

APPLIED CYBER TECHNOLOGIES



Product Lead Applied Cyber Technologies Daedalus Introduction Brief

Mr. Art Edgeson, Product Lead November 8, 2022

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Applied Cyber Technologies (ACT)

Applied Cyber Technologies (ACT) through DCO Development Environment (DCODE), is the mechanism to bring in rapid innovation, sustainment of Defensive Cyber Systems, and Training and DEVSECOPS Environment. This capability spans three mission sets: Forge, Armory, and Mission network.





MISSION

Rapidly provide the U.S. Army's cyber defenders the critical capabilities they need to meet the needs of an evolving cyber landscape.

Product Lead ACT Mr. Arthur Edgeson



TOP GOALS & PRIORITIES



Provide operational capability to the Army Cyber Command's Cyber Protection Brigades allowing for rapid evaluation and response to unexpected and dynamic cyber threats.



Provide the ability to rapidly triage an incident and place the impacted system back in service. A portable capability enables cyberspace defenders to quickly review information stored on deployed computers in real-time – without altering or damaging it.



Deliver new prototype solutions allowing deployment in austere environments to defend the Department of Defense Information Network (DoDIN)



CAPABILITIES

FORGE A collaboration model that enables industry, academia, and military to work together to solve the Army's most pressing cyber challenges.

ARMORY: Regionally-located focal points designed to support cyber forces by optimizing current cyber capabilities and improving operational effectiveness and efficiency.



Applied Cyber Technologies (ACT) Daedalus Scope







Daedalus is designed to be a "Solution Focus" pilot, that allows the government access to "Bleeding Edge" technology, while lowering risks and encouraging innovation.



Daedalus is a pilot that allows organizations to test and evaluate immature or emerging technologies that are not currently in the government space via the means above.



The ultimate goal, while not only lowering risks, is to fast-track the prototype process once a specific technology has been determined viable.







Applied Cyber Technologies (ACT) Daedalus Background





The Pilot for Labyrinth 1.0 began in May 2019.

The goal of this pilot was to establish mechanisms for conducting short-term High-performance sprints to address Defensive Cyber Operations (DCO) information technology challenges. Within 14 months, Labyrinth 1.0 completed 33 successful sprints.



Simply put, 2.0 brought forward the same capabilities as 1.0 from 2019





Applied Cyber Technologies (ACT) **Daedalus Purpose & Technical Objectives**



Purpose



The Daedalus 1.0 process not only focuses on providing models and methodology to solve DCO and PEO EIS Information Technology problems, continuing the success of Labyrinth but the pilot also takes the effort many steps farther by allowing a limited form of exploration and assessment for emerging technology.



The intent is to establish a pool of Industry experts that can recommend or develop new tactics, techniques, procedures and introduce engineering solutions to solve Army problems.

Technical Objectives >>









Applied Cyber Technologies (ACT) Daedalus Virtual Piloting









Applied Cyber Technologies (ACT) Daedalus More Capabilities





Model-Based Simulation Design (MBSD)

Provides an efficient approach for establishing a common framework for communication throughout the design process while supporting the development cycle.



Value-added Capability Demonstrations within the Government Environment Government sponsored Demos are value-based unlike traditional no cost Demos which are "as is where is". The goal is to have a "cutting edge" product demonstrated in a Dev environment that mimics the actually environment as much as possible, with or without STIGs, shaped toward a particular use case or requirement. The value-based platform agnostic, that is compatible with many types of platforms or operating systems.





Applied Cyber Technologies (ACT) **Daedalus More Capabilities**







Is the act of examining the artifacts and the behavior of the software under test by validation and verification, the process is used to evaluate a new design which can enhance precision by system analysts and End-users. Software testing can also provide an objective, independent view of the software to allow the business to appreciate and understand the risks of software implementation.

Risk Management Framework

Provides a process that integrates security, privacy, and cyber risk management activities into the system development life cycle. The risk-based approach to control selection and specification considers effectiveness, efficiency, and constraints due to applicable laws, directives, Executive Orders, policies, standards, or regulations.





Applied Cyber Technologies (ACT) Daedalus More Capabilities



Business Process Reengineering (BPR)

is the practice of rethinking and redesigning the way work is done to better support an organization's mission and reduce costs. The focus is on two key areas:



Use of modern technology to enhance data dissemination and decision-making processes.

Alter functional organizations to form functional teams. Reengineering starts with a highlevel assessment of the organization's mission, strategic goals, and customer needs.

Powered Market Research

Powered Market Research is a process of gathering, analyzing, and interpreting information about a given market. It takes into account geographic, demographic, and psychographic data about past, current, and potential customers, as well as competitive analysis to evaluate the viability of a product offer.







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Applied Cyber Technologies (ACT) Daedalus Roles and Responsibilities

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ROLES & RESPONSIBILITIES

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Project Manager Defensive Cyber Operations (PM DCO)

PM DCO's mission is to rapidly deliver integrated, innovative and cost-effective systems and services for the Total Force, to globally connect the Army and provide a decisive information advantage to every Soldier.

Project Lead Applied Cyber Technologies (PL ACT)

Applied Cyber Technologies (ACT) is the leader in consistently delivering solutions at the speed of cyber and provides cyber defenders the capabilities they need--when they need it--to defeat ever-changing threats. ACT develops innovative, rapid acquisitions processes to procure cutting-edge cyber capabilities, and skillfully integrates and fields those technologies to our cyber warriors.

Daedalus Mission Lead – Government Lead for DCODE (DCO Development Environment)

DCODE supports Forge (Develop), Armory (Deploy), Development Environment (Training, Testing and Integration) to develop innovative, rapid acquisitions processes to procure cutting-edge cyber capabilities, and skilfully integrates and fields those technologies to our cyber warriors.

Scrum Masters/Project Managers

Individuals assigned by the Government Project Lead to manage and facilitate all sprint activities. More specifically, facilitator for an agile development team; manages the process for how information is exchanged. Contractors who hold the before mentioned position will have signed NDA's prior to the start of any project.

Procurement Manager

Acquisition planning, market research, oversight and participation in formal/informal evaluation processes, cost/price analysis, negotiation support, preparation of pre- and post-award contract documents, and administration and closeout. Manage the planning and execution of pre-award activities, such as evaluations and selections of prototype solutions.





Applied Cyber Technologies (ACT) Period Of Performance





The Government anticipates a period of performance of 9 months from the date of award with 3, 9-month option periods

Phase	Price Ceiling	POP
Phase I	\$4M	9 Months
Phase II	\$5M	9 Months
Phase III	\$7M	9 Months
Phase IV	TBD	9 Months





Applied Cyber Technologies (ACT) Daedalus Definition of Complete



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Successful project completion will be determined by assessing whether the solutions can meet 60% - 70% or more of the use cases or requirements provided. Small, medium, and large solutions will be assessed individually and some or all solutions may be considered for prototype development.







Questions

