Avast

virus BULLETIN

What If?

From crazy ideas to more reasonable approaches to improve daily TI practice.

(No TI staff were harmed during the making of this presentation!)

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CYBER THREAT ALLIANCE

Lift our overall abilities ?

LEVEL UP

- Not an effort of one but of many
- The example of community - CERT / First IRC
- Emergency response Ukraine– rapid sharing and collaboration
- Rapid response vs IP concerns – sharing is the key, and being first lends advantage
- Joint up lift – share better data together – consolidation AV market –consequences /

Had more samples

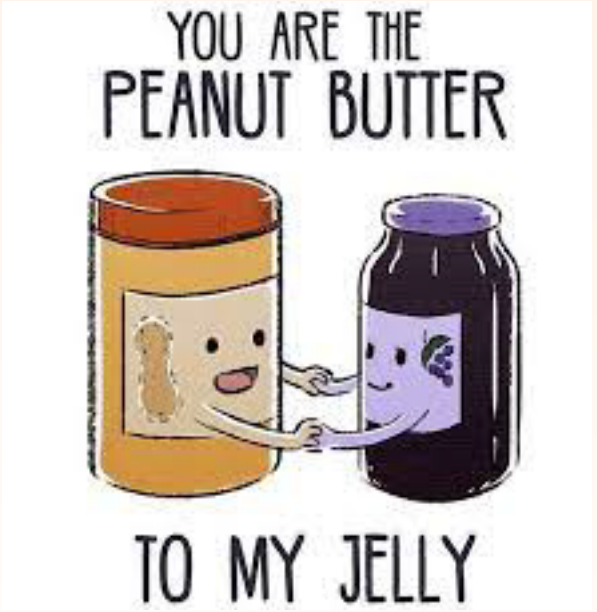
DAMN ESET (pronunciation matters)

- NCSCs – doesn't have malware res. / analyst
- Open platform submitting samples
- Triage **AND** feedback - incl. eta

Could Collaborate easier

Stronger together

- Amazing what you can achieve when no one cares who gets credit
- Not just technical
- Marketing & PR
- Open aegis // CTA
- WERKSPOT - // Dividing work – supply & demand



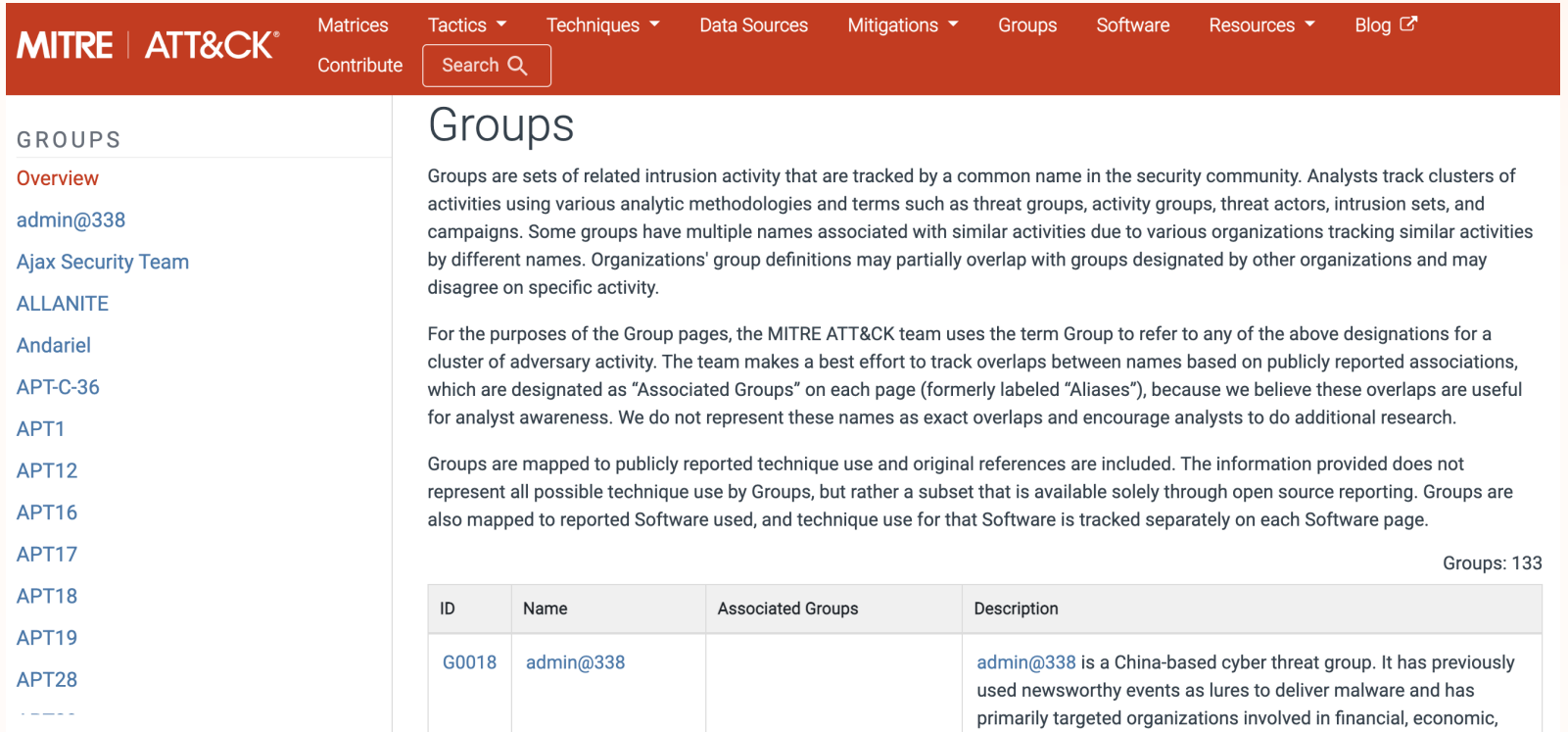
Could Automate IOCs/ TTPs

Automate all the things!

- AUTOMATE IOC HITS – and report for enrichment
- AND TAKE TTPS (DLL SIDE LOADING) as threat hunting objectives

Could agree on threat actor/ campaign naming

- SO OLD– I know
- AKA all the things– historically
- Agree on Mitre naming convention and add any new reports to existing groups or request new. Right now – Best Effort from Mitre
- Confidence level for new IOCs and TTPs



Organizing the data

Drowning in data...

- We are now not able to use all the data we have from our sensors and products -> We have more data than we are processing
- Easy query data / connections ?
- Quickly compare samples – at scale ? (Not just SSDEEP)
- Sometimes we are missing context but are we missing context because of volume or pipeline?
  - If volume -> maybe ML is here to help to cherry pick what is interesting
  - Use it to cherry pick anomalies from huge volume of unclassified data then researcher needs to validate

Improve collaboration between AI /Malware research teams

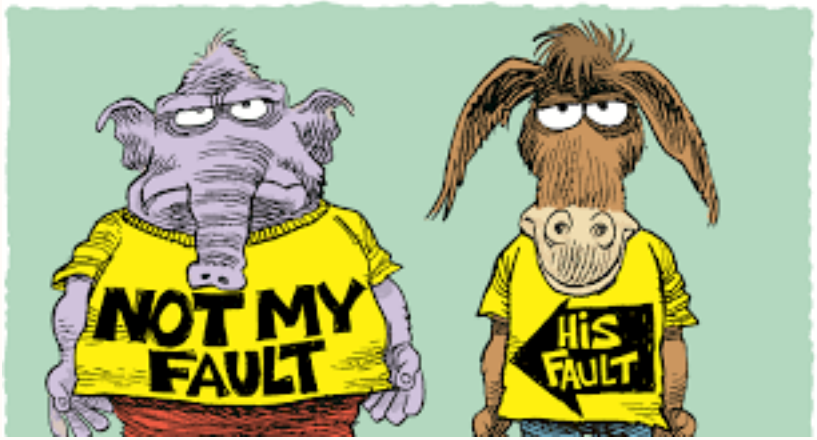
- Communication Gap– Statistically versus Deterministic sample detection
  BOOSTING– learn and look at mistake, rinse and repeat- Take a Boosting approach

- Knowledge Gap /Graphs– Security knowledge required to understand different strains/ mutexs etc. And make decisions
  Seemingly inconsistent information – hard to encode constraints – ie / also predicting times and sequence and ordering
- Explainability – understand why certain outputs are achieved from a certain model – better to move to a contract mechanism – where you know how to predict behavior 99% of the time

Andrew Gardner on Efficacy– ‘’ We’re just not measuring what matters. Our focus is on efficacy when we need to go beyond it with enrichment, context, and cost. ’

Context building with OSINT easier

- Context
- Structural use of OSINT/ Directed Hunting
- OSINT & MALWARE RESEARCH teams



Improve investigation basis – tooling and structural availability

WITH THE POWER OF
TEAM CYMRU™
PURE SIGNAL™

VICE

MOTHERBOARD
TECH BY VICE

Revealed: US Military Bought Mass Monitoring Tool That Includes Internet Browsing, Email Data

The “Augury” platform includes highly sensitive network data that Team Cymru, a private company, is selling to the military. “It’s everything.

Disruption requires democratization

- Better cross border collaboration
- Law Enforcement Relationship building
- Transparancy of the process and better usability of the results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