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Threat Intelligence 101

Because nobody teaches this stuff in school

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Indicators of Compromise

IOCs

- Bad Stuff™
- Usually ingested by security controls
- Not always conclusive by themselves
- Lots of different types, and of differing values

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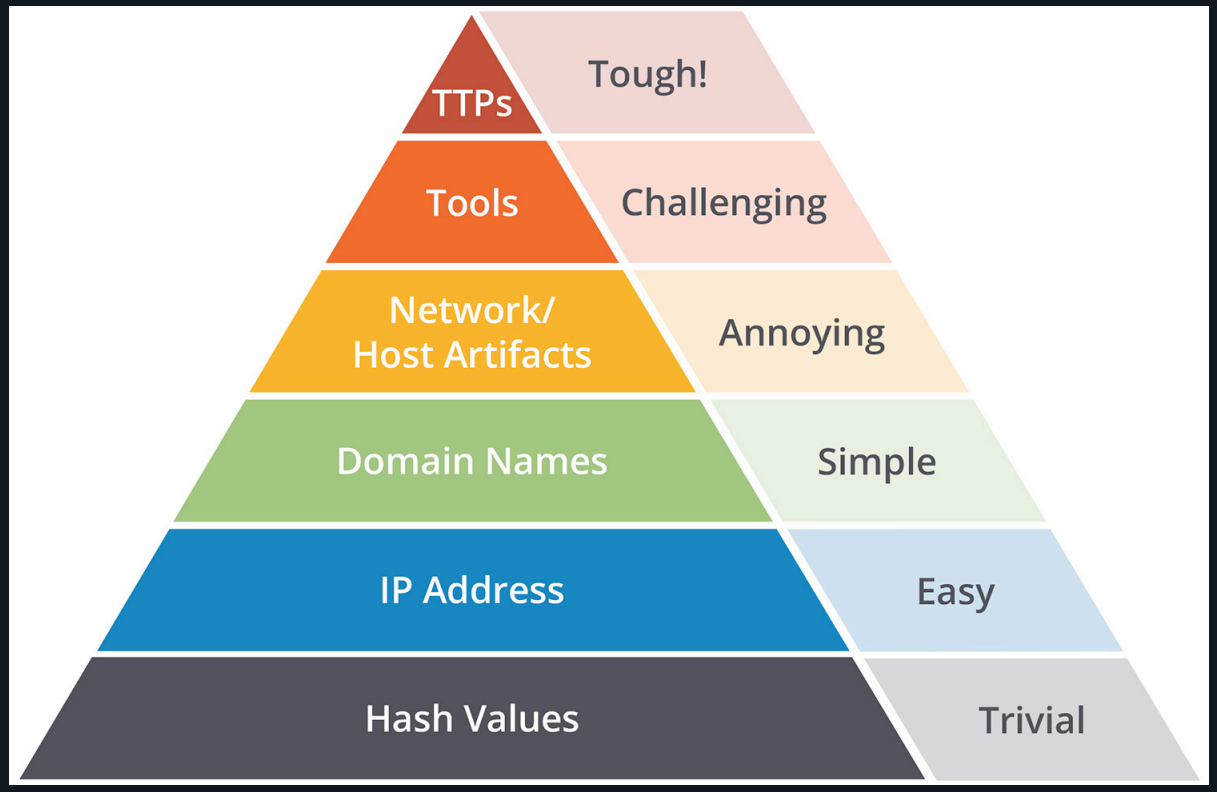
The Pyramid of Pain



Source: David Bianco

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Your Environment

Threat Intel begins at 127.0.0.1

- What controls do you have?
- What can they leverage?
- Who are your adversaries?
- What kind of intel can YOU generate?
- Cost/benefit analysis

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OSINT

- Bambenek Consulting - https://osint.bambenekconsulting.com/feeds/
- abuse.ch - https://abuse.ch/
- Alienvault OTX - https://otx.alienvault.com/
- CleanMX - https://support.clean-mx.com/clean-mx/viruse
- Malware Domain List - http://www.malwaredomainlist.com/forums/index.php?topic=3270.0

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Ask Yourself Some Questions

- What – Can I actually observe this?
- Where – Can this be narrowed down to a subset of my environment?
- Why – Do I know why it's bad? Is there a motive?
- When – How old is it? Is it still relevant?
- Who – Targeting. Are the attacks likely to affect you?

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Commercial Providers

- Ask questions
- Compare to OSINT and make sure there's original content
- Understand how the provider expects it to be used

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Threat Intelligence Platforms

TIP

- Take in multiple feeds and data sources
- Aggregate and normalize indicators
- Filter content that is not relevant
- Deliver content to your controls
- Some also enrich threat data and resulting alerts

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STIX and TAXII

A format so awesome and flexible that it's a pain to actually use

- Structured format for threat intel
- Either XML (1.x) or Json (2.x)
- Able to express complex relationships beyond just IOCs
- Good examples here

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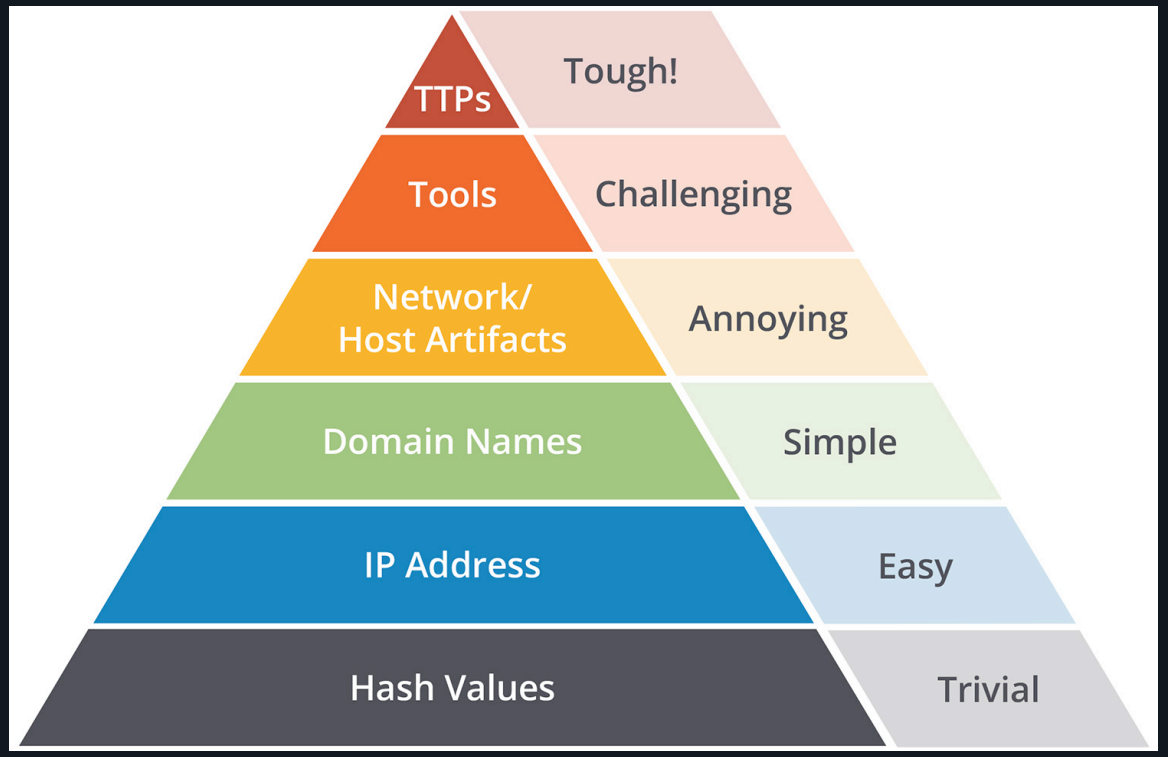
A Quick Case Study

- Malware hashes
- IP Addresses
- Domain Names
- DGA
- Certificate Attributes



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The road to hell is paved with good intentions

DFIU

- Monitor before you act
- Make sure your data is trustworthy
- Verify before you overreact

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Thank You.

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