

The Center for Cyber Defenders

Expanding Computer Security Knowledge

SAND2016-6734C



ThunderBird Cup v2.0

Tyler Morris, Embry-Riddle Aeronautical University

Andrew Chu, Purdue University | Nick Kantor, UT Austin

Project Mentors: Sean Michael Galvin, Org. 9312; Wellington Lee, Org. 9312

Problem Statement:

In the ever evolving world of technology and computing, security of computing systems is becoming an increasingly critical aspect to ensuring efficient, ongoing, progress. If a victim's hardware or network is compromised, progress can be halted, and assets both physical, and intellectual, can be lost or stolen.

ThunderBird Cup v2.0 provided instruction and competition exercises that targeted high school and middle school students to further educate and train them in preparation for real life cyber situations, as well as various other cyber oriented competitions.

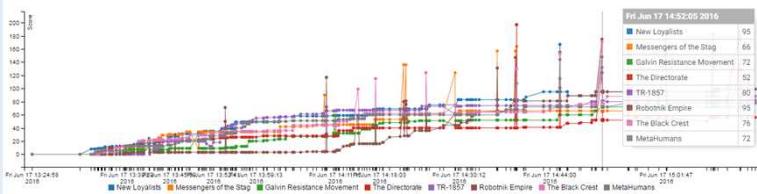


CECOR (Consortium Enabling Cybersecurity Opportunities & Research)

Impact and Benefits:

- Provided training and networking in cybersecurity for CECOR partners
- Encouraged high school students to cultivate and pursue an interest in cybersecurity
- Improved team building and time management of the competitors

Leaderboard



Screenshot of new scoring system with timestamped data for ease of navigation

Objective and Approach:

- Developed a dynamic scoring engine through Meteor.js and Windows PowerShell
- Created educational material that effectively educates the target age group
- Collected and analyzed exercise data to further educational initiatives
- Interacted and collaborated with CECOR, (Consortium Enabling Cybersecurity Opportunities & Research)



Meteor.js utilized for web framework; Windows Powershell utilized to monitor event changes for scoring

Results:

- Complete upgrade and rollout from the ThunderBird Cup v1.0 system to the ThunderBird Cup v2.0 system
- Additional access points for educational data collection
- Revised UI and visuals for ease of use and access
- New scoring system increasing competitiveness and interest
- Full scale Thunderbird Cup exercise at the University of the Virgin Islands with 25+ students.



University of the Virgin Islands workshop and test