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# THREAT HUNTING STRATEGY: HOW TO CATCH BEARS AND PANDAS

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#### **Discussion Topics**



- Can we please define THREAT HUNTING (TH) before we discuss it?
- Is TH only for very large companies with huge security teams?
- What are the practical pre-requisites for doing TH?
- How do you prove to your leadership that you need to TH?
- Can you actually "outsource" TH? Is this even conceivable?
- Describe your favorite TH success case!
- Lessons learned doing and organizing TH efforts



- "The defender needs to close all holes, but the attacker needs to just find one hole to get in."
- "The attacker needs to hide all his traces, but the defender needs to just find one trace to unravel the intrusion."

# CAREFUL! OPTIMISM ALERT!! Defender WIN!!!

#### o. What is THREAT HUNTING...



... devoid of marketing fluff?

"Threat hunting is an <u>analyst-centric process</u> that enables organizations to <u>uncover hidden advanced threats</u>, <u>missed</u> by automated preventative and detective controls.

It represents an *ultimate advanced* (!) security practice suitable for well-resourced security organizations facing persistent and stealthy threats."

"How to Hunt for Security Threats" (G00327290)

#### icely Put



Replying to @anton\_chuvakin

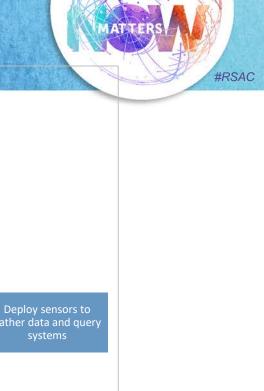
If it's not a hypothesis led proactive investigation it doesn't fit. Also it has to go beyond your current automation footprint, so by default if a tool is doing it it's not threat hunting. But an analyst could use any tool to go on a hunt if it helps test the hypothesis

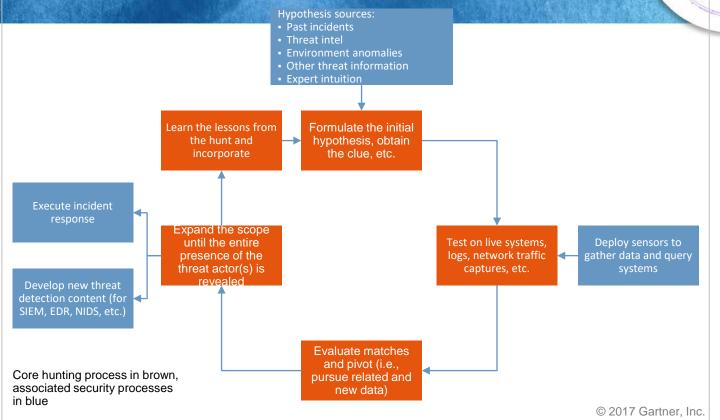
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### Foundational Threat Hunting Process





- 1. Threat intelligence threat actor **capabilities**, primarily
- 2. Past **incident data**, indicators and attacker tools, techniques and procedures (TTPs)
- 3. Red team and threat simulation artifacts
- 4. Various environment **anomalies** "what if this means we are hacked!?"
- Expert intuition yes, expert hunter intuition is often named as #1 source
  - Did we mention that TH is an ad hoc, creative process?

## he Final Page: TH and Other Security Processes



GOOD DETECTION



HUNTING



BETTER DETECTION

#### **Apply**

- Don't try to hunt if you're still building lower-maturity detection and response capabilities. Improve detection and alert triage first!
- ✓ Build a business case for TH using preventing unacceptable incident losses by discovering advanced hidden attackers early, reducing incident loss and reducing security incident response costs.
- Start by conducting one hunt of several days' length, formalize ad hoc hunting already going on, or engage with a service provider promising "managed hunting."
- √ Use the cyber kill chain to structure your hunts around specific types of attacker activities in your environment.

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#### H Pitfalls and Failures



- Falling for vendor's corrupt concept of hunting and getting something else entirely (#1)
- Reducing hunting to simplistic indicator matching
- You will find more evil and will have to respond be ready!
  - Doing a hunt and then being overwhelmed by an attacker is not good...
  - Chilling lessons of 2018 IR: the good guys don't always win in the end!
- Threat hunting is hard to measure, because of its nature
- Too much reliance on hunting tools or any singular data type
- Failure to keep up with latest threat news/intelligence