Alpha Presentation
Improved Detonation of Evasive Malware

The Capstone Experience
Team Proofpoint

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Project Overview

- System reads in a live feed of malware from Proofpoint
- Cuckoo sandbox detonates malware
- If Cuckoo detects evasive behaviors, it sends the malware to the python script for modification
- After modification, malware is sent back to Cuckoo to execute again
- Results are sent to the dashboard
System Architecture

Web Front End

Web Server

Database

Analysis

vmware

Bootstrap

jQuery

Flask

Python

PostgreSQL

SQLAlchemy

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What’s left to do?

• Detection and action on additional evasive behaviors
• Automation
  ▪ Link to Proofpoint’s inflow
  ▪ Run any program all the way through without any human interaction
• Work with more Formats of Executable
Questions?