It’s Just a Jump To The Left (of Boom)

Prioritizing Detection Implementation With Intelligence and ATT&CK

FIRSTCON22

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Introduction

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Disclaimer

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Nearly 600 techniques & sub-techniques

9,000+ detection rules, **2,100+** tests

```
index=__your_sysmon_index__ EventCode=1 Image="C:\\Windows\\*\\powershell.exe" ParentImage!="C
    :\\Windows\\explorer.exe"|stats values(CommandLine) as "Command Lines" values(ParentImage) as "Parent
    Images" by ComputerName
```

```
(source="WinEventLog:Microsoft-Windows-Sysmon/Operational" (DestinationPort="3389" EventCode="3" Initiated="true") NOT ((Image="*\\mstsc.exe" OR Image="*\\RTSApp.exe" OR Image="
    *\\RTS2App.exe" OR Image="*\\RDCMan.exe" OR Image="*\\ws_TunnelService.exe" OR Image="*\\RSSensor.exe" OR Image="*\\RemoteDesktopManagerFree.exe" OR Image="*\\RemoteDesktopManager
    .exe" OR Image="*\\RemoteDesktopManager64.exe" OR Image="*\\mRemoteNG.exe" OR Image="*\\mRemote.exe" OR Image="*\\Terminals.exe" OR Image="*\\spiceworks-finder.exe" OR Image="
    *\\FSDiscovery.exe" OR Image="*\\FSAssessment.exe" OR Image="*\\MobaRTE.exe" OR Image="*\\chrome.exe" OR Image="*\\thor.exe" OR Image="*\\thor64.exe")))
```

```
index=__your_sysmon_data__ EventCode=10
TargetImage="C:\\WINDOWS\\system32\\lsass.exe"
(GrantedAccess=0x1410 OR GrantedAccess=0x1010 OR GrantedAccess=0x1438 OR GrantedAccess=0x143a OR GrantedAccess=0x1418)
CallTrace="C:\\windows\\SYSTEM32\\ntdll.dll+*|C:\\windows\\System32\\KERNELBASE.dll+20edd|UNKNOWN(*)"
| table _time hostname user SourceImage GrantedAccess
```

```
(source="WinEventLog:Security" EventCode="4704" (Message="*SeEnableDelegationPrivilege*"))
```

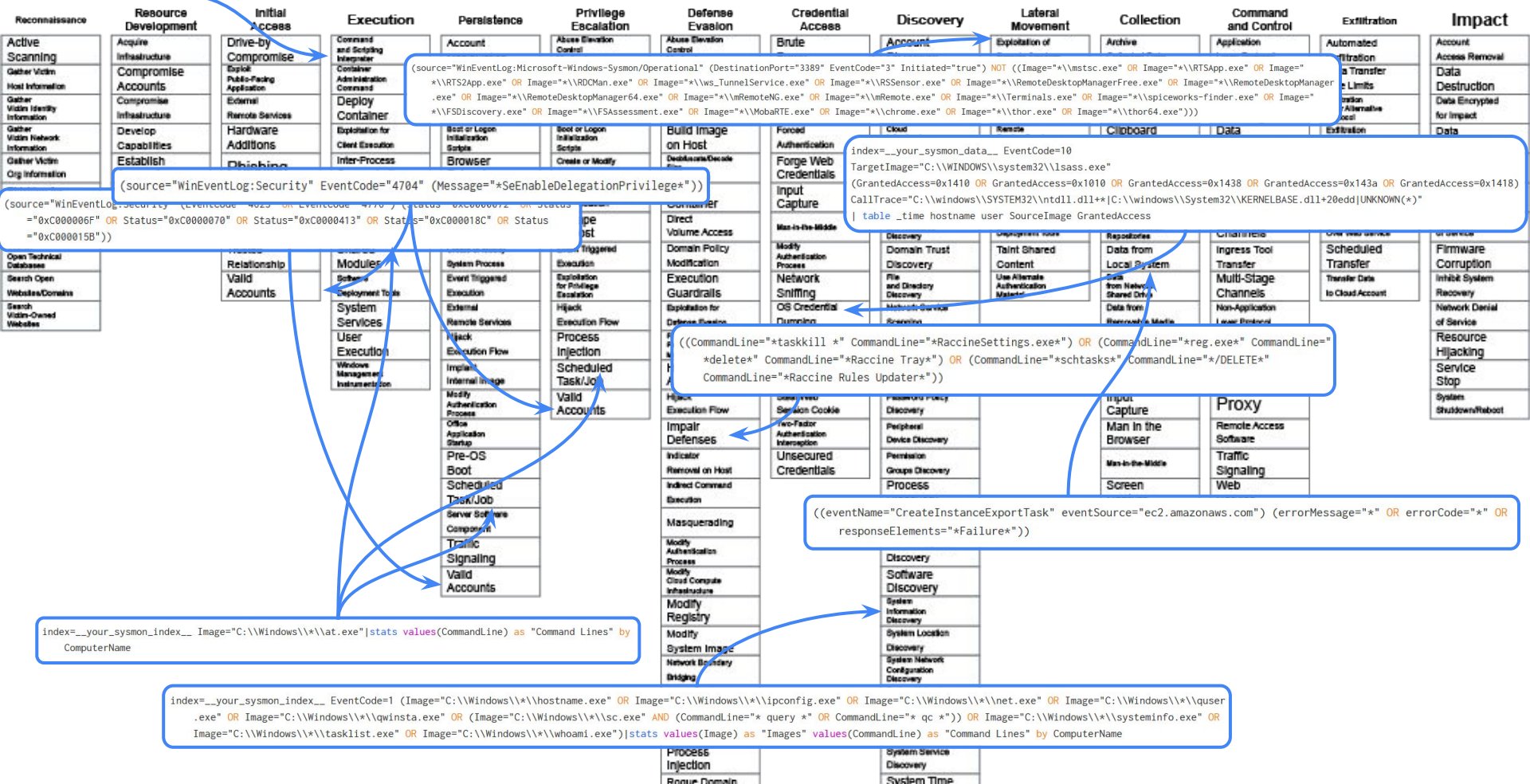
```
(source="WinEventLog:Security" (EventCode="4625" OR EventCode="4776") (Status="0xC0000072" OR Status
    ="0xC000006F" OR Status="0xC0000070" OR Status="0xC0000413" OR Status="0xC000018C" OR Status
    ="0xC000015B"))
```

```
((CommandLine="*taskkill *" CommandLine="*RaccineSettings.exe*") OR (CommandLine="*reg.exe* CommandLine="
    *delete* CommandLine="*Raccine Tray*") OR (CommandLine="*schtasks* CommandLine="*/DELETE*"
    CommandLine="*Raccine Rules Updater*"))
```

```
((eventName="CreateInstanceExportTask" eventSource="ec2.amazonaws.com") (errorMessage="*" OR errorCode="*" OR
    responseElements="*Failure*"))
```

```
index=__your_sysmon_index__ Image="C:\\Windows\\*\\at.exe"|stats values(CommandLine) as "Command Lines" by
    ComputerName
```

```
index=__your_sysmon_index__ EventCode=1 (Image="C:\\Windows\\*\\hostname.exe" OR Image="C:\\Windows\\*\\ipconfig.exe" OR Image="C:\\Windows\\*\\net.exe" OR Image="C:\\Windows\\*\\quser
    .exe" OR Image="C:\\Windows\\*\\qwinsta.exe" OR (Image="C:\\Windows\\*\\sc.exe" AND (CommandLine="* query *" OR CommandLine="* qc *")) OR Image="C:\\Windows\\*\\systeminfo.exe" OR
    Image="C:\\Windows\\*\\tasklist.exe" OR Image="C:\\Windows\\*\\whoami.exe")|stats values(Image) as "Images" values(CommandLine) as "Command Lines" by ComputerName
```



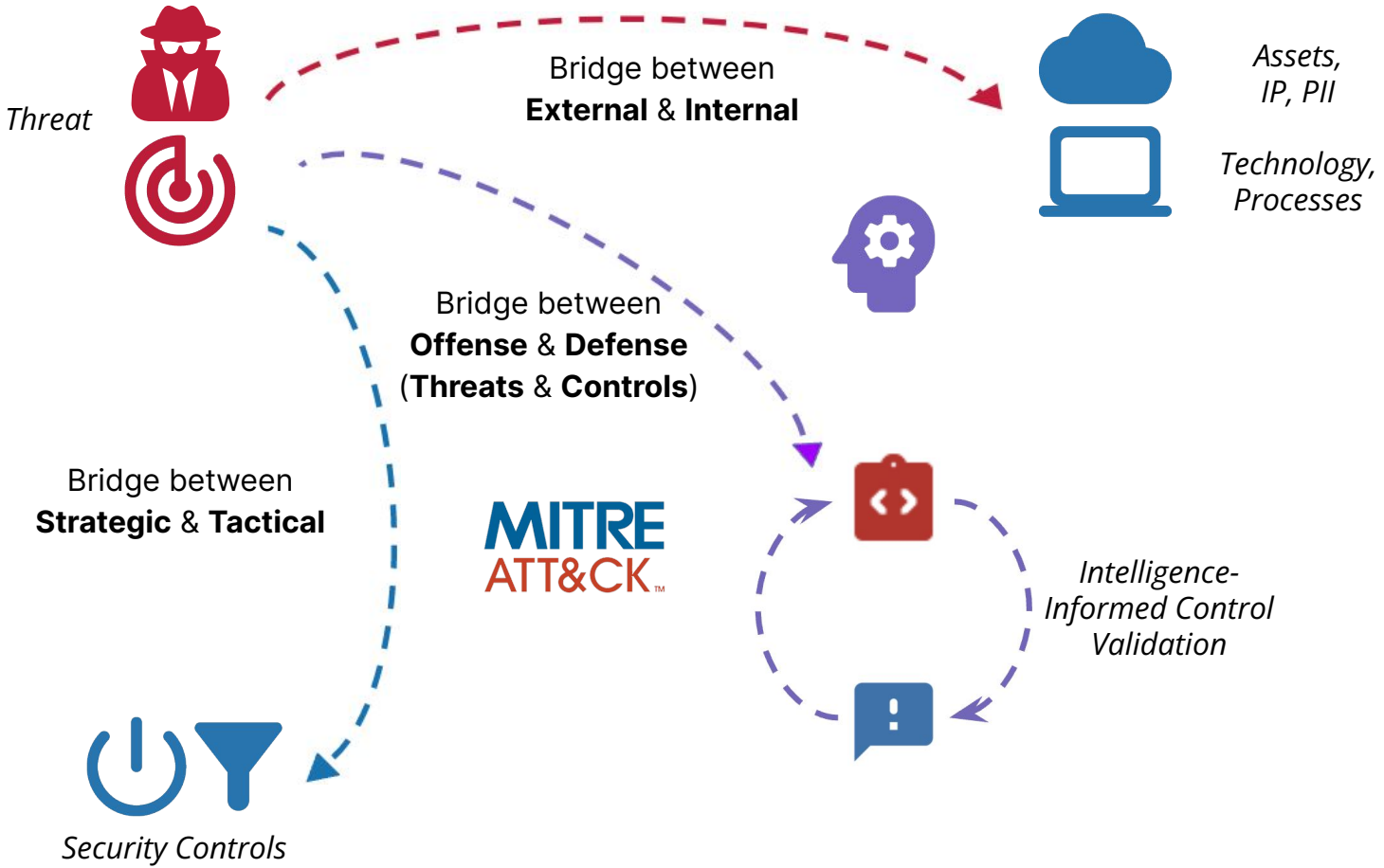
Background

For defenders, deciding where to start when implementing behavioral detections can be daunting

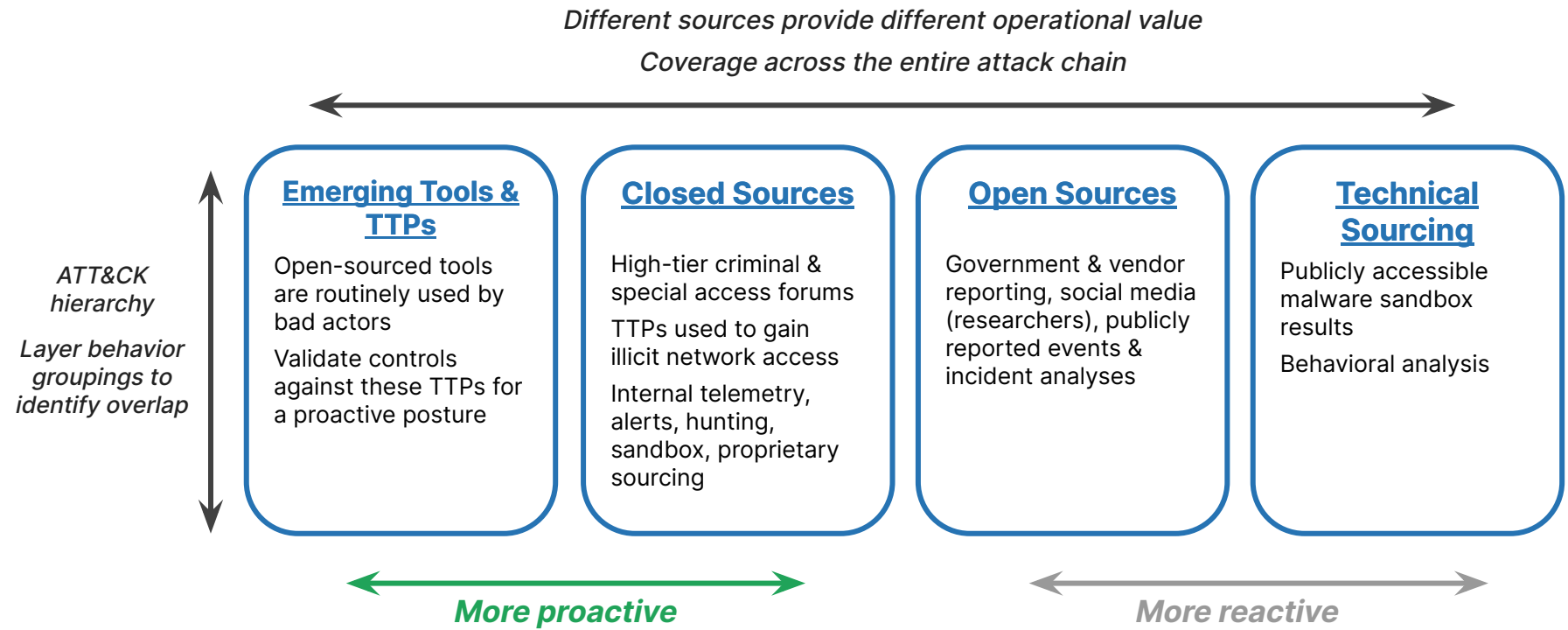
Ideally, a “best practice” approach involves closing the gap between existing controls and relevant threats - but this is easier said than done

Intelligence as a Bridge

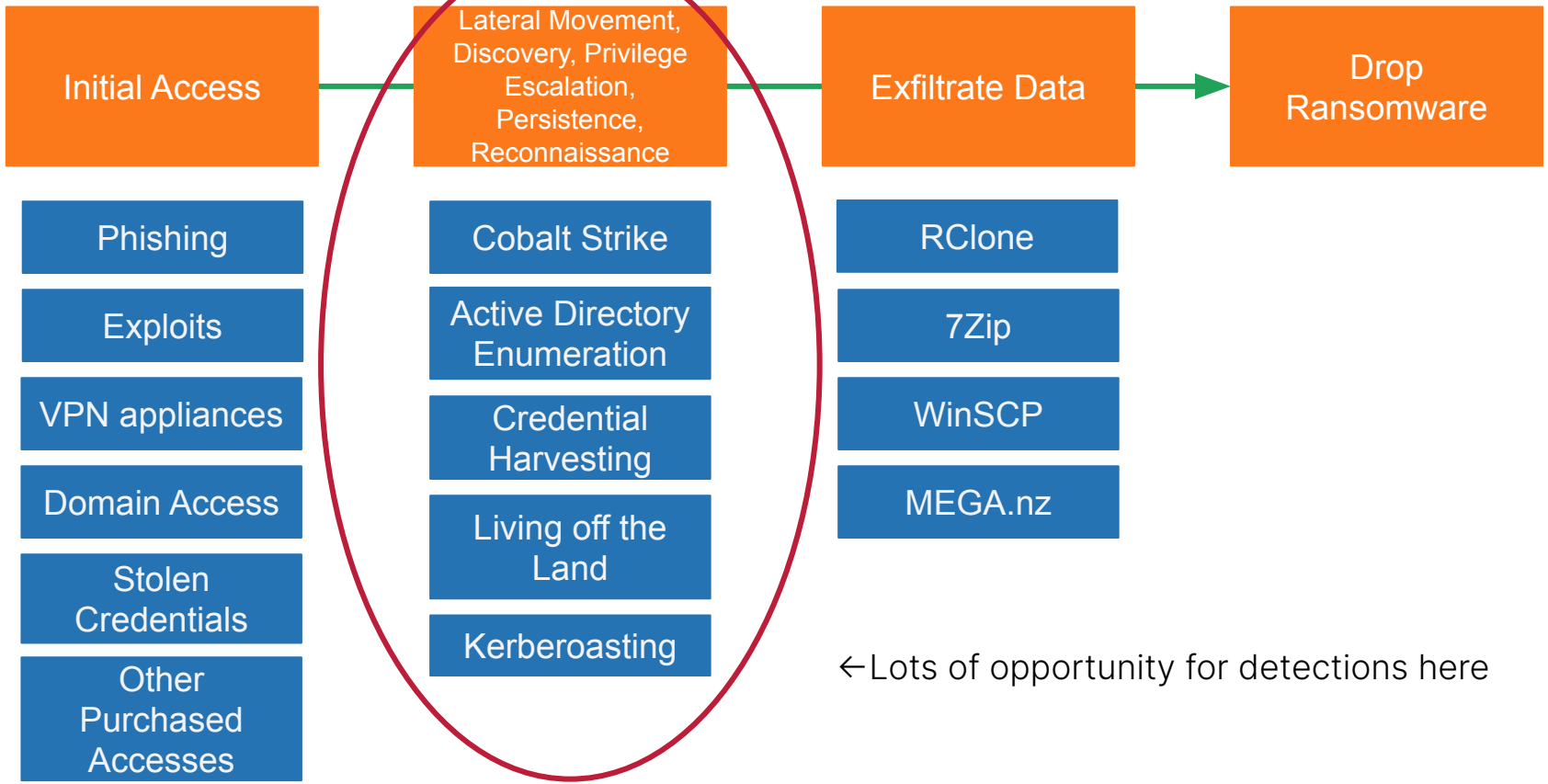
Intelligence as a Bridge



Sourcing TTP-Focused Intelligence



Case Study: Anatomy of a Ransomware Attack



←Lots of opportunity for detections here

Intel driving rule development (Insikt's process)

ATT&CK serves as a common language between highly technical concepts or reports and defenders'/operators' needs

Case Study: Intelligence Driving Rule Development

"Kozak" Released Jester Stealer

"Kozak, also known as "kozakdru", a member of the mid-tier Club2CRD and low-tier Carder forum, released Jester stealer. According to the threat actor's statement, the malware has the following technical functionality: Works via Tor network Stealer build is connected to the developer's admin panel in Tor (possible connection to the customer's server) Network connection encryption via AES-CBC-256 " Full note

Source Insikt Group on Aug 2, 2021, 00:00 • Reference Actions

We saw a threat actor "release" Jester Stealer on the dark web in August 2021 - produced a "note"

Insikt Validated TTP: Sample of Jester Stealer Shared on MalwareBazaar, Actively Advertised on Underground Forums • TTP Instance • Sigma Rule • Hunting Package • **Insikt Validated TTP** • **Hunting Package**

On January 17, 2022, [redacted] shared a sample of **Jester Stealer** (sha256 hash: **cdbed3a79d37d581fc5be268df61e13aaafa5c88a001f4e8b298d77c4b37ae13**) on MalwareBazaar. The sample yields a high detection rate on VirusTotal analysis. Sandbox analysis confirmed the sample to be an instance of **Jester Stealer** via a matched YARA rule.

Once executed, the sample tries to harvest and steal information such as wireless network passwords, mail credentials, **SMTP** and FTP credentials, sensitive browser data, and cryptocurrency wallet information. It queries sensitive service information and has been detected using **Koadic** (a post-exploitation COM-based **rootkit** for **Windows**) execution based on a triggered Sigma rule during sandbox analysis. The sample... Full Note

Source Insikt Group on Feb 4, 2022, 22:36 • Share document • Export • Pin note • Edit

Then, in January 2022, we saw a user on social media shared a sample of Jester Stealer on MalwareBazaar....

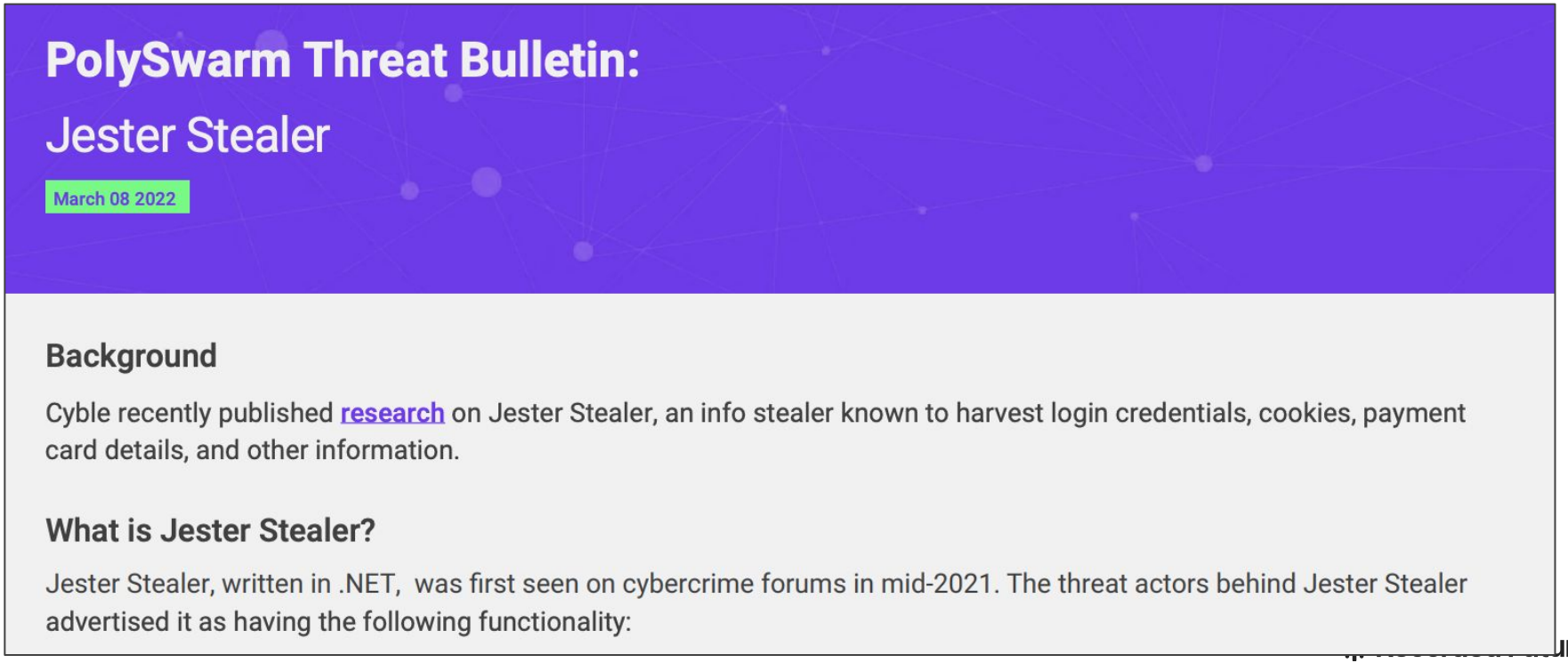
Case Study: Intelligence Driving Rule Development

Now that Jester Stealer was openly in use, an Insikt Validated TTP was created to provide a Sigma rule to our clients, to help detect the malware

```
title: MAL_Jester_Stealer
id: 020fd182-802c-4169-9be0-01257b20dbda
description: Detects Jester Stealer's use of netsh to harvest WiFi credentials as well as its ability to self delete
references:
    - Insikt Group Research
status: stable
author: KHOR, Insikt Group, Recorded Future
date: 2022/02/04
level: medium
tags:
    - attack.t1049 # System Network Connections Discovery
    - attack.t1070.004 # Indicator Removal on Host: File Deletion
logsource:
    category: process_creation
    product: windows
detection:
    netsh_wlan_pass:
        CommandLine|contains|all:
            - 'cbcp 65001'
```

Case Study: Intelligence Driving Rule Development

One month later, other vendors identified Jester Stealer as a priority threat



PolySwarm Threat Bulletin:

Jester Stealer

March 08 2022

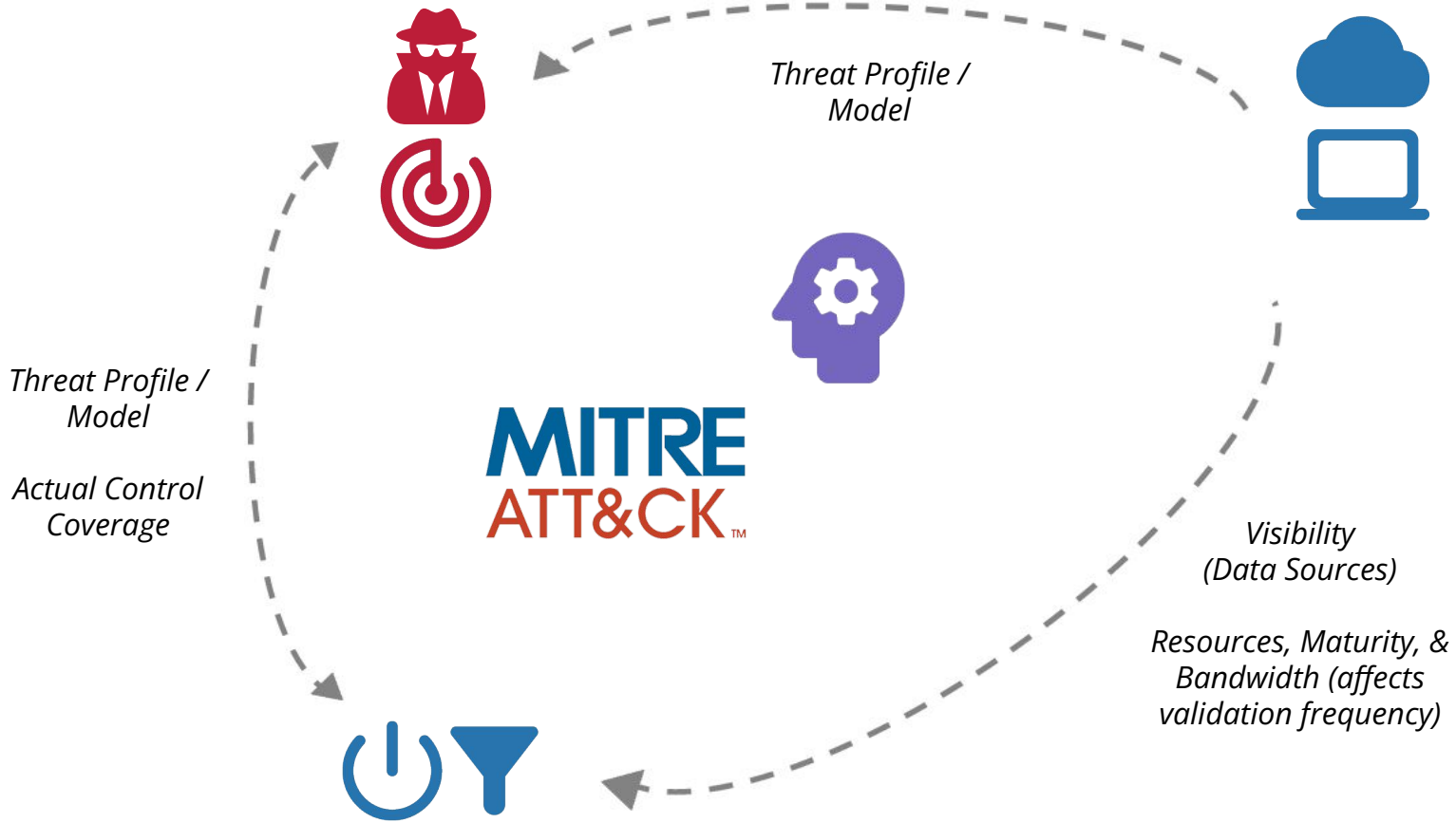
Background

Cyble recently published research on Jester Stealer, an info stealer known to harvest login credentials, cookies, payment card details, and other information.

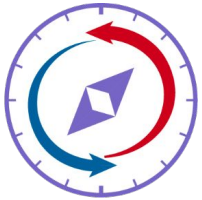
What is Jester Stealer?

Jester Stealer, written in .NET, was first seen on cybercrime forums in mid-2021. The threat actors behind Jester Stealer advertised it as having the following functionality:

Prioritizing Detections: Risk Profiling

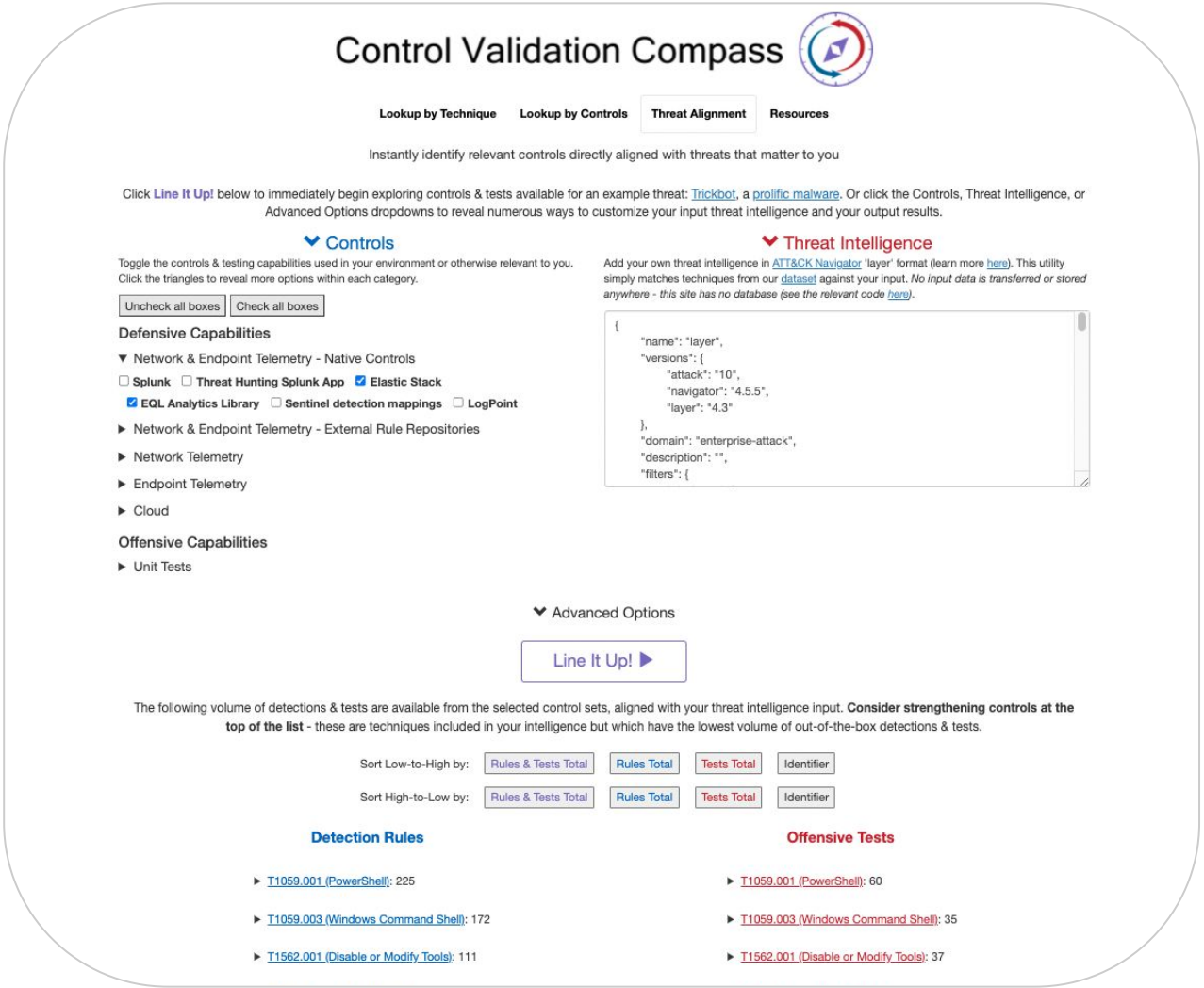


Prioritizing Detections: A Compass to Guide You

Control Validation Compass 

controlcompass.github.io

Open source tool pointing cybersecurity teams to **9,000+** publicly-accessible technical and policy controls and **2,100+** offensive security tests, aligned with over **500** ATT&CK (sub)techniques



controlcompass.github.io

Threat Intelligence

MalwareBazaar Database

You are currently viewing the MalwareBazaar entry for **SHA256 cdbed3a79d37d581fc5be268df61e13aaafa5c88a001f4e8b298d77c4b37ae13**. While MalwareBazaar tries to identify whether the sample provided is malicious or not, there is no guarantee that a sample in MalwareBazaar is malicious.

Database Entry

Intelligence

SHA256 hash:
SHA3-384 hash:
SHA1 hash:
MD5 hash:
humanhash:
File name:
Download:
Signature

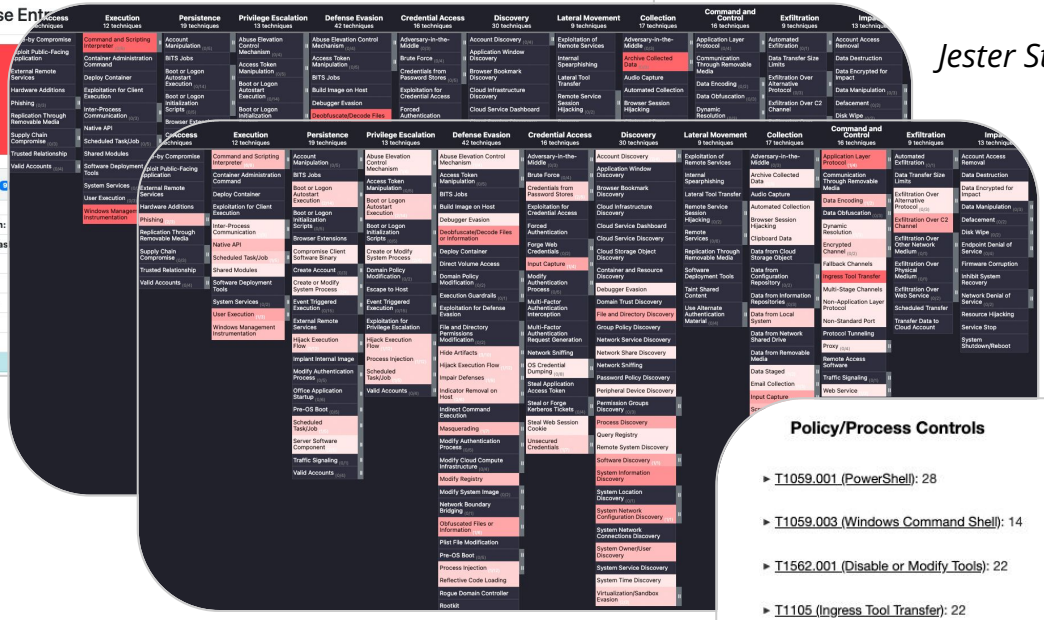
Jester Stealer

February 4, 2022 • 19 min read

ACTINIUM targets Ukrainian organizations

Microsoft Threat Intelligence Center (MSTIC)
Microsoft Digital Security Unit (DSU)

8 Stealer Malware (Combined)



github.com/tropChaud/Cyber-Adversary-Heatmaps

National Cyber Awareness System > Alerts > LokiBot Malware

Alert (AA20-266A)

LokiBot Malware

Original release date: September 22, 2020 | Last revised: October 24, 2020

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Policy/Process Controls	Detection Rules	Offensive Tests
▸ T1059.001 (PowerShell): 28	▸ T1059.001 (PowerShell): 284	▸ T1059.001 (PowerShell): 60
▸ T1059.003 (Windows Command Shell): 14	▸ T1059.003 (Windows Command Shell): 185	▸ T1059.003 (Windows Command Shell): 37
▸ T1562.001 (Disable or Modify Tools): 22	▸ T1562.001 (Disable or Modify Tools): 162	▸ T1562.001 (Disable or Modify Tools): 40
▸ T1105 (Ingress Tool Transfer): 22	▸ T1105 (Ingress Tool Transfer): 109	▸ T1105 (Ingress Tool Transfer): 66
▸ T1112 (Modify Registry): 7	▸ T1112 (Modify Registry): 138	▸ T1112 (Modify Registry): 48
▸ T1047 (Windows Management Instrumentation): 35	▸ T1047 (Windows Management Instrumentation): 93	▸ T1047 (Windows Management Instrumentation): 25
▸ T1548.002 (Bypass User Account Control): 26	▸ T1548.002 (Bypass User Account Control): 82	▸ T1548.002 (Bypass User Account Control): 40
▸ T1053.005 (Scheduled Task): 22	▸ T1053.005 (Scheduled Task): 69	▸ T1053.005 (Scheduled Task): 56
▸ T1082 (System Information Discovery): 6	▸ T1082 (System Information Discovery): 31	▸ T1082 (System Information Discovery): 85
▸ T1204.002 (Malicious File): 21	▸ T1204.002 (Malicious File): 69	▸ T1204.002 (Malicious File): 12

Operational takeaways (Controls)

Thank You!