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Arming SecOps with a Special Forces Targeting Process

Andrew Stokes

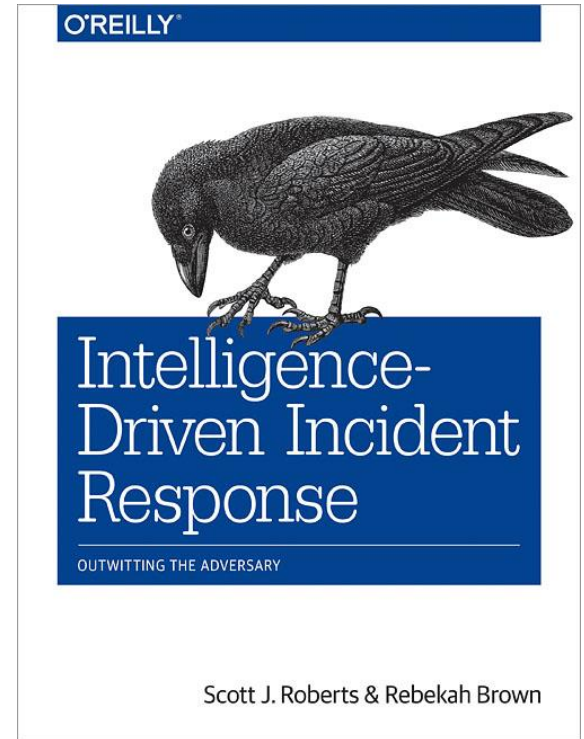
@_andrewstokes

Who Am I

- Andrew Stokes, @_andrewstokes
- Information Security Officer @ Texas A&M Engineering
- 12+ Years in Enterprise IT and Security Operations
- U.S. Marines, Operation Iraqi Freedom, Fallujah

Inspiration

Scott Roberts & Rebekah Brown
Intelligence Driven Incident Response



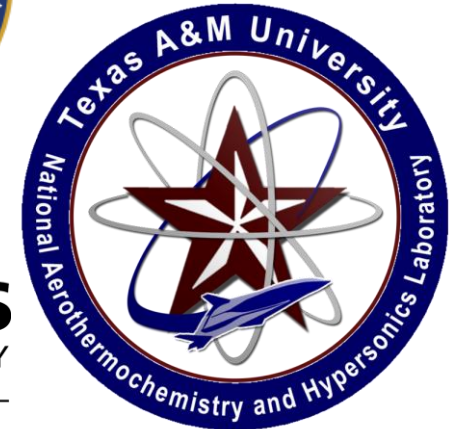
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Environment

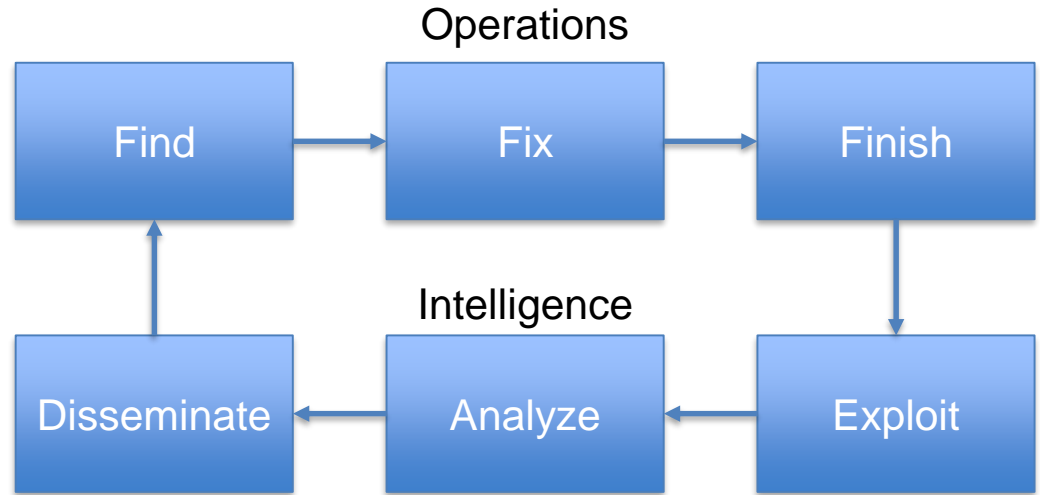
- Tier I Research Institution
- DoD and DoE Contractor
- Large and complex environment
- Many different missions
- Targeted research
- CUI, PCI, HIPAA, GDPR, ITAR, EAR, FERPA
- Academic Freedom



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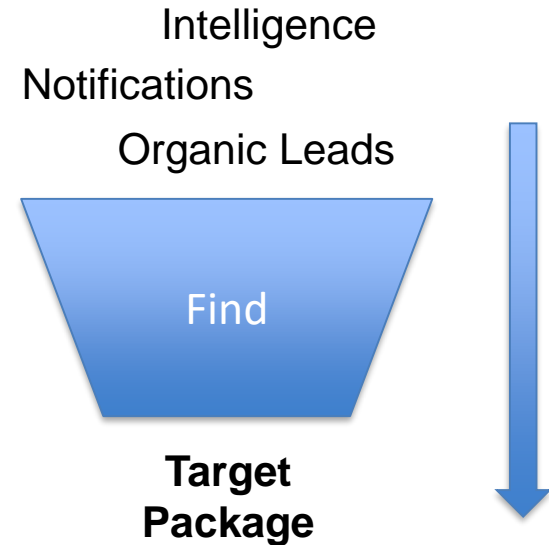
F3EAD

- Intel from ops improves future ops
- Used by U.S. SF for targeting
- A process and a mindset



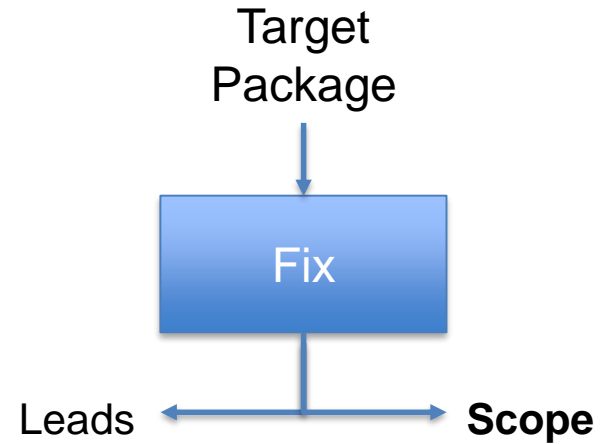
Find: Identify the Target

- Who are we looking for?
- What do they look like?
- Start with notifications
- Prioritization is key
- QC Notifications
- Develop and improve sources
- Aim for highest value indicators
- MITRE ATT&CK Navigator



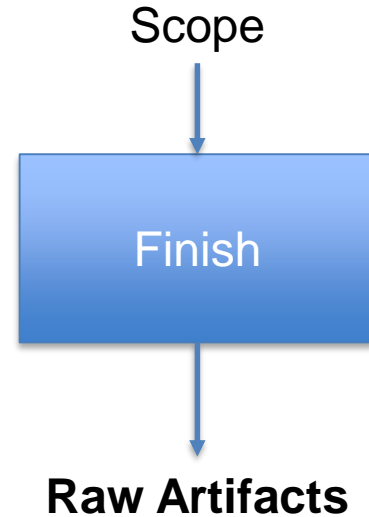
Fix: Locate the Target Position

- OpSec
- Create detections and leverage the SOC
- Survey using EDR and network telemetry
- Scope
 - Target positions / assets affected
 - Target capabilities
 - Initial access method
 - Target objectives
- Get unrelated leads out of the way



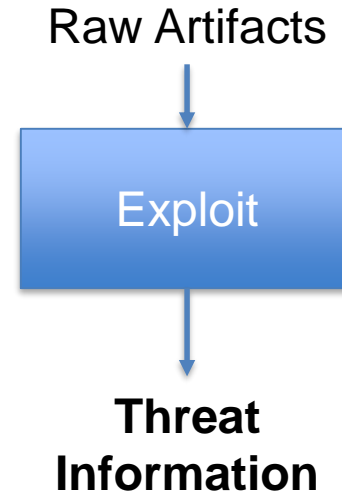
Finish: Neutralizing the Target

- OpSec
- Make a plan
 - Mitigation
 - Prevent re-entry
 - Containment
 - Eviction
- Execute
- Report



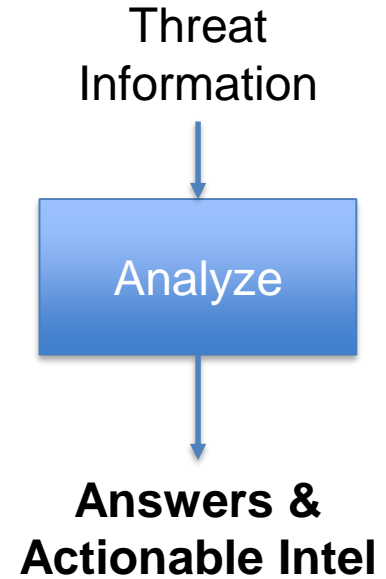
Exploit: Collecting Additional Information

- Tailor response processes to support collection
- Make this a part of closing an incident
- Capture infrastructure data quickly
- Automate when possible
- Important for the analysis phase
- Use a standard, even if it's your own



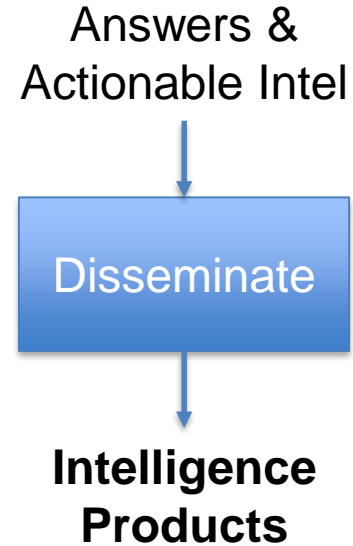
Analyze: Creating Intelligence

- Goal: Reduce uncertainty about threats
- Start simple
- Use a standard set of intel requirements
 - What was the adversary's objective?
 - How could the attack be prevented?
 - How can we detect this adversary?
 - Have we seen this adversary before?
- Involve the team in Devil's advocate rounds



Disseminate: Sharing Intelligence

- Consumer Priority
 - Yourself/Defense
 - SOC
 - CISO
 - Community
- Be mindful of creating demand
- Focus on clarity and consumer value
- Short stories for the CISO/CIO



Conclusion

- Ops first, then intel
- Focus on improving lead quality vs. quantity
- Let junior analysts test drive intel analysis
- F3EAD is not only a process, it's a mindset
- Helps prevent rabbit trails
- Increases organizational visibility and value
- Continuously improve and sensibly automate



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Questions?