

Coordinated National Training to Counter Cyber Attacks



Data breaches increased 20% year-over-year 2022 to 2023

<https://hbr.org/2024/02/why-data-breaches-spiked-in-2023>



Large-scale cyber attacks among top 5 global risks to world economy

<https://www.weforum.org/agenda/2019/01/biggest-global-risks-facing-our-world/>






75% increase in cloud intrusions from 2023 to 2024

<https://go.crowdstrike.com/global-threat-report-2024.html>

Coordinating Multi-Agency Cyber Security **Training and Readiness**

Military forces, traditionally the first line of national defense, are no longer alone in preventing hostile actors from negatively influencing multiple aspects of national sovereignty. In the digital age, even a small group of individuals have the ability to use technology from a distance to cause great damage to entire nations. Governments have identified that a comprehensive cybersecurity workforce management strategy is critical to defense at a national level.

	PROBLEM	SOLUTION
	<p>Training and Development of Individuals and Teams</p> <p>How do you build the next generation cyber workforce? One must provide effective and state-of-the-art training at military scale in work roles that strengthen cyber expertise and support career paths both in national service and in commercial enterprise.</p>	<p>A Real World Learning Platform Project Ares provides training for entry-level trainees requiring cyber fundamentals and seasoned experts alike, testing their critical thinking in interactive and realistic threat scenarios. They can be evaluated in real-time, providing command leaders with skill assessments that make workforce retention and unit assignments more efficient.</p>
	<p>Limited Visibility of Crew Capabilities</p> <p>Having a well-rounded crew with varying capabilities is critical to the success of a unit. How can a commander understand the skills and capabilities of each member of the team and how they fit together as a cohesive unit?</p>	<p>Crew Level Qualification</p> <p>A gunnery training and assessment model can be used to assign to specific work roles of a cyber mission element. Crews build and test their various skills using Project Ares battlerooms and missions. Training modules and live-fire cyber assessment builds readiness.</p>
	<p>Managing Individual's Lifecycle of Skills</p> <p>Commanders need the ability to track knowledge and progress of an individual for the duration of their time in a unit.</p>	<p>Analysis of Current Status</p> <p>Measure training proficiencies against established Cyber Command standards and use Project Ares to see a defender's progression of cyber skills.</p>



SC²⁰¹⁹ Awards
Winner



Traditional classroom training quickly hits bottlenecks in scale, retention, cost, and realism. Project Ares enables your team to train against real-time scenarios and threats, anytime, and anywhere, for a much lower cost.



Hands-on practice and personalized curriculum progress are key to knowledge retention. Active learning methods built into Project Ares increases retention by over 50% as compared to traditional instruction.

<https://www.avisystems.com/blog/active-learning-technology-improves-student-outcomes>



Project Ares is an immersive, gamified, cyber education learning platform. Project Ares integrates cyber ranges and learning content to provide on-demand learning and hands-on immersive labs. Your team performance is elevated as the number of best practices are collected and taught, measured in real-time and available 24/7.



Project Ares Cyber Learning with Government Defense Sector

Our work around the globe with government defense ministries and agencies supports cyber readiness efforts in professional training, skills development, and work role progression within cyber command operations.

Project Ares and a European Defense Ministry

The Situation

For over two years, one of Project Ares' longest-standing government clients has leveraged the Project Ares cyber learning platform.

- Project Ares offers an excellent off-site platform that allows cyber teams to train together from remote and federated locations.
- Project Ares online training offers the benefit of huge scalability.

With Project Ares, the organization found a cost-effective cyber learning solution to support joint, multi-service force training efforts, augment cyber curriculum development and help them achieve their goals to:

- Increase cyber skills for existing operators
- Develop further operators to participate in cyber programs
- Measure training aptitudes against established standards

Using Project Ares

Today, the Ministry is using Project Ares to:

1. Augment existing classroom based training of new cyber recruits with hands-on cyber defense curriculum
2. Provide an ever-present environment for consolidation of skills away from the training school
3. Identify readiness gaps through learning engagements for single players and teams in offensive and defensive battle room and mission learning exercises that mirror real-life threat scenarios

Milestones with Project Ares

Through continued use and development of Project Ares, this department has been able to:

- Enrich existing cyber courses and curriculum with hands-on experiential learning
- Add blended online learning to foundation pathways for trainees to advance cyber expertise and competency
- Provide trainees with environments to test cyber comprehension and application in real-world settings

What's Next?

Circadence will continue to work with this department of Defense and other national agencies towards full scale, self-service cyber training and readiness initiatives that include custom content development. Beyond training and education, the use of the Project Ares platform can be expanded for battle drills, playbooks, and mission rehearsals.