SimSpace Range - a ReSCIND Testbed

ReSCIND Proposer Day
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Who We Are?

SIMSPACE
BATTLE-READY CYBERSECURITY

The SimSpace Cyber Force Platform (CFP) is the **preferred cyber range** of the US Cyber Command

#1 commercial cyber range with over 25,000 live range concurrent emulations

Cyber range provider to **4 of the top 5** US banks

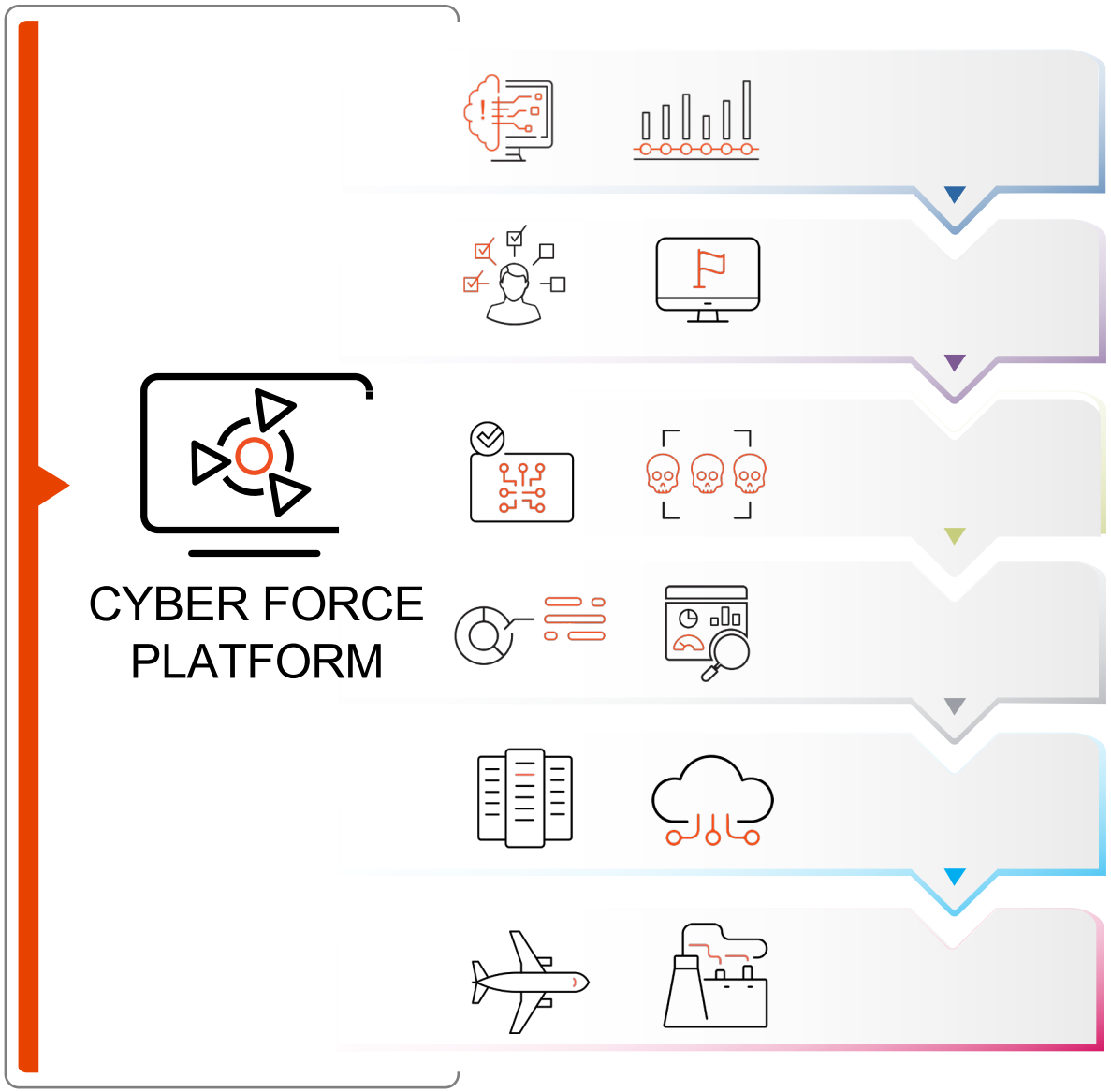
Cyber range provider to the **"Five Eyes" intelligence community**

Highest fidelity environments specific uses cases

What We Do?

- Military-Grade Cyber Ranges
- Elite Force Training
- Live-Fire Exercises - Securities Industry and Financial Markets Association "Quantum Dawn"
- **DARPA RADICS** Project Testbed
- Stable and robust platform with ranges that contain more than 25,000 VMs!

SimSpace Capabilities for the ReSCIND Program



6 Advanced Analytics and Reporting
Detailed logging and data-driven evidence collection at all levels correlating between decisions to actions.

5 Orchestrated Live-Event Execution
Bring together multiple teams, across locations, capturing all aspects of the cyber defender workflow

4 Real-World User Emulations and Attack Scenarios
Leverage rich real-world catalog of attack scenarios, edit and develop new scenarios and utilize automated attack agents to curated dynamic threats. Advanced user emulation modules to generate background traffic and vulnerabilities

3 Replicate real Cyber Security Stack
Include commercial off the shelf and custom security tools natively integrated into the platform.

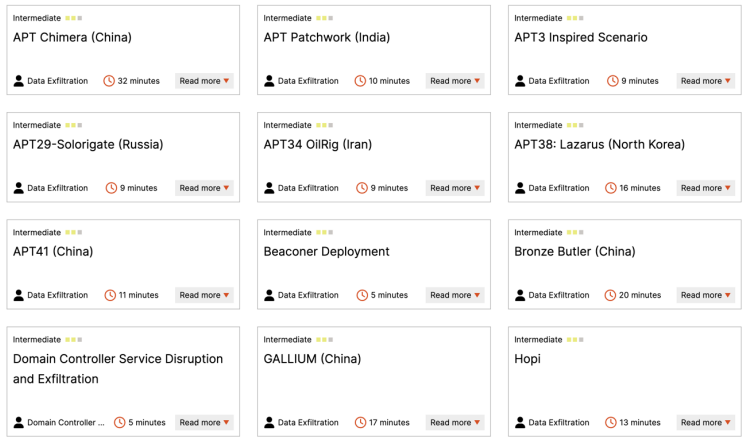
2 High-Fidelity, Guaranteed-Safe Replicas of Environments
Validate every part of the IT terrain across your enterprise, examine process changes, and safely anticipate M&A challenges and issues.

1 Connect Physical infrastructure
Easily connect a wide range of physical infrastructure that are critical to your operation scenarios, including SCADA, ATM networks, cloud deployed IT, and other technology resources.

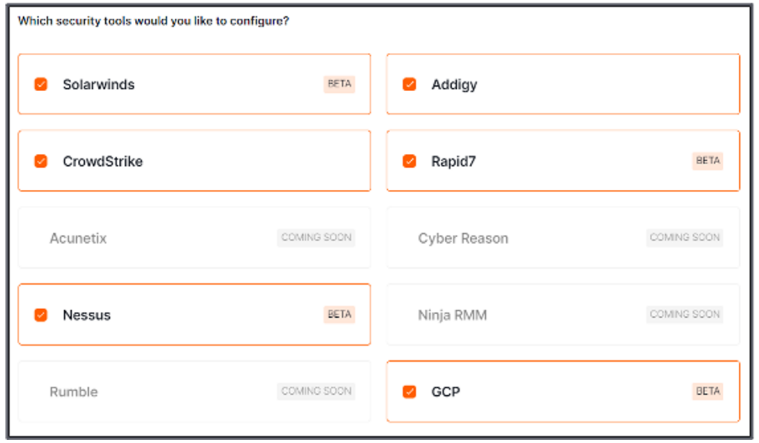
Experimental Design

- Quickly design and build the experimental environment (i.e., a **cyber range**) using:
  - An intuitive graphic user interface
  - Network specification
- Design from scratch, based on scans of a production network, or start from ready-made network templates (e.g., Bank, Business, Power Co.)
- Deploy a wide range of network elements, security tools, and assets as VMs
- Create a controlled, repeatable and replicable environment
- Automated cyber range set-up and clean up

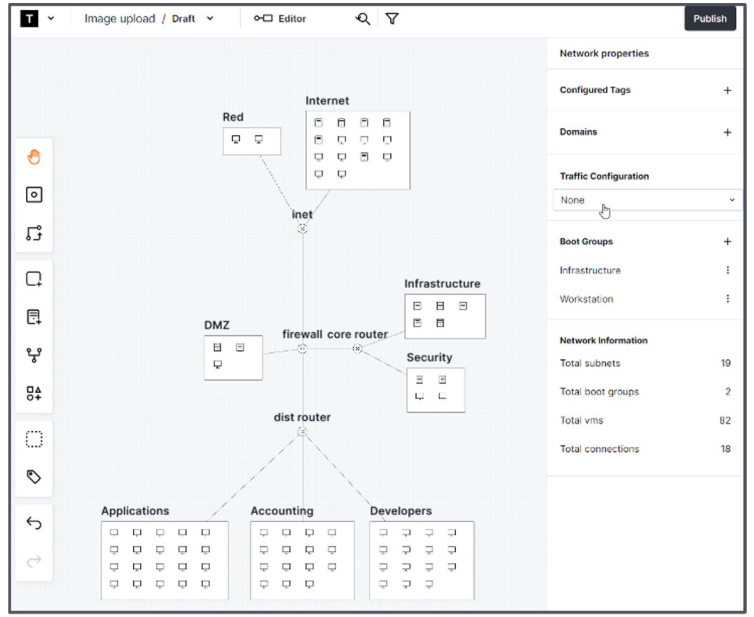
- Tunable user emulation that perform actions on hosts in real-time and generate traffic
- Design attacks and indicators of compromise



Sample of the attack catalog



Creating a range by ingesting scans of a real-world network



A UI for creating and editing a network, configuring VM, security tools, software and user accounts

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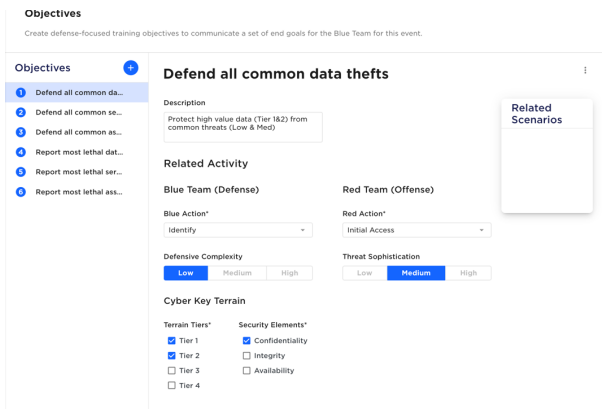
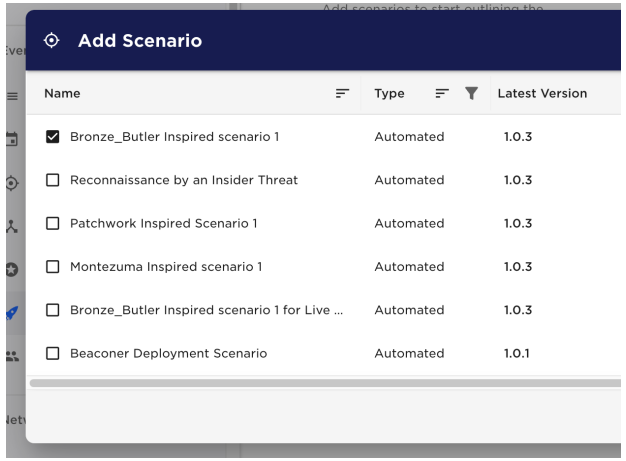
Experimental Execution

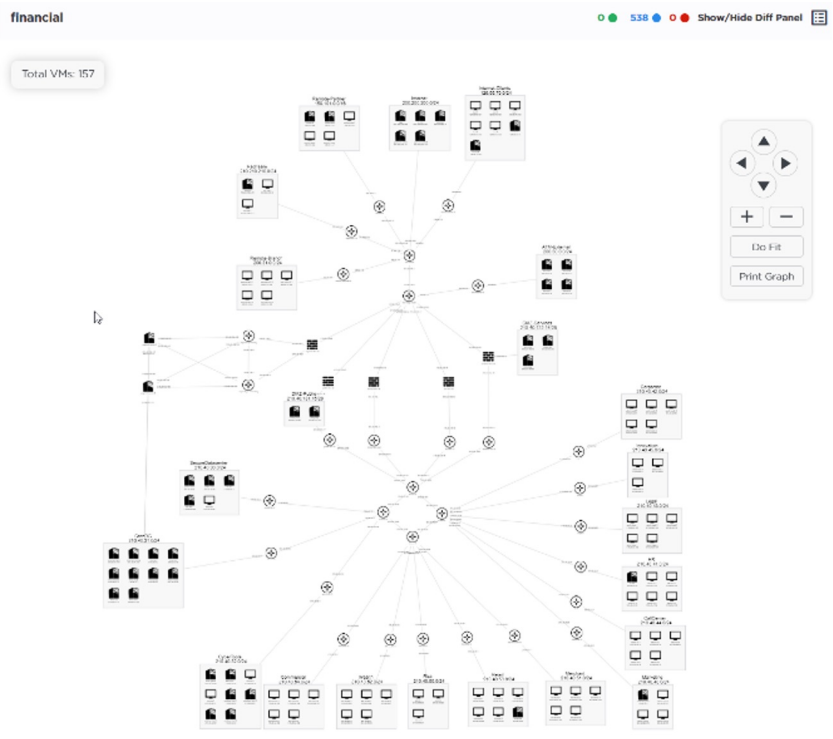
- Multi users real time live events
  - Live or emulated Red Team
  - Blue test subjects can log in from any where
- In platform separate communication channels (Blue, Red, White/Purple)
- Repeatable attack execution in a click of a button - with automated AI/ML driven dynamic attack agent
- Custom attack development using an SDK
- Tunable data collection and reporting



Define objectives to the defenders (Blue team)



Add and schedule attacks or use a human Red team



Track how an event unfolds at the network and host levels

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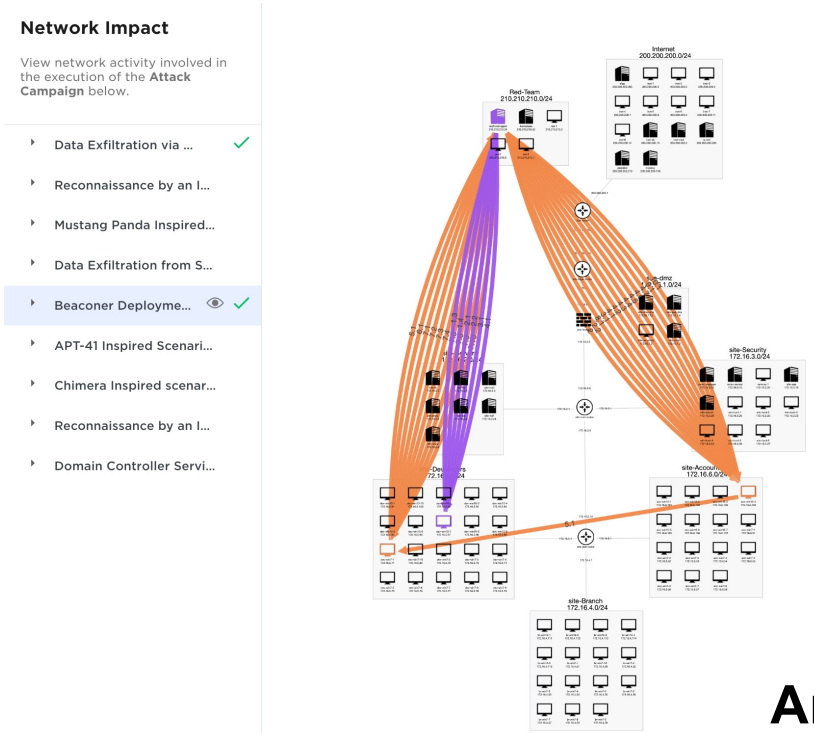
Supporting Data Collection and Analysis

- Built-in reporting capability with the ability to expand and log any activity at the host and network levels
- Match between attackers' and defenders' actions
- Real time situational awareness on progress and performance of all participants



Live view of attack progression

View and track attackers' actions and blue team response

And, bring your own tools and experiments to our range!

Why SimSpace?

- When studying cognitive biases context matters!
- SimSpace provides the realistic and rich context needed to understand, quantify and design mitigations for cybersecurity related cognitive biases
- Deployable as SaaS or On-Premises
- Automated, scalable, high fidelity cyber ranges
- Hyper-realistic end user, network, and attack simulations
- Embedded advanced data collection and analytics expertise

Contact our team!

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