

 **ARIES SECURITY**

# CAPTURE THE PACKET

**CYBER TRAINING RANGE & SKILLS ASSESSMENT SUITE**



## **Hacker Tested, Government Approved.**

We are Aries Security, creators of Capture The Packet: a world-class cyber training range and skill assessment suite. Our clients include governments, corporate entities, and all branches of the U.S. military, several members of the IC, and governments around the world. As a company, we have over a decade of experience creating custom content and we are known for creating the most sophisticated challenges in the world. In addition to providing cutting-edge cyber training solutions, we have leveraged our many years of experience running professional cyber competitions and events at conferences like DEF CON, Black Hat, Cyber Shield, Cyber Gauntlet, Code Blue Japan, and RSA.



## Who We Are

Founded in 2008, Aries Security is the manufacturer of the premiere cyber training range and skill assessment suite used globally, as well as an industry leading content developer and event organizer. We haven't forgotten our hacker roots, and we're dedicated to providing the best product possible.

We regularly give back to the community through the Packet Hacking Village at DEF CON, where we host massive interactive training sessions on a variety of cybersecurity topics. We also host a competition-style version of our product, Capture The Packet, which challenges the best of the best and has been a Black Badge contest for years.

## Product Performance

Aries Security has a long and proud history of serving governments around the globe. We have assisted in training and skills assessments, job/work role qualification, custom content development, and cyber security briefings.

Our product, Capture The Packet, can be used for recruitment skills assessment, vetting, pre-class training prep, initial on-the-job training, mission preparation, ongoing skills and certification maintenance.

We provide non-traditional gamified learning that leads to true skills development and retention. Capture The Packet is an ideal complement to existing classroom training/curriculum and provides for the opportunity to allow students to "practice what they learn".



## Full NICE and DCWF Support

Gamified cyber training has unprecedented training value, especially when combined with NICE and DCWF work role mapping. We have mapped both work roles to our existing content, and developed custom content for our customers. We are one of the only cyber range providers to offer such a deep integration with this educational standard.





## Past Performance

**2019-21:** Partnered with Metova/Bylight on the Part Task Trainer – Cyber (PPT-C) program to deliver 20 TAA-compliant systems for use in classified areas, compatible with the ANG's Virtual Interconnected Training Environment (VITE).

**2019-21:** Multiple TAA-compliant systems delivered to the Air Force ISR community.

**2021:** Delivered a cloud-based system to the Naval Air Warfare Center Training Systems Division.

**2022:** Delivered a cloud-based system to the Space Force Mission Defense Teams.

**2022:** Delivered a cloud-based system to the Air Force.

**2022:** Awarded sub-contract with Lockheed Martin to deliver integrated cloud-based solution for the US Army Cyber Civilian program.

At this time, our system has been deployed and used across all branches of the U.S. military, including at the top secret level.

## Our Partners

We are proud to have long-standing partnerships with the following manufacturers, helping us ensure the very best hardware and software to keep your teams ready:

vmware®

DELL

JUNIPER  
NETWORKS®

SUPERMICR®

DUIO

EDGE-CORE®  
NETWORKS

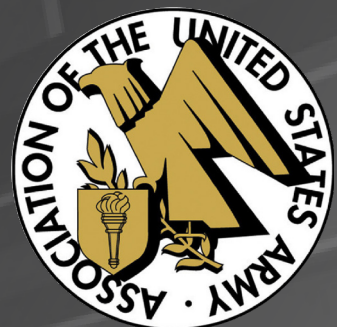
ACCX  
PRODUCTS



Great Scott Gadgets

CISCO®

We are proud to hold membership in the following organizations:





**U.S. Army:**

"Excellent option for ALL National CPTs/NDTs. System is portable, with support. Easily able to maintain spaces between missions. Not required to obtain time at another facility."

"I was very impressed with everything. The software used for the simulator was easy to use and navigate."

"It has all the functionality that you need to be able to conduct dynamic ranges and training."

"Very Intuitive, MORE!"

**U.S. Navy:**

"Capture The Packet follows the CTF format where you need to solve a challenge given the information provided. It trains cyber security professionals by giving them a well defined challenge, which makes them do research on the topic until they have the knowledge to solve it. This encourages self-learning which is a critical skill to have in this field."



"Capture The Packet is exactly the training form factor that Cyber Protection Teams need – the analysts can sit down, capture live traffic, examine it, and answer questions based on what was captured. I'm a huge fan of the CTF format and the "gamification" of training in general, it encourages participants to hone their skills in order to claim that top score for themselves. This is, to my knowledge, the only CTF focused on live network traffic capturing and analysis."

"CTP is hands on training that the cyber community desperately needs."

**U.S. Air Force:**

"The interface is effective for training and a great use of the team's time. The level of difficulty was on point, which was challenging but not too frustrating. The hands on experience was exceptional and beats the hell out of power points and online quizzes."

"Wish ALL the training I received were hands on like this class. I learned more today than I have in 1 year of online training. This is how we should gear all cyber training."

"I recommend this exercise to all military/civilian/contractor personnel!"

"Much better than sitting in a PowerPoint class. Excellent refresher of old skills as well as introduction to new things."



**U.S. Marine Corps:**

"CTP provides great, personalized training for CPT members. The problem sets range from easy to difficult and really enable your team members to push their knowledge to the limit to better themselves."

"There are very few training resources that simulate a real environment perfectly. In my opinion the hands on training with Capture The Packet is second to none in the realm of packet analysis training. Not only will it help members of your organization learn, but they will have fun doing so. It is one thing to go over concepts, but the actual 'doing' with a resource like Capture The Packet is exceptionally better."

"This product is a must-have. It comes jam-packed with all of the latest open source tools you could possibly need to get any job done: from network reconnaissance and exploitation to intrusion detection and analysis to forensics and malware analysis."

**U.S. Marine Corps Forces Reserve:**

"This is a great product that has been well designed with multiple exercises. The exercises range in complexity and are great for both OCO and DCO operations."

"Fresh to the field, I was able to start at the beginning and work my way up. I feel as I continue through this, it will directly help me progress in the field. Great resource to have."

"No set up, responsive tools, and great challenges. Reduces the overhead of setting up/maintaining a training box, so that time can be dedicated to specific training goals. With that said, offers the control and flexibility to build from scratch, if that is what the training objective is."

**Air National Guard:**

"CTP scenarios are thorough, realistic and challenging. They are an integral part of our training plan to improve operator/analyst proficiency as individuals and a team. Aries Security support is unparalleled as well."

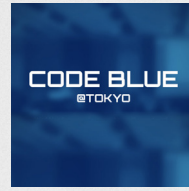
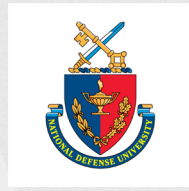
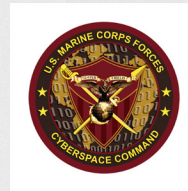
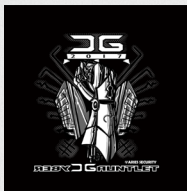
"CTP provides great, personalized training for CPT members. The problem sets range from easy to difficult and really enable your team members to push their knowledge to the limit to better themselves."

"The CTP allows for critical thinking in hunt methodologies without learning a new 'tool'. Resources needed to accomplish the CTP are known to those in Cyber Ops, regardless of branch. Without needing to learn a new tool, learning/training can focus on the concepts."



## Experts at event management:

The Aries Security team has almost two decades of experience managing events with attendee numbers ranging from 10 to over 10,000. Over the years, our team has built every style and format of event imaginable. We have organized events at most major conferences around the country and the world, including:



## Educational Events

These events are designed to take groups of any skill level and provide exercises and training designed to upgrade their skills or teach them new ones. This event type is perfect for training staff on new and emerging threats, cross departmental training, and overall skill assessment. With our administrative back end, we can provide in-depth reporting for management and leaders and provide CPEs for all participants.



## Competitive Events

This style of event is great for groups interested in seeing how much they've improved over time, or in showing off in friendly competition. We can tailor challenge sets based on your group's skill level, or provide our DEF CON style approach of throwing our toughest challenges out and seeing how far up the ladder your teams get. This style is how we approach bigger shows like DEF CON, in Las Vegas and the Code Blue Security Conference in Japan.

## Team Building Events

The perfect choice for corporate events, providing a tailored blend of educational and competitive functions. As with all our events, we can customize activities to align with your company culture, help bring staff together with fun and informative exercises, and provide you with insights on how to keep up momentum after the event.





## Cyber Range Types

### Software-as-a-Service

Train from **anywhere, anytime**, with **anything!**  
This solution is ideal for distributed teams and remote workers.

- Buy at the scale you need: licenses are available in quantities of just a few to thousands.
- Offered as a private single-tenant or shared multi-tenant solution.
- Licenses offered in both **named and floating** seats to meet your training needs & budget.
- Save with volume discounts.
- Accessible from many government networks.
- Single licenses and month-to-month available.
- Virtual on-premise solution available for areas with high security requirements or large hardware investments.



### Physical Appliance

Throw your IT infrastructure setup issues out the window! Our range-in-a-box solution comes with everything pre-configured and ready to run. (DNS, DHCP, VPN, VDI's and more)

- Go anywhere and set up an exercise in under 30 minutes with **NO** internet required.
- Able to integrate with other range equipment
- Up to 100 concurrent seat options readily available with the ability to customize/scale to meet your needs.
- Perpetual licensing options available.
- Solution weighs less than 60 pounds and is easily portable on commercial airlines.
- Offered as a TAA Compliant accredited solution for Secret+ areas.

### Credentials

We have collected some of our more relevant contractor information here for convenient reference. More information is available on our website at:

<https://www.ariessecurity.com/federal-resources/>

#### DESIGNATOR:

Small Business

#### DUNS:

080179659

#### SAM:

JN8JL9211WJ9

#### CAGE CODE:

7LB07

#### DoD PROJECTS:

Prime Contractor:

OTA#W15QKN-14-9-007

2017-FA7000-17-T-0099

W911W4-18-P-0006

N6134021P0054

Subcontractor:

OTA#W15QKN-14-9-0001

#### NAICS:

541519	Other Computer Related Services
611420	Computer Training
511210	Software Publishing
334419	O.E.C.M
423390	O.C.M.M.W

#### SINS:

511210	Software Licences
54151	Software Maintenance Services
611420	Information Technology Training

#### GSA:

Contract: 47QTCA19D001M





## Modes

### Jeopardy® Style

Our competitive Jeopardy-style mode gamifies offensive and defensive training/assessment for solo trainees and teams by using five difficulty levels of challenge questions, hints, and the opportunity to use real-life tools. This mode includes an optional challenge timer with a scored game board.

Scenarios can be created from hundreds of challenges, featuring 7 unique types of challenges across 18 categories. This mode of Capture The Packet is a regular contest at DEF CON.

### Force-On-Force Style

The force-on-force style module is an attack-defense game where every team is provided their own network with vulnerable services. Each team reverse engineers their services in order to develop exploits to use on the other teams or build hot-patches to protect their own services.



## Features



### Gamified Training

Gamification is a scientifically proven educational technique that increases skill retention and development, as well as trainee engagement.



### Knowledge Base

Our built-in hint system and knowledge base provides a wealth of information for trainees who need a little extra help. We regularly update our knowledge base with new tools and tips to help cyber experts stay current.



### Traffic Generator

Capture The Packet's highly sophisticated traffic generator offers the option to learn in a self-contained live network environment featuring hostile traffic, hundreds of protocols, and nation-state level threats.



### Targeted Content

Scenarios can be modified before starting a session to target any experience level, from beginner to expert. Sessions can also be targeted towards developing specific skills or validating specific job requirements.



### Single Sign-On (SSO)

Our system is integrated with multiple popular single sign on services, giving you the ability to tie into your pre-existing infrastructure with ease.



### Tool Agnostic

Our system is tool agnostic, allowing users to train with the tools used in daily tasks. This encourages the development of functional skills which allow multiple methods for solving any challenge.



### Anti-Collusion

Our unique iterative system prevents cheating by ensuring that no participant ever sees the same exact question twice. This anti-collusion feature encourages trainees to work together on problem solving while ensuring that answer sharing is useless.



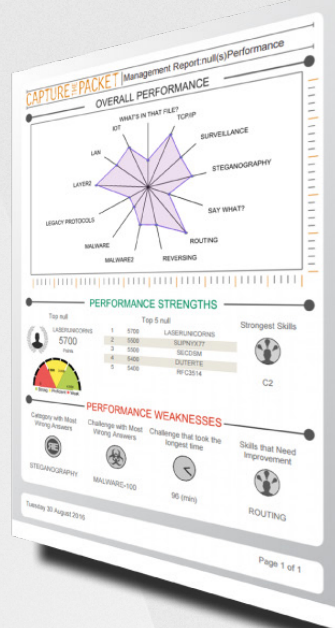
### Advanced Reporting

The rich reporting system built into Capture The Packet provides administrators a wealth of information. Our first-class Cyber PT® reporting system provides leaders, teachers, and training coordinators the depth of data necessary to identify and remedy skill gaps.









## Administrative Features

Capture The Packet has been built with ease of administration in mind, as directed by one of our earliest Pentagon contracts in 2015.

## Simple Challenge Selection

Navigating our challenge menu is quick and easy. You can sort through our content by challenge type, difficulty, challenge id and additionally by role or KSA, as defined by frameworks such as NICE.

## Ease Of Access

Our back-end system is simple for administrators to navigate. We've integrated feedback from our customers, and designed an interface that requires minimal training in order to create maximum useful output.

## Scenario Management

The scenario wizard makes it easy to create a scenario with the challenges you want. Managing, editing, and deleting scenarios is simple.

## User & Group Management

User and group management is easy, and made easier with integrations. We are able to integrate Capture The Packet into nearly any single sign-on system, and have successfully integrated with PCTE and military CAC.

## Reporting Features

Our first-class reporting system delivers a wealth of insight. These reports can be run on individuals or groups, and provide the depth of data needed to identify and remedy skill gaps.

## Report Types

Capture The Packet enables administrators to generate a variety of reports. Individual users can be assessed with analytics based off answer times, hints, and more. Comparative reports can also be created by department, division, and location to identify which groups are keeping training up, and where organizational strengths lie.

## Report Generation

Data within our system can be filtered by users, groups, rounds or times, giving administrators the flexibility to find and view any data set they need. Reports, metrics and CPEs are downloadable as PDF or CSV depending on the report type.



## Challenge Categories

Capture The Packet training challenges can be selected from our built-in collection of challenges, or created from our list of specific skills to develop task specific training.



IoT



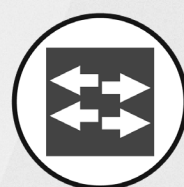
System Forensics



File Forensics



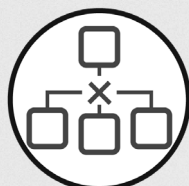
APT



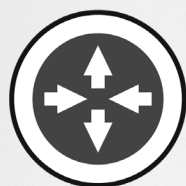
LAN



Exploitation



Misconfigured Devices



WAN



Network Forensics



Cryptography



Web Attacks



Reconnaissance



Reverse Engineering



VoIP



Insider Threats



Legacy Protocols



Binary Analysis



Operating System

## Custom Development

### Challenge Content

Aries Security has over a decade of experience creating custom content and is known for creating the most sophisticated challenges in the world. Capture The Packet's challenges are tested in the crucible of DEF CON, where it has been a Black Badge event for 10 years.

Our team is made up of expert hackers and security researchers in the field. Our personnel are able to have classified discussions about sensitive topics, and all custom content is developed in-house to ensure data privacy.

### Walkthroughs

Our walkthroughs can be used to augment training and provide deeper understanding to subject matter experts. Topics include binary analysis, network forensics, reverse engineering, cryptography, and other subjects across dozens of categories and hundreds of challenges.

## Continual Updates

Aries customers don't have to purchase new custom content packages to get new content on a regular basis. Our platform receives quarterly content updates based on the changing cyber landscape and our customers' feedback.

Every customer has the option to designate a subject matter expert (SME) to become part of our content input team. As a part of this process, each customer describes what new content they would like to see, and our team adds those ideas to our development list.

## Crowdsourced Content

If one organization needs a particular type of content or challenge, many others are likely to have the same need. As an incentive to encourage participation, we make the cost of custom challenge creation low compared to the rest of the industry. Once developed, this content is then added to the product for all to use. More organizations participating means more content for everyone.



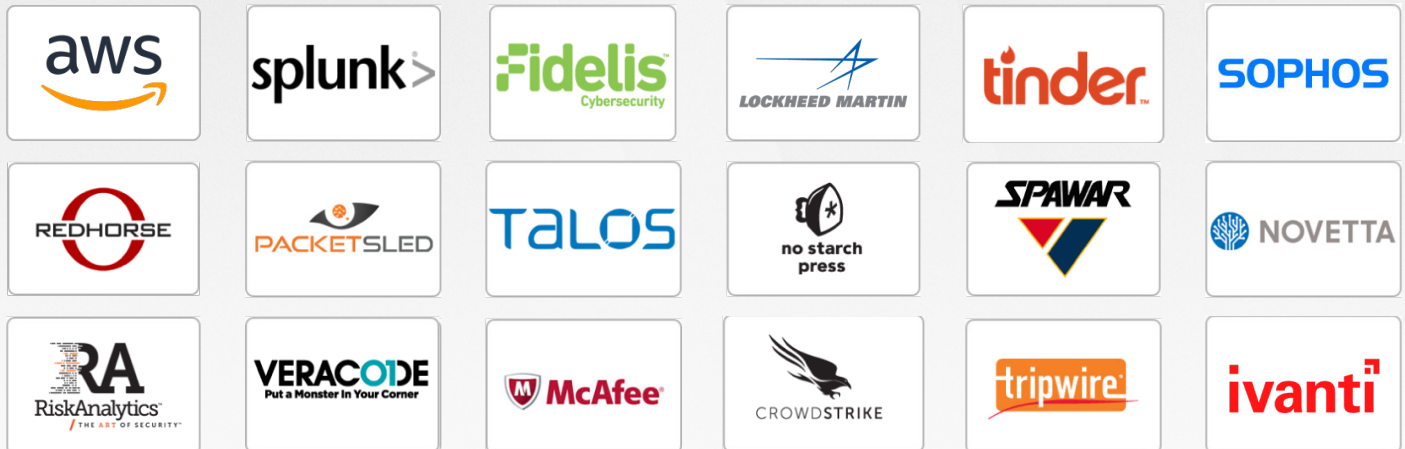
## About Us

Founded in 2008, Aries Security is the manufacturer of the premiere cyber training range and skill assessment suite used globally, as well as an industry leading content developer. We have always focused on embracing our team's strengths, open collaboration, and the exploration of new ideas. We haven't forgotten our hacker roots, and we're dedicated to providing the best product possible.

We regularly give back to the community through the Packet Hacking Village at DEF CON, where we host massive interactive training sessions on a variety of cybersecurity topics. We also host a competition-style version of our product, Capture The Packet, which challenges the best of the best and has been a Black Badge contest for over a decade.

## Our Customers

We have worked with organizations across the corporate, education, military, and government spaces. Here are just a few of the companies we have supported.



## Our Product

Capture The Packet has been used for over a decade to train and assess individuals and teams. In the military, our product is used to train on key skills and assess existing troops' skills to ensure mission readiness. In the education sector, Capture The Packet has been used to deliver CPEs and training to users across every major cyber industry. We provide non-traditional gamified learning that leads to true skills development and retention.

Visit our website to learn more:

<https://www.ariessecurity.com/>

**Contact us for more  
information:**