

SCARS

Simulation Common Architecture Requirements and Standards Program

The Problem: Outdated and Expensive Training

The US Air Force (USAF)'s training infrastructure is based on a Cold War era industrial training model. The service is reliant on a range of bespoke simulators and platforms that have not been designed for interoperability or cybersecurity and struggle to replicate the modern battlefield replete with multi-domain effects. Due to these constraints, USAF has adopted an approach to training design and delivery that is time consuming to implement, costly, and lacks long-term reusability. The service requires a better path forward.

The Solution: SCARS

SCARS is a centralized enterprise solution establishes a common open-systems architecture for USAF simulators, platforms, and the Joint Synthetic Environment. Through a single USAF wide operations center and shared infrastructural backbone, SCARS allows all USAF simulators to leverage common applications, rapidly update and maintain ever-green modeling and simulation capabilities and ensure cyber resilience – all while minimizing life cycle costs.

WARFIGHTER

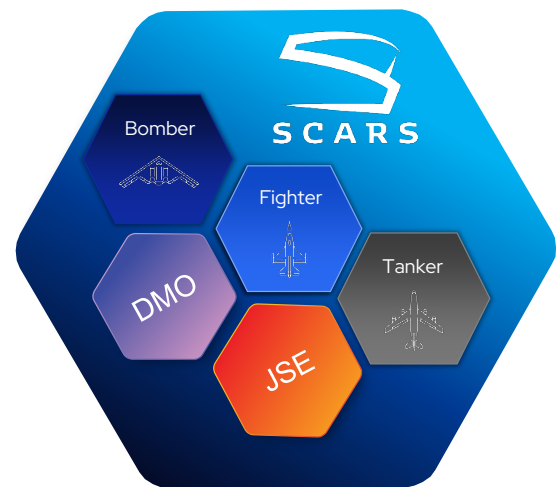
- Increased speed to the field
- Improved interoperability
- Higher fidelity of models
- Reduced cyber risk

ACQUISITION

- Reduced acquisition cost
- Reduced Intellectual Property
- Lower life cycle cost
- Fewer contract actions

INDUSTRY

- Common standards
- Increased opportunity for innovation
- Fewer development risks for affiliates



The highest fidelity joint domain system with immediate and long-term cost savings and reduced security vulnerability.

The Benefits of SCARS Adoption

- Corporate voice in SCARS standards, ensuring the best performance of company developed models, simulators, and systems within the SCARS ecosystem.
- Access to a larger customer base, lowering development risks and providing new innovative pathways for affiliates and pathfinders.
- The provision of cybersecurity and a reference architecture, driving down the initial cost to entry and longer-term cybersecurity and sustainment costs.
- Increased speed to adoption when fielding new models, simulations, and applications.
- Access to a far larger marketplace – the entire SCARS ecosystem – for corporate developed models and applications, helping to drive company growth simply through SCARS compliance.
- Multi-level security across the training ecosystem, ensuring corporate developed assets can connect across the entire ecosystem of USAF devices, simulators, and platforms.
- Shared training applications and tools across a common environment through a SCARS Operations Center, ensuring the redundancy of corporate developed assets.

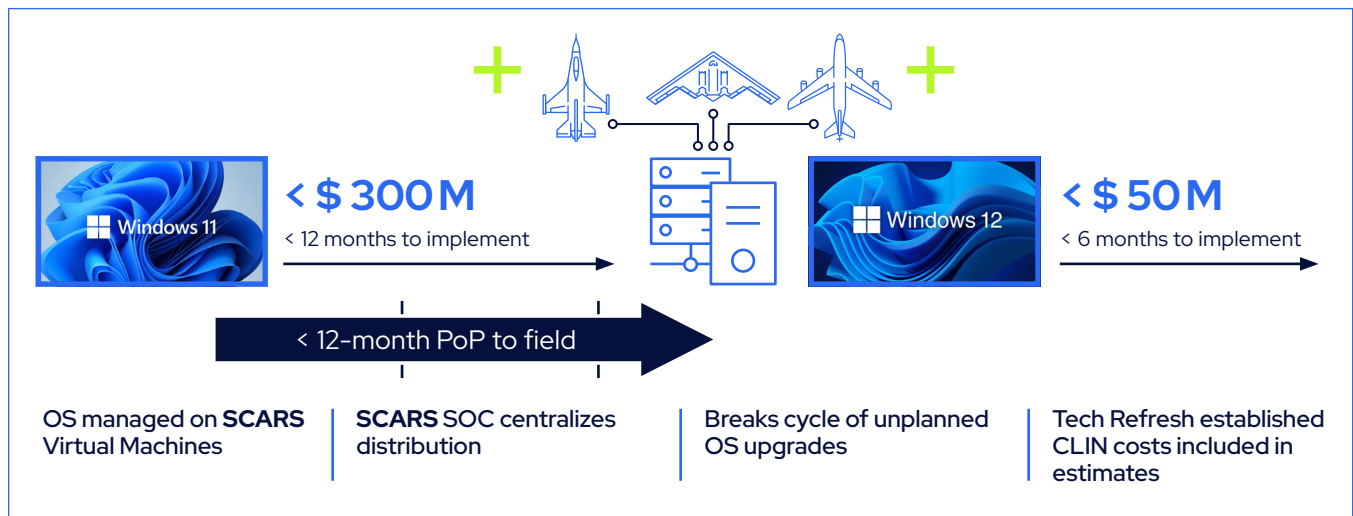
The Current Status: CAE Support to SCARS

The suite of SCARS benefits will only be achieved with full virtualization of USAF platforms and simulators on the SCARS common computation environment. At present, the F-16 is currently 50 percent virtualized and is on track to be entirely virtualized by the end of CY2024. A SCARS wide area network (WAN) will be deployed in 2024 to support any platform that does not yet have a SCARS connection.

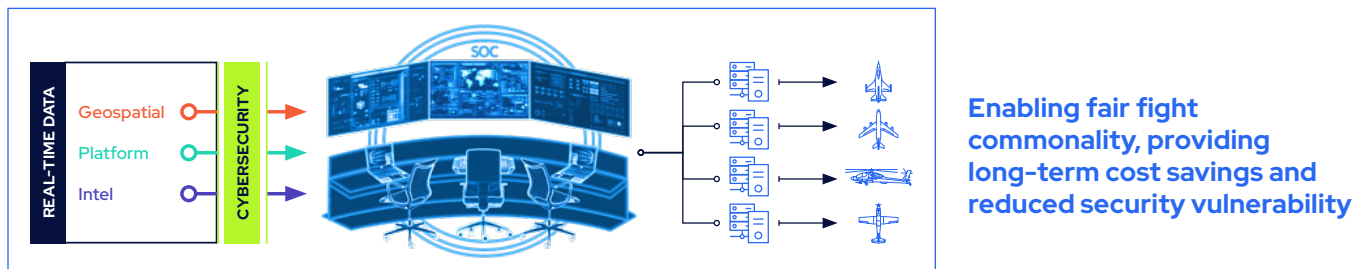
As the prime contractor on SCARS, CAE designs, delivers, sustains, and upgrades the Operational Training and Test Infrastructure (OTTI) based on cyber secure hybrid cloud technology. CAE's product line, which acts as the foundation of SCARS, is a USAF-owned infrastructure.

Cost-effective centralized management and virtualization

- The SCARS On Premise Equipment (OPE) is compliant with Windows 11 system requirements
- Operating System virtualization reduces recurring costs
- Currently, traditional Windows migration is estimated at greater than \$500M



Single point for cybersecure exposure & monitoring + Centralized data processing



SCARS

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