICAM, an integrated data ecosystem, automation, analytics, secure applications, and a reduced reliance on key network components.

Cloud based endpoint management for NIPR

Microsegmentation alleviates concerns from East/West traffic through isolation

Next Gen Gateway matches identity with application access

Where We're Headed...

Securing and monitoring at the transaction level in every environment

HOW DOES THE HOLISTIC ENTERPRISE IT ENVIRONMENT WORK TOGETHER?

While the most foundational components of the Enterprise IT environment support the greatest number of components, they all work together to build toward ZT.

ZT is an **architectural imperative** that requires the enterprise to successfully deliver all component parts of the holistic Enterprise IT Environment

ZT

Increasing Dependency

DATA & AI — Data and AI depend on strong Cloud and EUD platforms to efficiently process data at scale

EUD — EUDs must work in concert with all components for UX satisfaction

API — APIs must have an ICAM solution that extends to software

ICAM — ICAM relies on a resilient computing platform to meet the demand of the user base

CLOUD — Access to the Cloud requires a strong and secure network connection

NETWORK — The Network must be available and performant wherever the DAF's Mission takes place

WHAT'S NEXT FOR THE HOLISTIC ENTERPRISE IT ENVIRONMENT?

To deliver the holistic Enterprise IT Environment, the DAF is taking critical steps over the next year to develop each component while remaining cost-effective and mission-ready.

ENHANCE SECURITY ACROSS ENTERPRISE

Bolster Enterprise Device, Application, and Network security through the set up of microsegmentation and SDP services

DEVELOP STANDARDS & POLICY

Guide the development of the innovative API solution by working with key stakeholders to develop standards and policy

UNIFIED ENTERPRISE ICAM

Integrate disparate user communities and environments into one enterprise-provided ICAM solution to enhance automation, dynamic access, and auditability

COST-EFFECTIVE & MISSION-READY

DAF ENTERPRISE IT ENVIRONMENT

CENTRAL EUD MANAGEMENT

Establish foundation for central management of EUDs by transitioning management via Wave 1 EITaaS

NEW MANAGEMENT MODELS

Develop and implement new management models and technology to facilitate EUD service, bolster network resilience, and increase operational flexibility

INCREASE CLOUD USAGE

Accelerate enterprise Cloud adoption to promote data interoperability, reduce technical debt, and increase survivability of key business and tactical system workloads

BE ON THE LOOKOUT FOR...

Zero Trust Roadmap Quarterly Update
Spring 2024

API & Data Access Roadmap
Spring 2024

ICAM Roadmap 2.0
Spring 2024

Cloud Strategy
Summer 2024

Network Strategy
Summer 2024

QUESTIONS?