Air Force Materiel Command

Digital Dayton Update



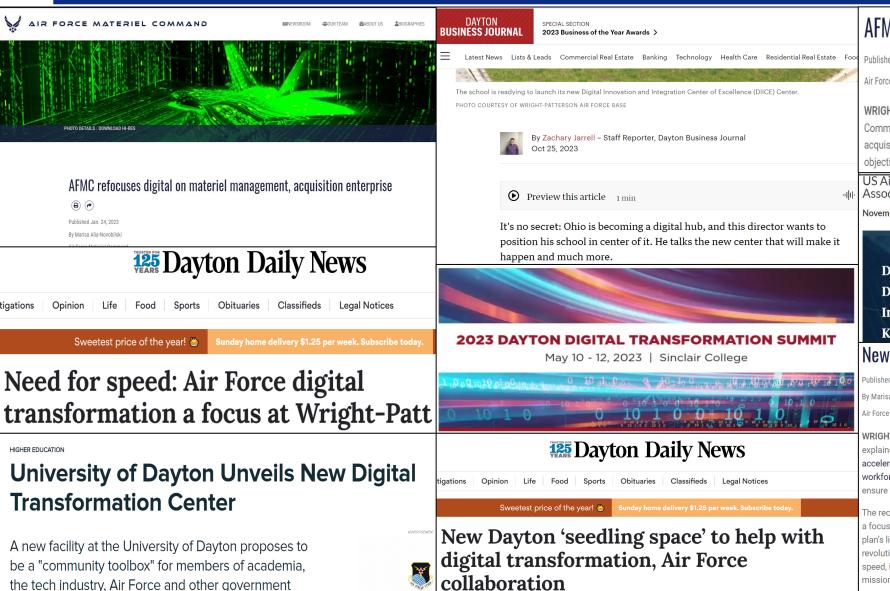
Mr. Robert Fookes, SES Director, Engineering and Technical Management, HQ AFMC

Mr. J. Kyle Hurst Chief, Digital Transformation Office, HQ AFMC

20 Nov 2023



Growing Momentum



AFMC releases white paper on Digital Materiel Management

Published June 12, 2023

Air Force Materiel Command

WRIGHT-PATTERSON AIR FORCE BASE, Ohio -- The Air Force Materie Command released information on its new approach to accelerating the acquisition materiel lifecycle to meet Air Force and AFMC strategic



US Air Force and Army Digital Materiel Management (DMM) Industry Association Consortium (IAC) Kickoff

November 2 @ 8:00 am - November 3 @ 1:00 pm EDT

Department of the Air Force and Army Digital Materiel Management (DMM) **Industry Association Consortium (IAC)** Kickoff



New video illuminates AFMC Digital Materiel Management

ublished March 15, 2023

By Marisa Alia-Novobilski

Air Force Materiel Command

WRIGHT-PATTERSON AIR FORCE BASE. Ohio -- A new video explains how the Air Force Materiel Command is working to accelerate capability delivery through an empowered digital workforce equipped with modern technologies and tools to ensure the service maintains a competitive edge.

The recent release of the 2023 AFMC Strategic Plan highlights a focus on Digital Materiel Management as a key aspect of the plan's line of effort number three, which focuses on revolutionizing processes across the life cycle by leveraging speed, innovation, digital methods throughout all aspects of mission execution



VIDEO | 02:44 | Digital Materiel Management



The Way Forward with DMM



DMM: An Accelerated Future State Whitepaper



DMM OV-1 Video





Digital Acceleration Task Force (DATF)

- Why: A necessary accelerator to unify DAF and AFMC digital transformation efforts and deliver DMM solutions, enabling integrated capability delivery faster
- When: DATF kicked off on 17 July identifying LOEs for critical near-term challenges to rapidly achieve DMM enterprise solutions
- Who: Collaborative effort with HQ AFMC DMM team, functionals, Center reps, and SAF/AQR
- What: Issuing 4 Mission Type Orders (MTOs) for these near-term challenges targeting DMM levers



AFMC Commitment to Digital Transformation

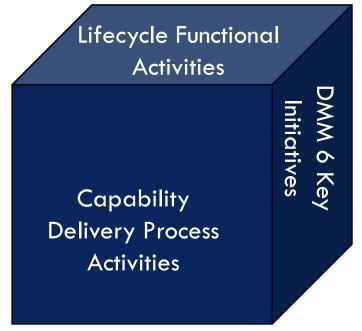




<u>The Task:</u> to establish, participate in, and execute the Executive Forum (commonly known as the Industry Association Consortium, or IAC) as a formalized group to focus on accelerating DMM Implementation.

<u>Value Proposition DMM</u>: Digital Materiel Management and its full-scale adoption will radically accelerate fielding, sustainment and modernization of Air Force Materiel Command (taken from "An Accelerated Future State")

<u>Value Proposition IAC</u>: The IAC will provide an open, collaborative opportunity for the defense industrial base to contribute to the identification and articulation of barriers and develop potential solutions associated with the rapid, full-scale adoption of DMM within AFMC.

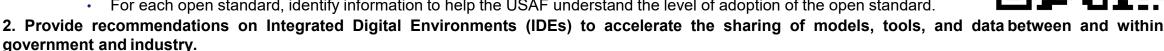


November 20, 2023 SERC USE ONLY



RFI Summary Posted to SAM.gov 30 Oct 2023

- 1. Identify critical data & interface standards, structures, and formats to enable or preserve the sharing of models and data between and within government and industry partners throughout the lifecycle.
 - Highlight the 'open' or 'proprietary' status of each critical data standard, structure, or format.
 - Recommend a prioritized list of United States Air Force (USAF) domains or functions needing data standards (e.g., logistics, supply chain, cyber, engineering)
 - Recommend prioritized list of relevant data item descriptions comparable to industry standards to update from legacy data formats to agreed upon modern digital formats.
 - For each domain/function, identify potential industry standards and/or open standards which can meet the need. Identify any gaps in industry standards that need to be addressed.
 - For each open standard, identify information to help the USAF understand the level of adoption of the open standard.



- Recommended requirements from DAF & original equipment manufacturers (OEMs) to require of software vendors (e.g., interoperability, backwards compatibility).
- Recommended roadmap for a Cross Domain Solution IDE and multi-level security implementation strategies and recommendations to ensure secure sharing of data across security domains.
- Provide recommendations for development of an open Application Programming Interface (API) to address shortfalls in IDE interfaces. Discuss the benefits of an open API in IDE interfaces.
- Make recommendations on dynamically deploying and scaling digital environments (e.g., configurable scripts).
- Make recommendations on a containerized IDE which can be deployed on virtually any infrastructure.
- Make recommendations on creating time & space separations within shared enterprise resources.
- Make recommendations on a solution to create a knowledge graph of disparate Model Based Systems Engineering (MBSE) Design Data.
- 3. Provide recommendations for establishing Authoritative Source of Truth (ASOT) between stakeholders across the lifecycle to instill and retain trust in models and data.
 - Describe how you would implement ASOT within your organization when interacting with USAF.
 - How does/would this differ based on government interactions and interactions amongst your supply chain? Discuss the data protection plan with specific concerns to sub-tier supplier intellectual property (IP). Discuss what additional cybersecurity measures that may need to be implemented across the whole supply chain.





Government/Industry Challenges

- Enterprise Resourcing to establish enterprise solutions
- Workforce education, training, and adoption
- Tool interoperability and SW vendor lock
- SW testing, approval, and deployment processes
- Data Standards, formats, modeling style guides
- USAF vs. USSF vs. DAF integration and commonality
- IT Infrastructure, tools, *enterprise* digital environments
- Scaling enterprise solutions to across programs, DoD, & Industry
- Transitioning legacy artifacts, processes, & best practices; model curation/V&V
- Data item Descriptions, Contract Data Requirements Lists, Contract language, IP/data rights considerations, data access vs data ownership
- Real-time government/contractor access to data vice traditional time-phased delivery
- Cross-domain solutions / multi-level security (CDS/MLS) scalability and standardization





Questions?