C2 EXPERIMENTATION AT SPEED AND SCALE

The MITRE Advanced Command and Control Experimentation Laboratory (ACCEL) empowers collaborative innovation with a dedicated secure classified laboratory for distributed, all domain command and control (C2) experimentation and analysis to advance joint warfighting concepts in coordination with industry partners.

Core Principles

The ACCEL mission is to partner with the government, industry, and stakeholders to seamlessly integrate and mature end-to-end C2 capabilities from conception to operation.

The federated environment utilizes a library of shared platforms, applications, data, and C2 frameworks allowing for comparison with standardized metrics, benchmarks, and evaluation criteria to assess performance and outcomes. Answering key questions early in the development phase accelerates acquisition decisions and operational fielding at speed and scale.

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> “ACCEL leverages a partnership-driven approach to help the government accelerate the development of future command and control capabilities from conception to operation through experimentation.”
>
> Keoki Jackson, General Manager, National Security Sector

Foundational Pillars

MOSA. Provide a modular open systems architecture (MOSA) featuring application programming interfaces (APIs) that enable government and industry entities to seamlessly integrate their own APIs into the ACCEL environment, facilitating comprehensive testing and validation.

Models. Maintain a comprehensive catalog of Advanced Framework for Simulation, Integration, and Modeling (AFSIM) operational scenarios, informed by validated intelligence reports, doctrinal guidelines, and relevant operational plans.

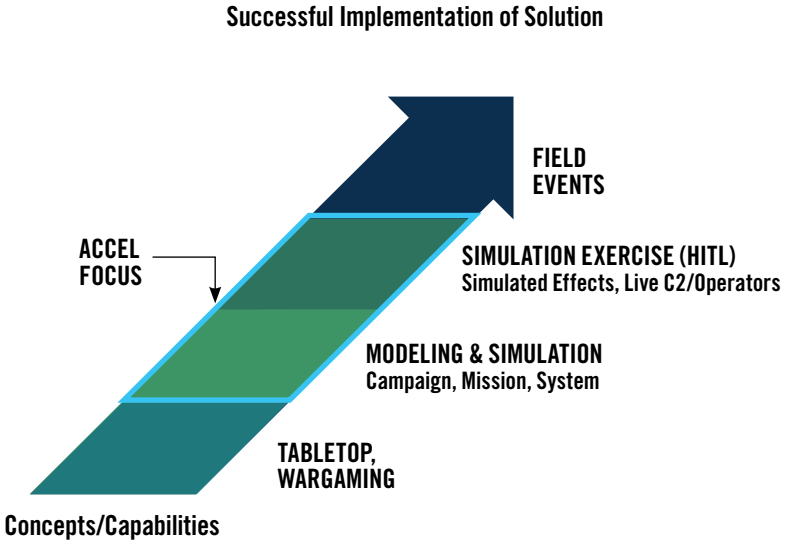
Data. Enable the rapid integration of real historical and simulated experimental data feeds for concept exploration and capability evaluation.

Interactive. Provide an "out-of-the-box" capability for human-in-the-loop (HITL) experimentation and Monte Carlo fast-time analyses..

Environment. Offer a persistent, distributed environment through a secure compartmented information (SCI) commercial cloud, complemented by a dedicated classified MITRE laboratory space in the Washington, D.C. area.

Connecting Government and Industry

Industry and government can utilize MITRE to extract requirements, identify and validate capability gaps, directly connect their C2 prototypes with simulation to evaluate performance, and integrate humans in/on the loop for experimentation.



For information about MITRE ACCEL expertise and capabilities, contact accel@mitre.org or visit https://www.mitre.org/accel.

Example Use Cases

- Strategic Decision Support
- Tactical Intelligence, Surveillance, and Reconnaissance (ISR)
- Tactical Fires
- Space Command-and-Control (C2)
- Command, Control, Computing, Communications, Cyber, Intelligence, Surveillance, Reconnaissance and Targeting (C5ISRT)
- Counter C5ISRT
- Mission Optimization
- Interagency Collaboration
- Gap Analysis
- Industry JADC2 Testbed

Microservices Available for Industry Prototypes

- Perceptions and fusion
- Courses of Action (COAs)
- Task Assignment
- Time Management

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

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