

Pwned! (or not?)

The need for
and effectiveness of
Cyber Deception

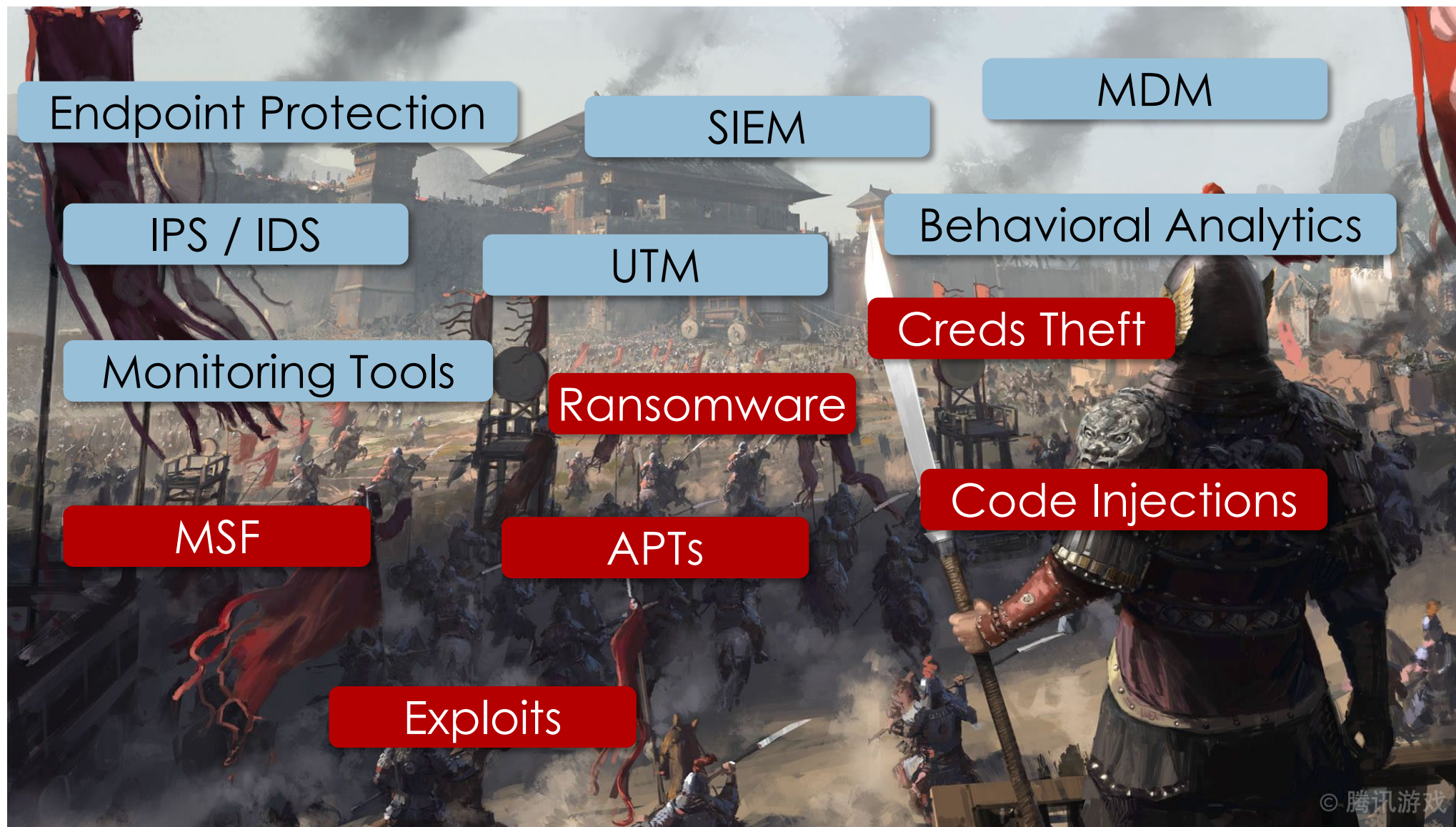
April 2019



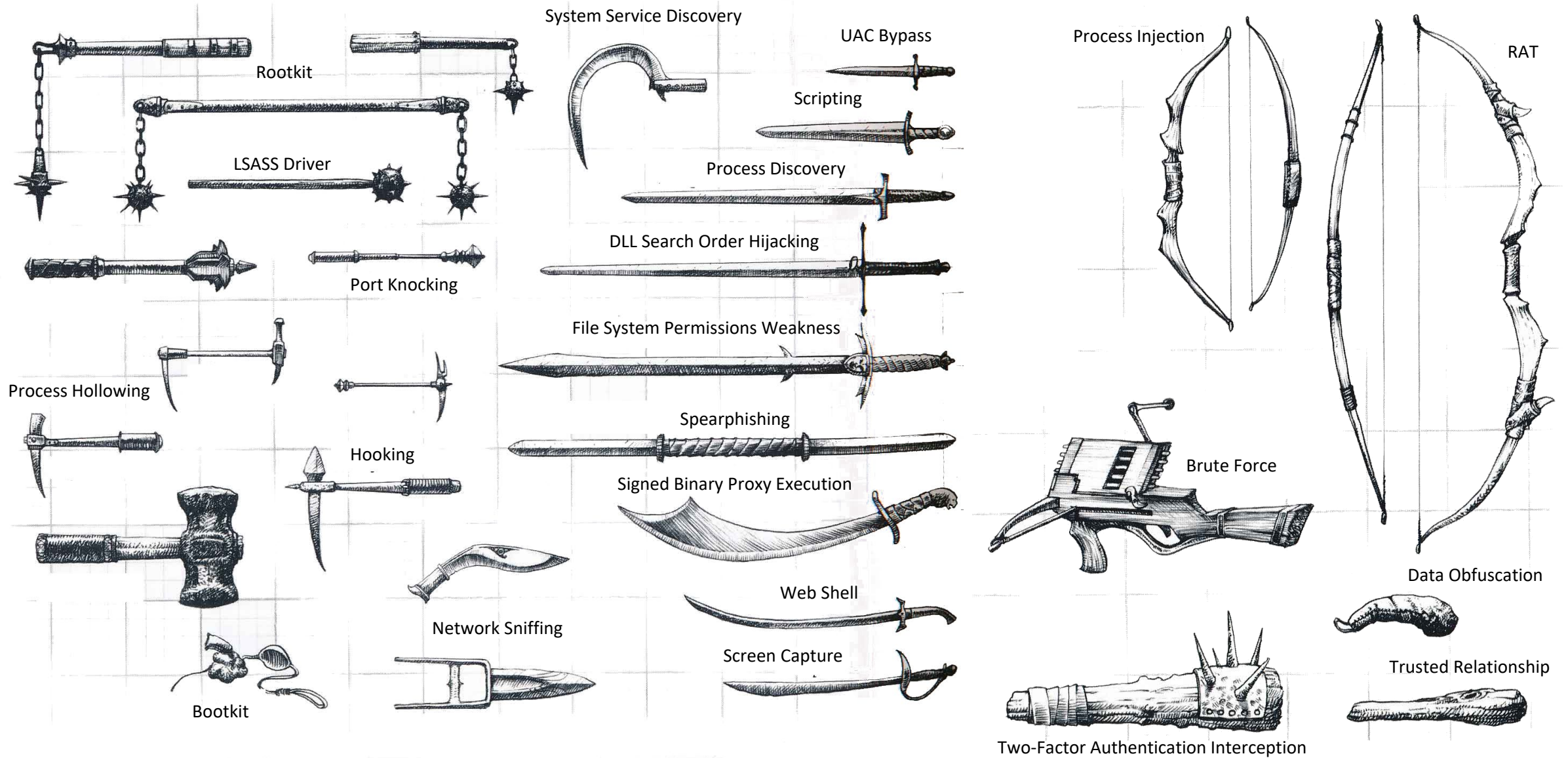
ILLIC IUM

www.deceivewithillicium.com

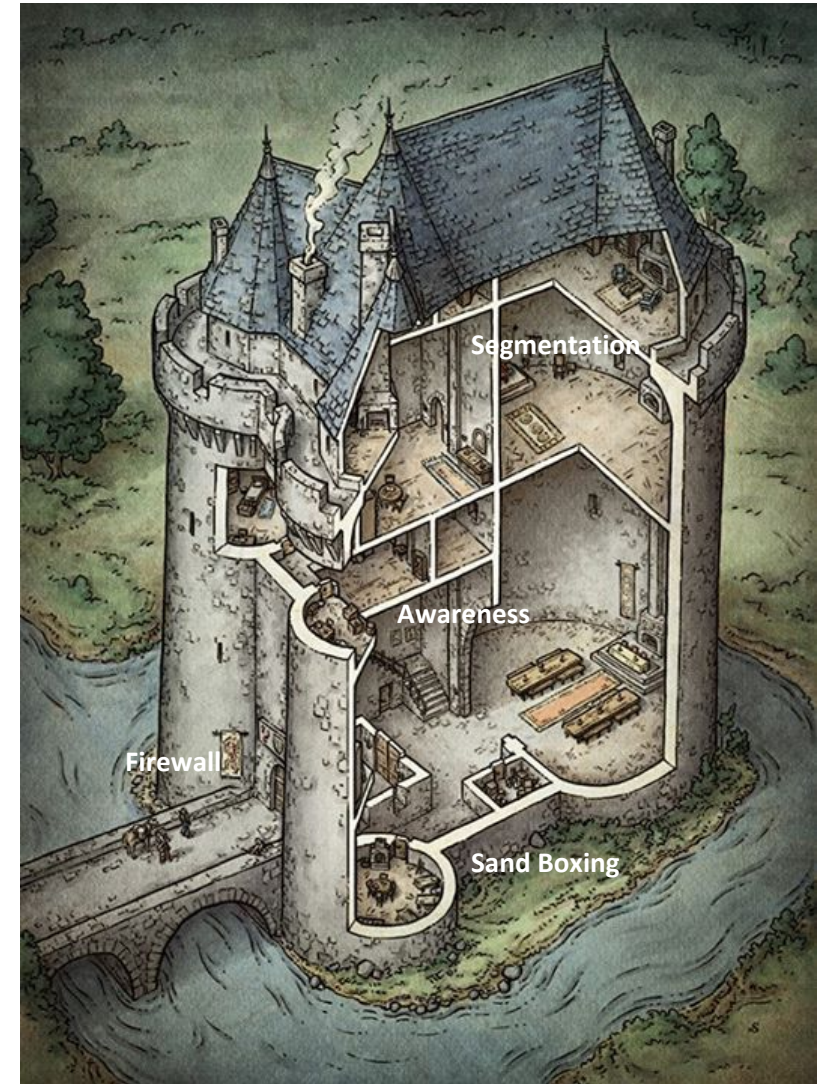
Every Single Network is a Battlefield



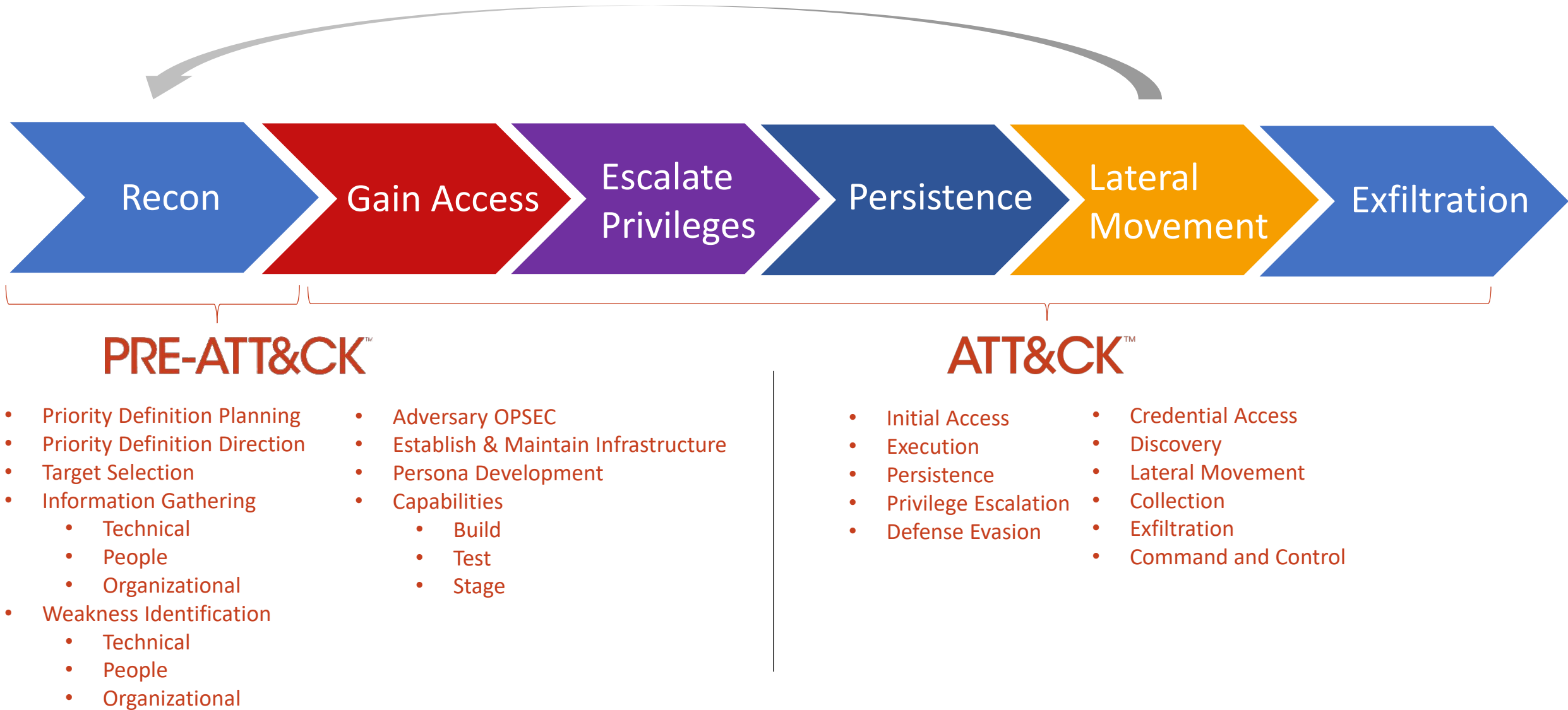
How the Attacker Thinks



How the Defender Thinks



The Attacker Tactics and Weapons



The Attacker Weak Points

Keep Cost Low (Expense vs Gain)

- Time
- Money
- Effort
- Resources

Hide Attack Details (Do not expose)

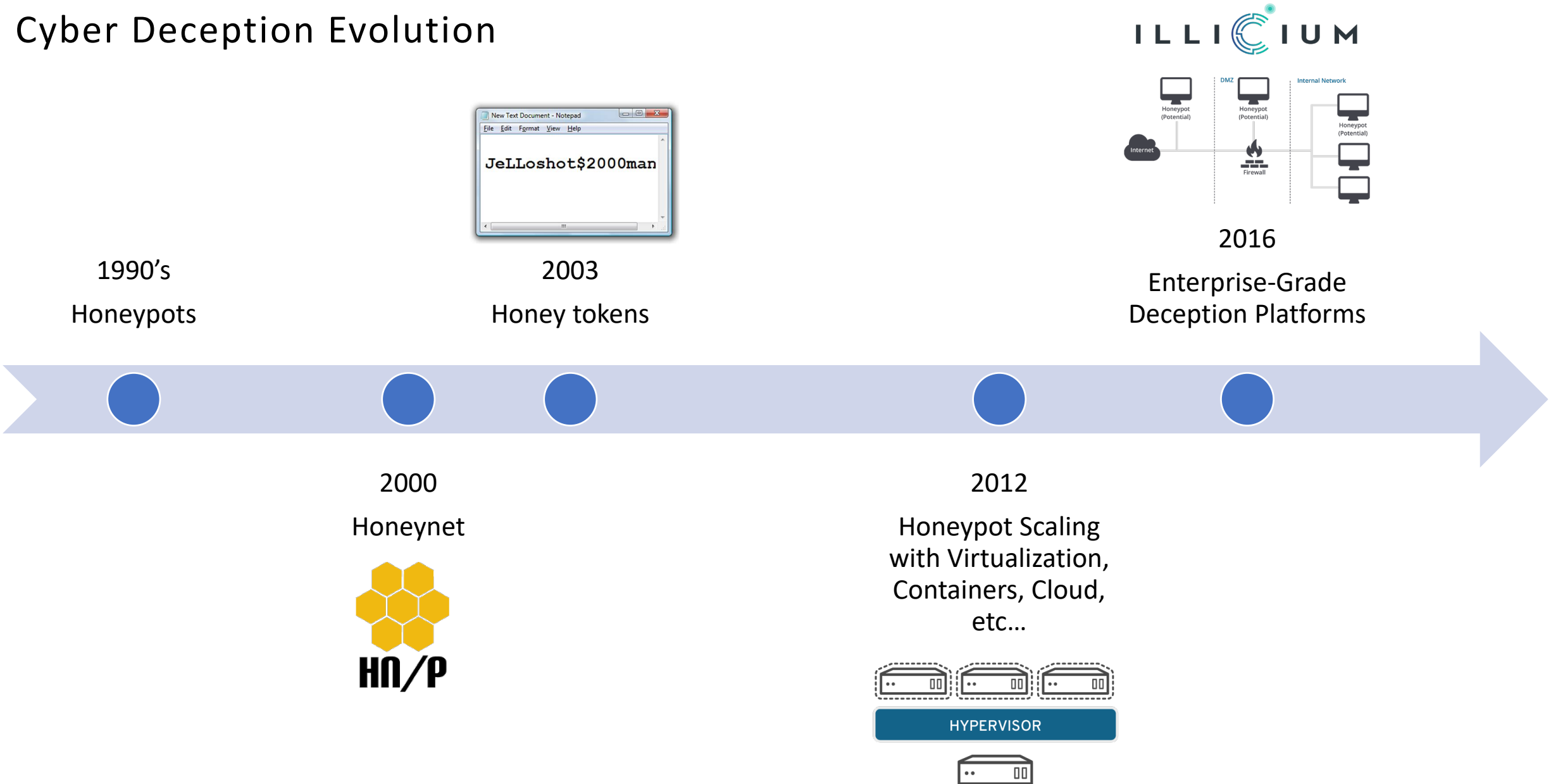
- Path
- Strategy
- Tactics
- Evidence



Deception: A key component in warfare



Cyber Deception Evolution



Illicium Cyber Deception Platform

- An original Neurosoft product
- From Scratch, not a modification of other software
- New software, not a stack of other tools
- Cooperation of three departments across two directorates:
 - Security Software Development
 - Cyber Security Services
(Penetration Testers, Security Analysts)
 - ICT
(System Administrators, Network Engineers)
- Mature (initiated in 2016)
- Installations in Major Companies (undisclosed)



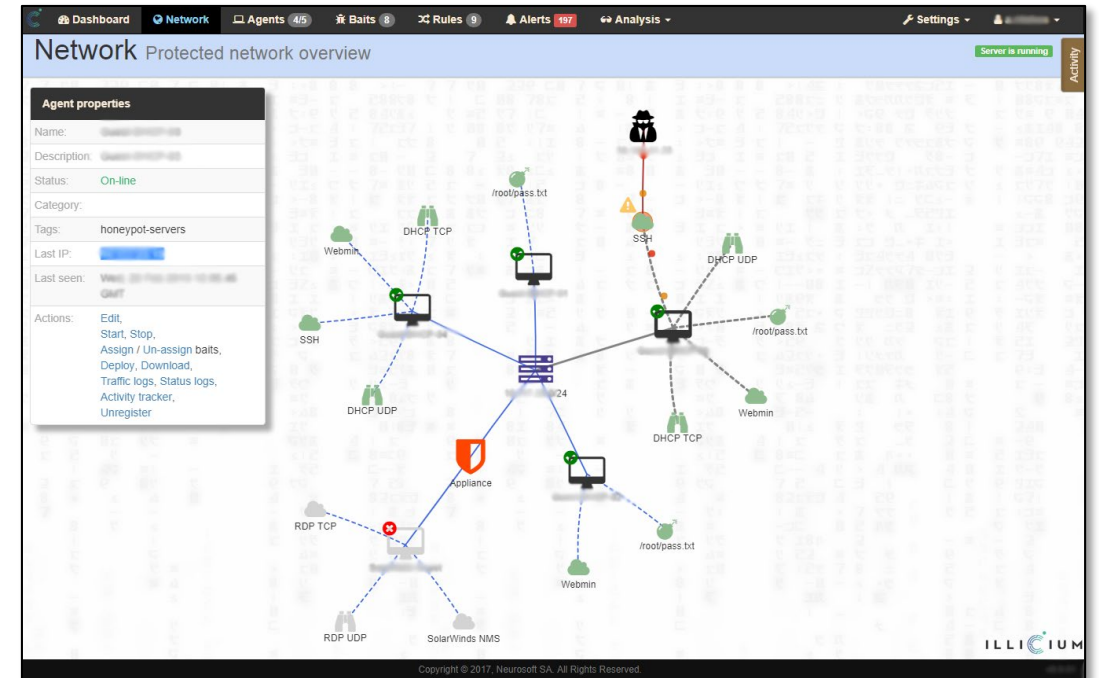
ILLIUM Features and Benefits

Functionality Features

- Full stack deception
- Attack Analysis
- Attacker Tracking
- Delay Attacker
- Detects attacks with very high confidence

Architectural Features

- Baits fully integrated to real systems
- Lightweight
- Full Simulation – NO Emulation
- Isolation
- Custom Baits

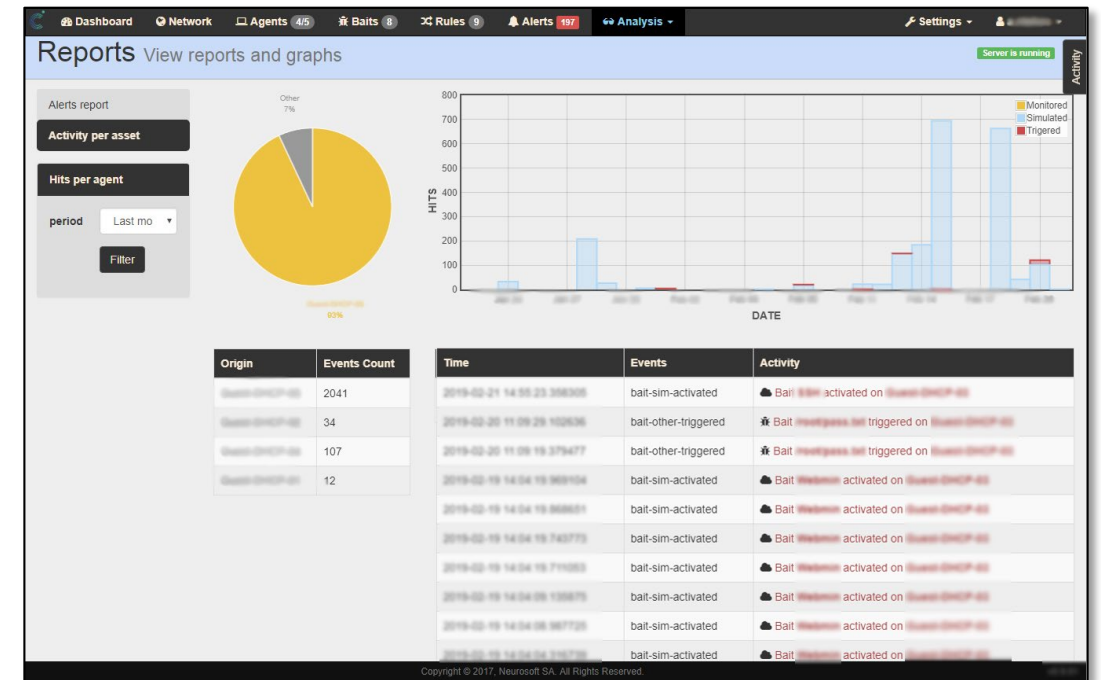


Identify 0-days, APTs, and Targeted Attacks

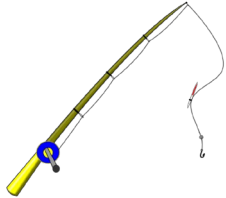
Calculate Attacking Trends

Assist on design of Effective Defensive Measures

Reduce Detect and Response Times

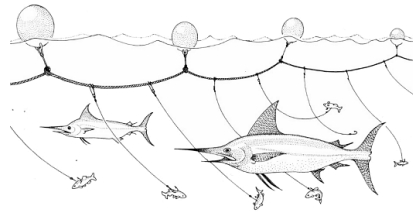


Deception Effectiveness is a Function of Maturity



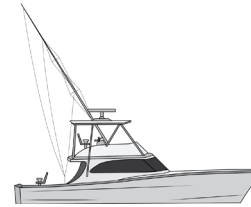
Primitive

- Free / Open Source
- Academic Research
- Basic logging
- Emulates reality
- No Customizations
- Mostly Effective in Reconnaissance



Basic

- Scalable
- Based on baits
- Customizable



Normal

- Dynamically managed deployment
- Simulates reality
- Forensics-enabled
- Rules
- Machine learning
- Attack visualization
- SIEM integration



Advanced

- Control the attacker
- Containment
- More integrations...



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