

# Triage & Beyond: How Magnet Forensics Powers Incident Response

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# Doug Metz, MCFE, GCFA, GCFE, GREM

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- Joined Magnet in 2021
- Incident Response Manager
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**Cyber Unpacked**  
Exploring enterprise DFIR



BAKER STREET FORENSICS

D . F . I . R .

# Triage in DFIR

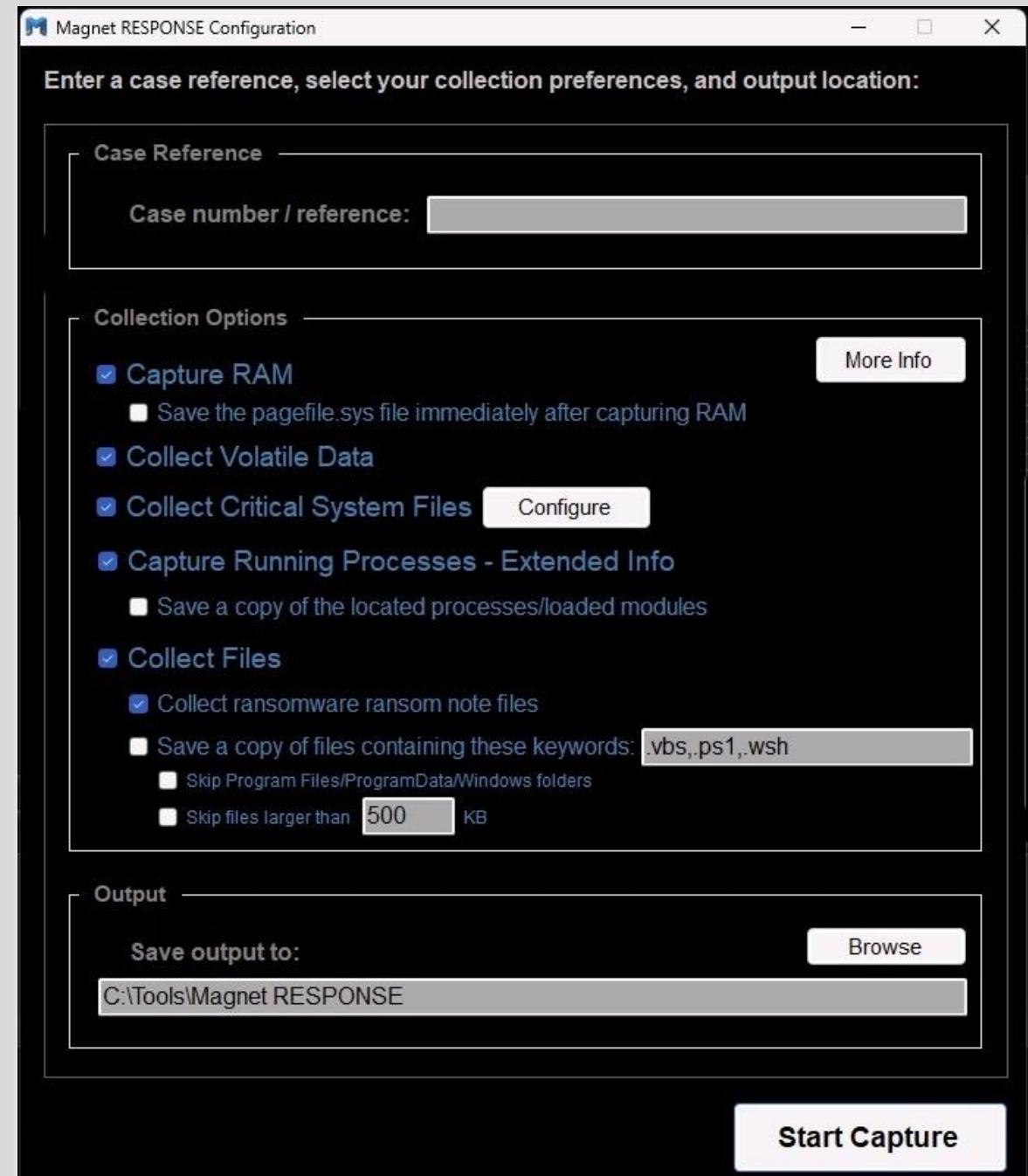
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- Incident Identification
- Impact Assessment
- Urgency Classification
- Containment and Mitigation
- Resource Allocation

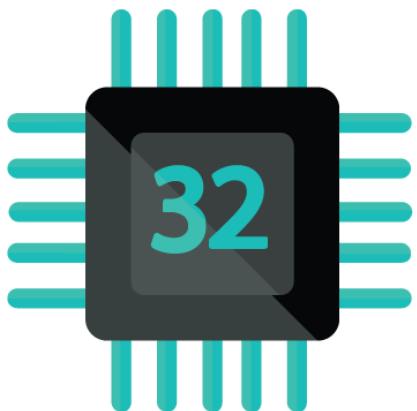
# Magnet RESPONSE

- Free triage collection tool
- Intuitive interface
- Collects RAM, Volatile info and Operating System artifacts

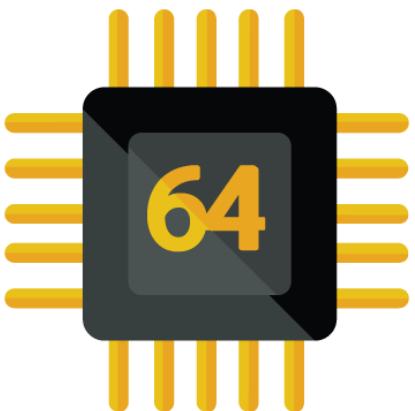


# Simplified Memory Capture

---



VS



# Magnet RESPONSE Output

HTCIA Demo-MagnetRESPONSE-2023.03.14_13.16.33			
Name	Date modified	Type	Size
7z MORIARTY_jmoriarty_2023.03.14_13.16.33...	3/14/2023 1:21 PM	ZIP File	909,893 KB
RAMDump-MORIARTY-20230314-131633...	3/14/2023 1:17 PM	DMP File	16,382,988 ...

HTCIA Demo-MagnetRESPONSE-2023.03.14_13.16.33 > extracted >		
Name	Date modified	Type
Logs	3/14/2023 1:37 PM	File folder
Processes	3/14/2023 1:37 PM	File folder
Saved_Files	3/14/2023 1:37 PM	File folder
Volatile_Data	3/14/2023 1:37 PM	File folder

# Magnet RESPONSE Output

HTCIA Demo-MagnetRESPONSE-2023.03.14_13.16.33 > extracted > Saved_Files >				
Name	Date modified	HTCIA Demo-MagnetRESPONSE-2023.03.14_13.16.33 > extracted > Volatile_Data		
		Name	Date modified	Type
Amcache	3/14/2023 1:37 PM	Firewall_Info.txt	3/14/2023 1:19 PM	Text Document
Browser_History	3/14/2023 1:37 PM	IP_Info.txt	3/14/2023 1:19 PM	Text Document
Jumplists-AutomaticDestinations	3/14/2023 1:37 PM	Logged_On_Users.txt	3/14/2023 1:19 PM	Text Document
Jumplists-CustomDestinations	3/14/2023 1:37 PM	Network_Connections.txt	3/14/2023 1:17 PM	Text Document
MFT	3/14/2023 1:37 PM	Scheduled_Tasks.txt	3/14/2023 1:19 PM	Text Document
NTUSER.DAT	3/14/2023 1:37 PM	User_Accounts.txt	3/14/2023 1:19 PM	Text Document
PowerShell_History	3/14/2023 1:37 PM	Wifi_Info.txt	3/14/2023 1:19 PM	Text Document
Prefetch_Files	3/14/2023 1:37 PM	Windows_Services.txt	3/14/2023 1:19 PM	Text Document
Recent_Files	3/14/2023 1:37 PM	Windows_Version.txt	3/14/2023 1:19 PM	Text Document
Recycle_Bin	3/14/2023 1:37 PM			
Registry_Hives	3/14/2023 1:37 PM			
Scheduled_Tasks	3/14/2023 1:37 PM			
SRI IM	3/14/2023 1:37 PM			

# Auto Collect Options

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MagnetRESPONSE\_AutoCapture.exe



MagnetRESPONSE\_AutoCaptureMinimal.exe

# Verifying a Capture Package

---

 Capture Completed

**Integrity verification PASSED - All data is intact for file:**

c:\users\jmoriarty\documents\htcia  
demo-magnetresponse-2023.03.14\_13.16.33\moriarty\_jmoriarty\_2023.03.14\_13.16.33.zip

**Verification report saved to:**

c:\users\jmoriarty\documents\htcia  
demo-magnetresponse-2023.03.14\_13.16.33\VerificationReport-2023.03.15\_09.46.43.vt

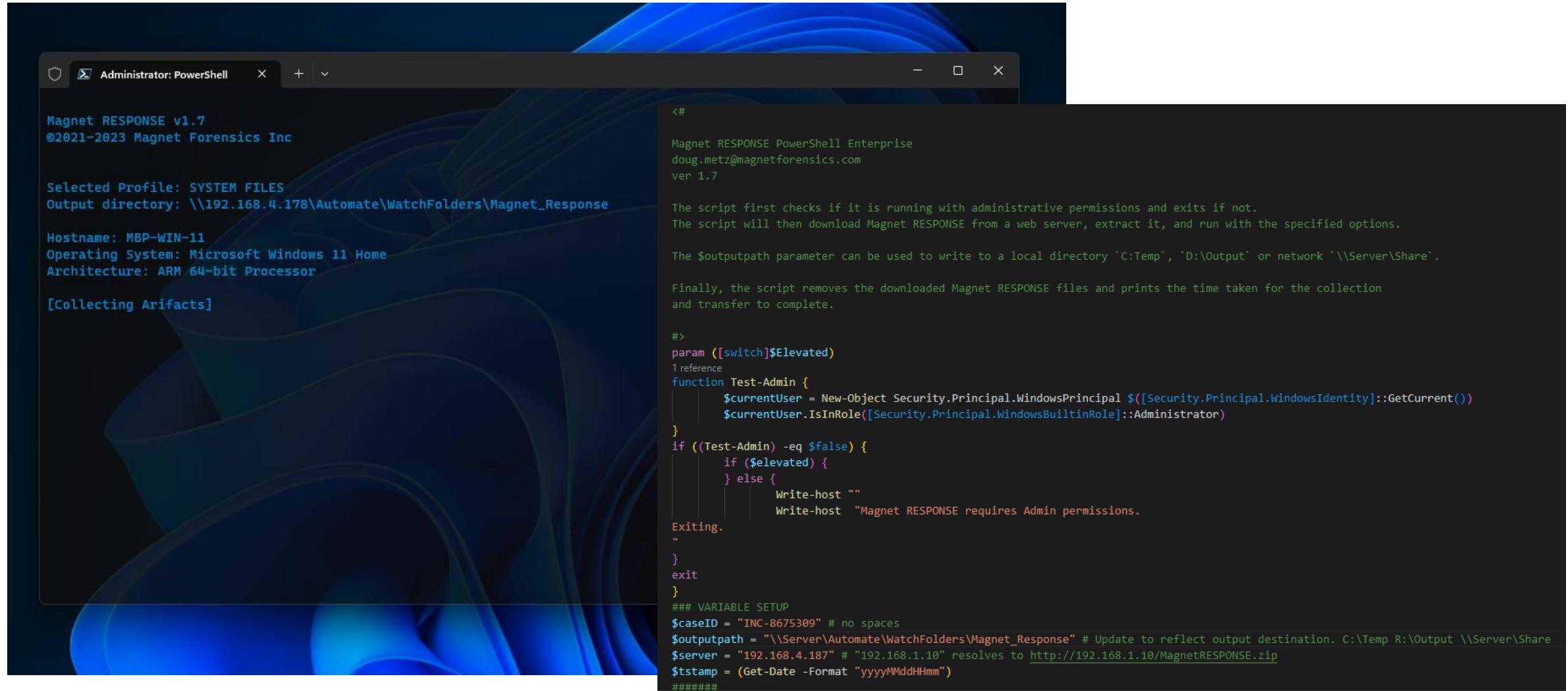


[Open Verification Report](#) [Exit](#)

# Magnet RESPONSE CLI

/captoram	- Enables RAM capture
/capturepagefile	- Enables capture of pagefile.sys file
/capturevolatile	- Enables volatile data capture
/capturesystemfiles	- Enables critical system file collection
/captureextendedprocessinfo	- Enables extended info capture for running processes/loaded modules
/saveprocfiles	- Enables saving copies of running processes/loaded modules. Must be used with /captureextendedprocessinfo switch
/capturefiles:<keyword.csv>	- Enables scanning for files with filenames containing specified keywords e.g. /capturefiles:secret,badfile,.vbs,confidential
/skipsystemfolders	- Indicates that the Program Files/ProgramData/Windows folders should be skipped when searching for files based on filename keywords. Must be used with /capturefiles
/maxsize:<file size in KB>	- Indicates the maximum file size to collect from hits found using /capturefiles – any files above this size are skipped e.g. /maxsize:500
/captureransomnotes	- Enables the ransomware ransom note collection
/silent	- No GUI output to screen

# Magnet RESPONSE PowerShell



The screenshot shows a Windows PowerShell window titled "Administrator: PowerShell". The left pane displays the Magnet RESPONSE v1.7 setup script, which includes the following information:

- Magnet RESPONSE v1.7
- ©2021-2023 Magnet Forensics Inc
- Selected Profile: SYSTEM FILES
- Output directory: \\192.168.4.178\Automate\WatchFolders\Magnet\_Response
- Hostname: MBP-WIN-11
- Operating System: Microsoft Windows 11 Home
- Architecture: ARM 64-bit Processor
- [Collecting Arifacts]

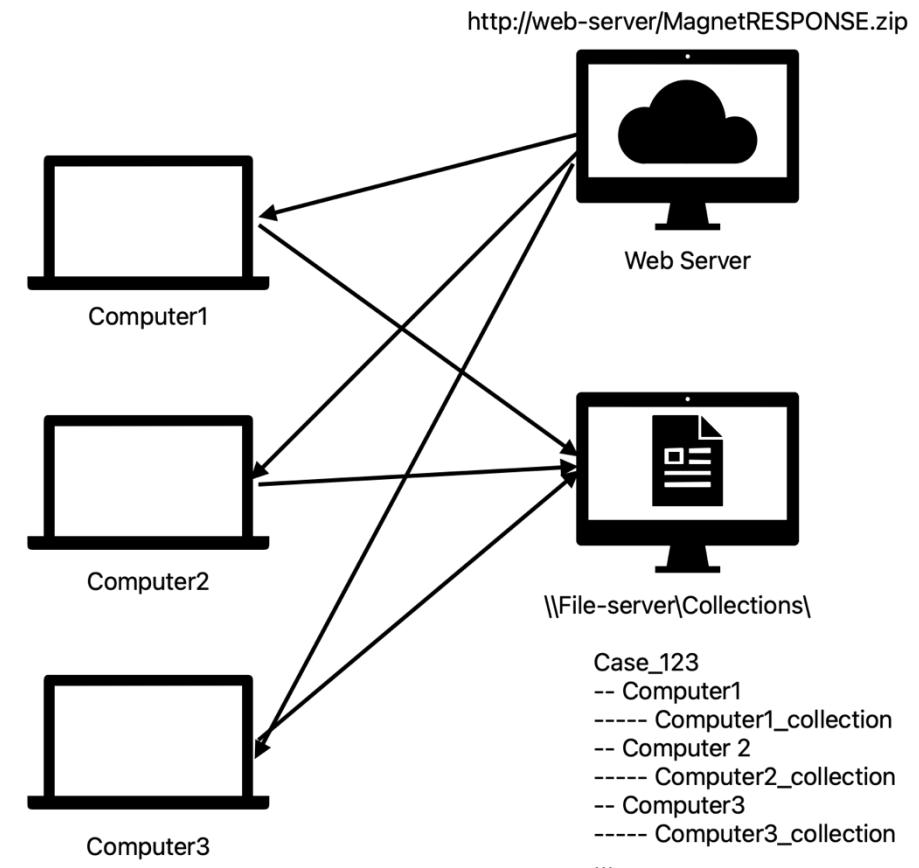
The right pane shows the PowerShell command being run, which is a PowerShell script for collecting artifacts. The script checks for administrative permissions, downloads Magnet RESPONSE from a web server, extracts it, and runs with specified options. It also handles output paths and removes temporary files.

```
<#  
Magnet RESPONSE PowerShell Enterprise  
doug.metz@magnetforensics.com  
ver 1.7  
  
The script first checks if it is running with administrative permissions and exits if not.  
The script will then download Magnet RESPONSE from a web server, extract it, and run with the specified options.  
  
The $outputpath parameter can be used to write to a local directory `C:\Temp`, `D:\Output` or network `\\Server\Share`.  
  
Finally, the script removes the downloaded Magnet RESPONSE files and prints the time taken for the collection  
and transfer to complete.  
  
#>  
param ([switch]$Elevated)  
1 reference  
function Test-Admin {  
    $currentUser = New-Object Security.Principal.WindowsPrincipal $([Security.Principal.WindowsIdentity]::GetCurrent())  
    $currentUser.IsInRole([Security.Principal.WindowsBuiltinRole]::Administrator)  
}  
if ((Test-Admin) -eq $false) {  
    if ($Elevated) {  
    } else {  
        Write-host ""  
        Write-host "Magnet RESPONSE requires Admin permissions."  
        Exiting.  
    }  
    exit  
}  
### VARIABLE SETUP  
$caseID = "INC-8675309" # no spaces  
$outputpath = "\\Server\Automate\WatchFolders\Magnet_Response" # Update to reflect output destination. C:\Temp R:\Output \\Server\Share  
$server = "192.168.4.187" # "192.168.1.10" resolves to http://192.168.1.10/MagnetRESPONSE.zip  
$tstamp = (Get-Date -Format "yyyyMMddHHmm")  
#####
```

# Magnet RESPONSE PowerShell

---

- Web server hosting MagnetRESPONSE.zip
- File server with folder share for collections



# Case Variables

---

```
### VARIABLE SETUP
$caselD = "demo-161" # no spaces
$outputpath = "\server\share" # Update to reflect output destination.
$server = "192.168.4.187" # "192.168.4.187" resolves to http://192.168.4.187/MagnetRESPONSE.zip
```

`$caselD` – Name of your case or incident. (no spaces)

`$outputpath` – Where the collection output is sent

`$server` – Address for web server hosting `MagnetRESPONSE.zip`

# Collection Profiles

---

```
#### Extended Process Capture
<#
$profileName = "EXTENDED PROCESS CAPTURE"
$arguments = "/capturevolatile /captureextendedprocessinfo /saveprocfiles"
#>
#### System Files

$profileName = "SYSTEM FILES"
$arguments = "/capturesystemfiles"
#>
#### Just RAM
<#
$profileName = "CAPTURE RAM"
$arguments = "/captureram"
#>
```

# Magnet RESPONSE and



## **Microsoft Defender for Endpoint**

# Defender\_RESPONSE.ps1

C:\> library	Description	Parameters	Parameters description	Uploaded on
File name				
====	====	====	====	====
Defender_RESPONSE.ps1				GMT
-0500 (Eastern Standard Time)				GMT
MagnetRESPONSE.exe				
-0500 (Eastern Standard Time)				

**Endpoints**

General	Advanced features
Licenses	<input checked="" type="checkbox"/> On <b>Download quarantined files</b> Backup quarantined files in a secure and compliant location so they can be downloaded directly from quarantine.
Email notifications	<input checked="" type="checkbox"/> On <b>Live Response</b> Allows users with appropriate RBAC permissions to investigate devices that they are authorized to access, using a remote shell connection.
Auto remediation	<input type="checkbox"/> Off <b>Live Response for Servers</b> Allows users with Live Response privileges to connect remotely to servers (Windows Server or Linux devices) that they are authorized to access.
Permissions	<input checked="" type="checkbox"/> On <b>Live Response unsigned script execution</b> Enables using unsigned PowerShell scripts in Live Response.
Roles	<input type="checkbox"/> Off <b>Share endpoint alerts with Microsoft Compliance Center</b> Forwards endpoint security alerts and their triage status to Microsoft Compliance Center, allowing you to enhance <a href="#">insider risk management</a> policies with alerts and remediate internal risks before they cause harm. Forwarded data is processed and stored in the same location as your Office 365 data.
Device groups	<input checked="" type="checkbox"/> On <b>Microsoft Intune connection</b> Connects to <a href="#">Microsoft Intune</a> to enable sharing of device information and enhanced policy enforcement.
APIs	<input type="checkbox"/> Off <b>Authenticated telemetry</b>
SIEM	
Rules	
Alert suppression	
EDR Exclusions	
Indicators	
Process Memory Indicators	
Web content filtering	

```
C:\> run Defender_RESPONSE.ps1
Transcript started, output file is C:\ProgramData\Microsoft\Windows Defender Advanced Threat Protection\Temp\PSScriptOutputs\PSScript_Transcript_{94264446-9ED8-497F-AFE7-45A1DD98777A}.txt

Magnet RESPONSE v1.7
©2021-2023 Magnet Forensics, LLC

Hostname: OFFICE-2701139
Operating System: Microsoft Windows 10 Enterprise
Architecture: 64-bit

[Collecting Arifacts]
** Acquisition Completed in 0 minutes and 11 seconds.**

C:\> [
```

Retrieving the Data from the Defender console:

Once the script finishes, the zipped output will be saved to “[C:\Temp\RESPONSE](#)” on the remote machine.

- Navigate to the output folder using the command — [cd c:\Temp\RESPONSE](#)
- List files using the “[dir](#)” command
- Copy the zip filename
- [Download <filename.zip>](#)

# CyberPipe

```
.';::cccccc:;.
.:cccclllloooddxc.      .';clooddoollcc:;:;.
.:cccclllloooddxo.      ,.coxxxxxdl:,'..
'ccccclllooooddd'      .,,lxkxxxo:'.
'ccccclllooooddd'      .,:lx0kl,;oxo,.
':ccccllloooodddo.     .:dk0000kkd;''.
.:cccclllooooddo.     ...;lxk00000kkkd;
.;cccclllooooddc:coxkkkk000000x:.
'ccccllloooodddxxxxkkkk0000x:.
,ccclllooooodddxxxxkkkxlc,.
':llllooooodddxxxxxoc;.
.';:clooddddolc:...  
.....
```

CyberPipe IR Collection Script v5.0  
<https://github.com/dwmetz/CyberPipe>  
@dwmetz | ©2024 bakerstreetforensics.com

```
Mapping network drive...
Drive is mapped.
Collections directory exists.
Host directory created.
```

```
Running MAGNET Response...
```

Magnet RESPONSE v1.7  
©2021–2024 Magnet Forensics Inc

```
Hostname:          MORIARTY
Operating System: Microsoft Windows 11 Pro
Architecture:     64-bit
Selected Profile: Volatile (testing)
Output Directory: \Collections\MORIARTY-202402131644
```



HONEY, YOU SHOULD SEE ME IN A CROWN.

Collecting Artifacts...

# CyberPipe (v5)

---

## Functions:

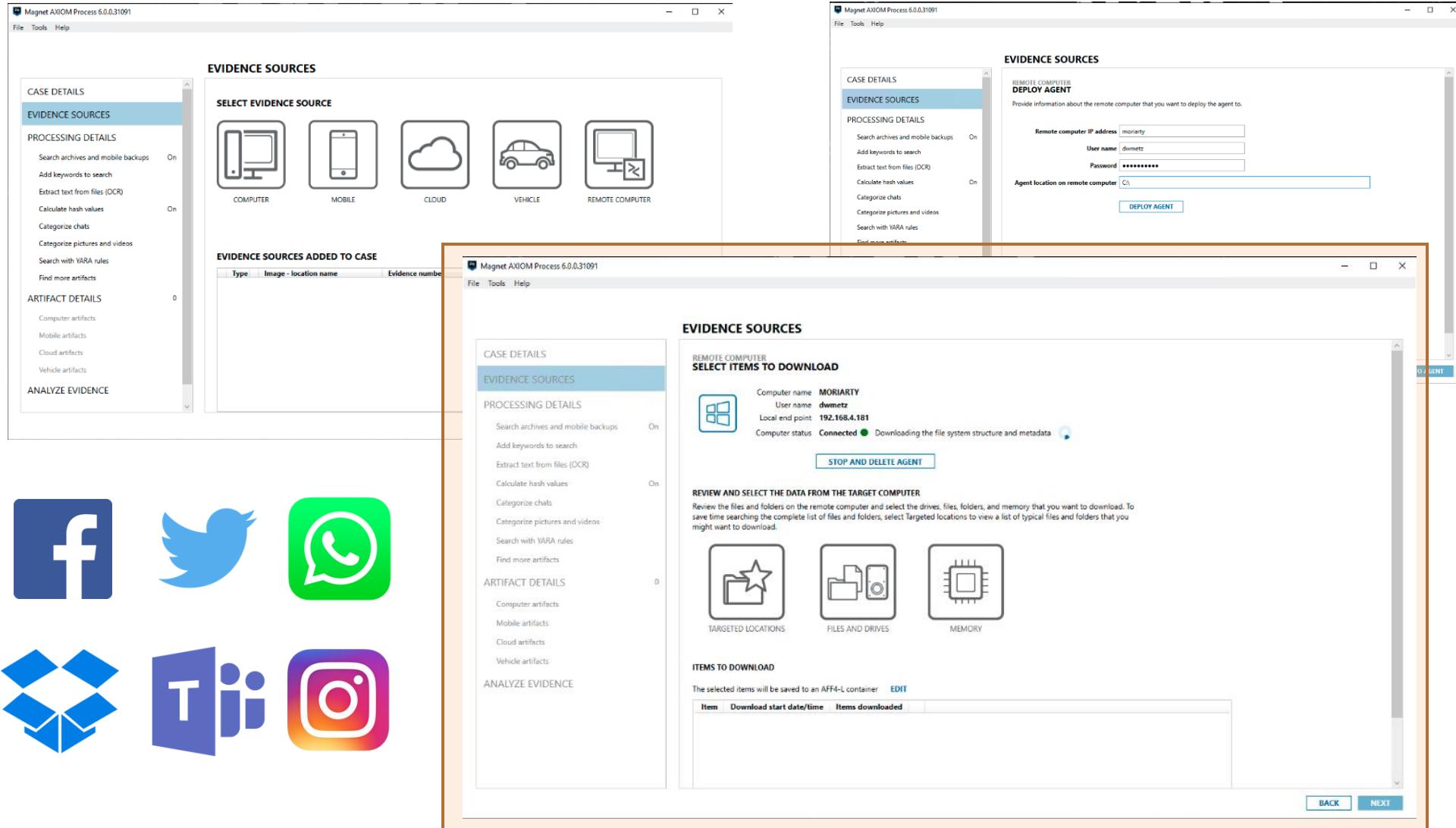
- Capture a memory image with MAGNET DumpIt for Windows, (x32, x64, ARM64), or MAGNET RAM Capture on legacy systems;
- Create a Triage collection with MAGNET Response;
- Check for encrypted disks with Encrypted Disk Detector;
- Recover the active BitLocker Recovery key;
- Save all artifacts, output, and audit logs to USB or source network drive.
- Volatile Artifacts
- Triage Collection (Volatile, RAM, Pagefile, Triage artifacts)
- Just RAM
- RAM & Pagefile
- or build your own using the RESPONSE CLI options

## Prerequisites:

- MAGNET Response
- MAGNET Encrypted Disk Detector

## Collection Profiles:

# Remote Collections with AXIOM Cyber



The screenshot displays two windows of the Magnet AXIOM Process 6.0.0.31091 software. The left window shows the 'EVIDENCE SOURCES' screen with icons for COMPUTER, MOBILE, CLOUD, VEHICLE, and REMOTE COMPUTER. The right window shows the 'REMOTE COMPUTER DEPLOY AGENT' screen, which includes fields for Remote computer IP address (moriarty), User name (dwmetz), and Password (\*\*\*\*\*). A 'DEPLOY AGENT' button is present. Both windows have tabs for CASE DETAILS, EVIDENCE SOURCES, PROCESSING DETAILS, and ARTIFACT DETAILS.



# Remote Collections (and Analysis) with Magnet NEXUS

The screenshot displays the Magnet Nexus software interface, specifically the 'Cases' view. The top navigation bar includes 'Cases' (8), 'Most Recent', a search bar ('Search by case name...'), 'My cases', 'Shared with me', and a 'Create case' button. Below the header, six cases are listed in a grid:

- Metal Health**: Owned by Doug Metz, Created on May 9, 2024 at 9:55 AM. Status: COMPLETED. Collections: 4. 4 Done.
- Ran Somewhere**: Owned by Doug Metz, Created on May 6, 2024 at 11:10 AM. Status: COMPLETED. Collections: 1. 1 Done.
- Volatile Baseline**: Owned by Doug Metz, Created on May 6, 2024 at 9:50 AM. Status: COMPLETED. Collections: 1. 1 Done.
- test case 1231231232121**: Owned by Tayfun Uzun, Created on Apr 17, 2024 at 3:10 PM. Status: IN PROGRESS. Collections: 5. 5 In Progress, 1 Failed.
- 20240411 picture only**: Owned by Zhuopei Zhao. Status: Not explicitly shown.
- Test Linux**: Owned by Mariel Martinez. Status: Not explicitly shown.



Cases    Endpoints

Endpoints 60

## Create collections

1 Select a case

 Select All 0 Selected

Windows

Linux

Mac

**+ Create 1 collection**

2 Select endpoints to scan

**Memory** Collect and analyze endpoint RAM 

RAM captures can be large. Additional time is required to upload and process them.

3 Select artifacts to acquire

**Artifacts > Expand All** Additional Sources 

Includes artifacts related to OS backups, disk images, and virtual machines.

> [See Artifacts](#) Application Usage 

Includes artifacts related to application activity and use, which can verify a user's identity and reveal what a user was doing with a device at a specific period of time.

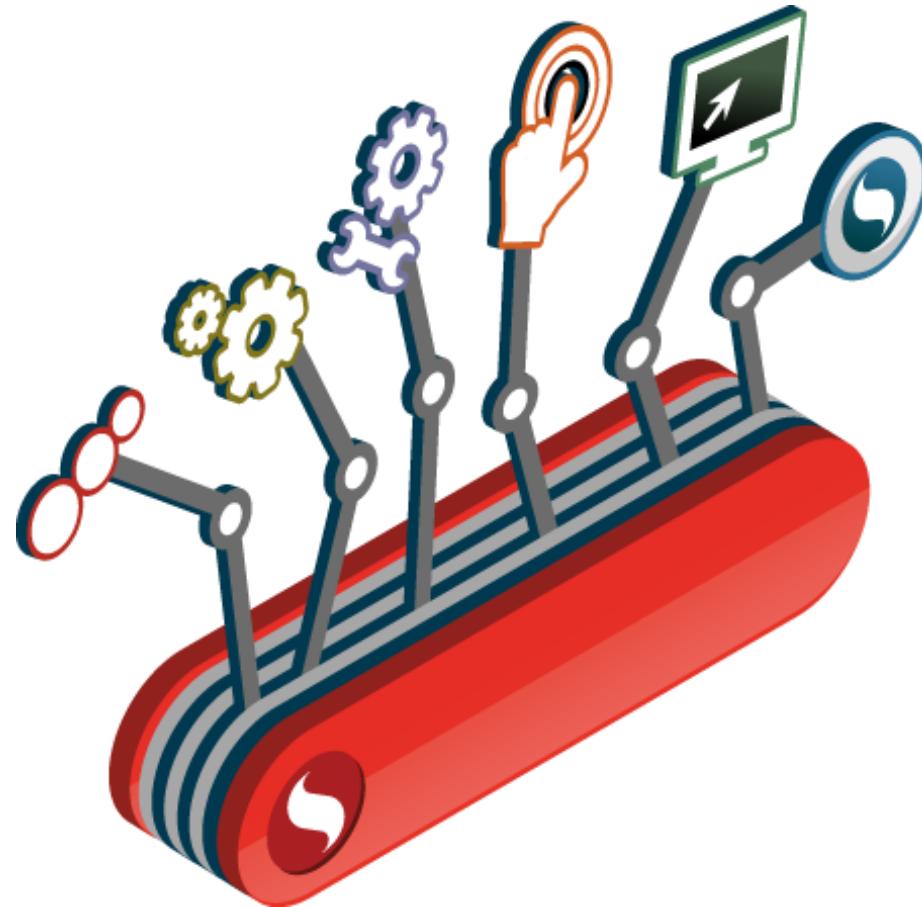
> [See Artifacts](#)

	Hostname
<input checked="" type="checkbox"/>	DUSTY-BOTTOM
	NORADCO-WS02
	LDBLAIR-W10
	VM04WIN2019
	LDBLAIR-W10
	MMARTINEZ-W10

# YARA

---

“The pattern matching Swiss army knife for malware researchers (and everyone else).”



# Components of YARA Rules

---

1. \* Rule Name: Name of the rule. (Avoid spaces.)
2. Metadata: Details describing the sample and/or conditions the rule was written to detect for, author information, references, etc.
3. Strings: text patterns identified in the sample (ascii, wide, HEX, Base64...)
4. \* Condition: The pattern or patterns that must be present in a file or process for the rule to trigger

\* Required

# Example YARA Rule

---

```
rule Detect_Malware {
    meta:
        description = "Detects a specific malware family"
        author = "Your Name"

    strings:
        $string1 = "malware_indicator_1"
        $string2 = "malware_indicator_2"

    condition:
        $string1 and $string2
}
```

# YARA Sources

InQuest / awesome-yara (Public)

Code Issues 1 Pull requests Actions Projects Security Insights

master 1 Branch 0 Tags

Go to file

About

A curated list of awesome YARA rules, tools, and people.

JosiahRaySmith @jipedit added Public YARA Rules 3761757 · 3 days ago 333 Commits

.travis.yml Add awesome\_bot config 7 years ago

CONTRIBUTING.md Add contributing file 6 years ago

LICENSE Initial commit 7 years ago

README.md @jipedit added Public YARA Rules 3 days ago

README\_CN.md Update of README\_CN.md 2 months ago

awesome-yara.png Add image to header 6 years ago

Readme View license Activity Custom properties 3.3k stars 170 watching 467 forks Report repository

Releases No releases published

Packages No packages published

Contributors 37

YARA, the "pattern matching swiss knife for malware researchers (and everyone else)" is developed by @plusvic and @VirusTotal. View it on GitHub.

**YARA Forge**

Streamlined Public YARA Rule Collection

**Rule Sets**

Download one of the rule sets here

**Core** [ZIP](#)

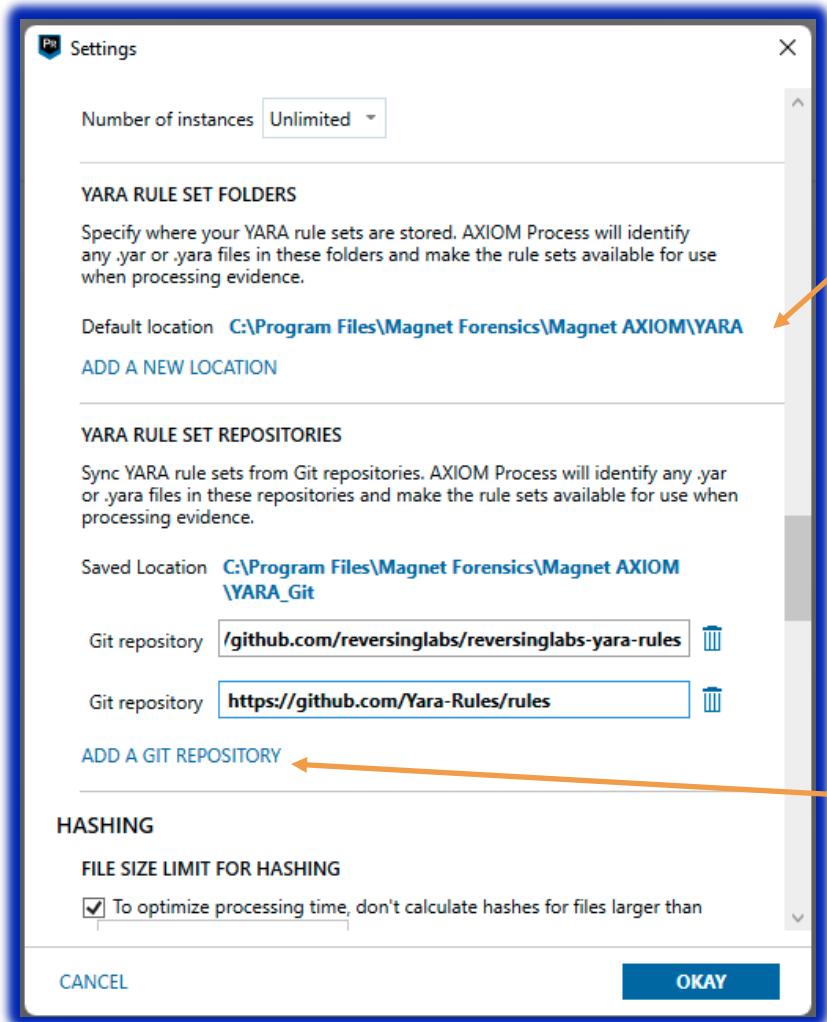
**Extended** [ZIP](#)

**Full** [ZIP](#)

YARA Rules In

**MAGNET  
AXIOM CYBER™**

# YARA Repository Configuration



Manually add or remove rules from this folder

Sync additional GitHub repositories

## SEARCH WITH YARA RULES

CASE DETAILS

EVIDENCE SOURCES 2

PROCESSING DETAILS

Search archives and mobile backups

On

Decode file-based encryption

On

Add keywords to search

On

Extract text from files (OCR)

On

Calculate hashes and find matches

On

Analyze chats with Magnet.AI

Analyze pictures with Magnet.AI

Search with YARA rules

Find more artifacts

ARTIFACT DETAILS 214

Mobile artifacts

Cloud artifacts

Computer artifacts 214 of 264

Vehicle artifacts

Parse and carve artifacts

Privileged content

Date range filter

ANALYZE EVIDENCE

### YARA RULE SETS

Use YARA rules to identify matching files. You can import YARA rule sets from a folder containing .yar or .yara files, or you can manually add YARA rule sets.

NOTE: Running several YARA rule sets at once might increase scan times.

Reading YARA rule sets from 1 synced folder(s) and 2 Git repo(s). [EDIT](#)

[SELECT ALL](#)

[ADD NEW RULE SET](#)

[REFRESH](#)

[SYNC WITH GIT](#)

Rules selected: 0

# New YARA Rules

Enabled	Rule set name	Source path	Source	Date created
<input type="checkbox"/>	Win32.Ransomware.Ladon.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	Jjencode.yar	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA_Git\rules\packers	Git	12/8/2023 10:49:32 AM
<input type="checkbox"/>	Win32.Ransomware.LeChiffre.ya...	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	packer.yar	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA_Git\rules\packers	Git	12/8/2023 10:49:32 AM
<input type="checkbox"/>	Win32.Ransomware.LockBit.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	Win32.Ransomware.Lolkek.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	Win32.Ransomware.LooCipher....	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	packer_compiler_signatures.yar	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA_Git\rules\packers	Git	12/8/2023 10:49:32 AM
<input type="checkbox"/>	Win32.Ransomware.Lorenz.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	Win32.Ransomware.Mafia.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	peid.yar	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA_Git\rules\packers	Git	12/8/2023 10:49:32 AM
<input type="checkbox"/>	Win32.Ransomware.Magniber.y...	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	tweetable-polyglot-png.yar	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA_Git\rules\packers	Git	12/8/2023 10:49:33 AM
<input type="checkbox"/>	Win32.Ransomware.Major.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM
<input type="checkbox"/>	Win32.Ransomware.Makop.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	Magnet Forensics	12/13/2022 3:14:57 PM

Search with YARA rules

! On

BACK

MAGNET FORENSICS

ARTIFACTS	
Passwords and Tokens	3
Social Media URLs	48
User Accounts	5
Web Chat URLs	3
<b>WEB RELATED</b>	<b>14,289</b>
<b>MEDIA</b>	<b>1,500</b>
<b>DOCUMENTS</b>	<b>25</b>
<b>APPLICATION USAGE</b>	<b>8</b>
<b>OPERATING SYSTEM</b>	<b>25,510</b>
<b>MEMORY</b>	<b>45,733</b>
<b>CONNECTED DEVICES</b>	<b>28</b>
<b>LOCATION &amp; TRAVEL</b>	<b>2</b>
<b>CUSTOM</b>	<b>44</b>
<b>YARA RULE MATCHES</b>	<b>8</b>
Win32_Ransomware_WannaCry	8

**EVIDENCE (8)**

Column view ▾

Artifact	Key detail	Sup...	Additional detail
Yara Rule Matches			File name
Win32_Ransomware_WannaCry			!WannaDecryptor!.exe
Yara Rule Matches			File name
Win32_Ransomware_WannaCry			be22645c61949ad6a077373a7d6cd85e3fa
Yara Rule Matches	Process Name	Process ID	
Win32_Ransomware_WannaCry	!WannaDecrypto	3348	
Yara Rule Matches	Process Name	Process ID	
Win32_Ransomware_WannaCry	!WannaDecrypto	3348	
Yara Rule Matches	Process Name	Process ID	
Win32_Ransomware_WannaCry	!WannaDecrypto	3348	
Yara Rule Matches	Process Name	Process ID	
Win32_Ransomware_WannaCry	be22645c61949a	8276	
Yara Rule Matches	Process Name	Process ID	
Win32_Ransomware_WannaCry	be22645c61949a	8276	
Yara Rule Matches	Process Name	Process ID	
Win32_Ransomware_WannaCry	be22645c61949a	8276	

**!WannaDecryptor!.exe**

Current offset 7546

Current selection 217

GO TO FIND COPY SELECTION SAVE SELEC

007495	55	56	57	B9	05	UVW <sup>1</sup> .
007500	00	00	00	BE	68	...34h
007505	ED	41	00	8D	7C	iA..I
007510	24	18	33	C0	F3	\$3A0
007515	A5	B9	2D	00	00	Y <sup>1</sup> ..
007520	00	8D	7C	24	2C	.1\$,
007525	F3	AB	B9	81	00	6« <sup>1</sup> ..
007530	00	00	8D	BC	24	...4\$
007535	E1	00	00	00	88	á....
007540	84	24	E0	00	00	.\$.à..
007545	00	68	4C	ED	41	hLiA
007550	00	F3	AB	66	AB	.ó«f«
007555	AA	8D	44	24	1C	^D\$.
007560	C7	44	24	14	00	CD\$..
007565	00	00	00	50	FF	..PÝ
007570	15	38	45	41	00	.8EA.
007575	8B	2D	D8	40	41	-Ø@A
007580	00	8B	1D	18	40	....@
007585	41	00	83	C4	08	A..Ä.

**MATCHING CONDITIONS**\$set\_reg\_key\_6 "hLiA.ó«f«.D Offset 7546  
\$.CD MAGNET FORENSICS**YARA Findings in AXIOM**

YARA Rules In

MAGNET  
NEXUS™

Endpoints 1 Deselected

	Hostname
<input checked="" type="checkbox"/>	MORIARTY

## Create collections



Add Agent



1 Select a case

2 Select endpoints to scan

3 Select artifacts to acquire

4 Process settings

### YARA rules

Run Magnet's included set of YARA rules

Select from 236 of Magnet's pre-defined YARA rules.

1 Selected

Run Custom Rules

Upload your own set of YARA rules.

### Optional keywords

Add keywords individually, from a text file, or both.

Select...

Choose File no file selected

Cancel

Step 4 of 4



Create Collections

+ Create 1 Collection

days

View



BakerStreetLabs.net

Windows



Endpoints

1

Deselected

	Hostname
<input checked="" type="checkbox"/>	MORIARTY

## Create collections

1 Select a case  
2 Select endpoints to scan  
3 Select artifacts to acquire  
4 Process settings

**YARA rules**

Run Magnet's included set of YARA rules

Select from 236 of Magnet's pre-defined YARA rules.

Run Custom Rules

Upload your own rules

0 Selected

**Custom YARA Rules**

Search...

000\_common\_rules.yar  
 ADapps.yara  
 APT\_APT1.yar  
 APT\_APT10.yar  
 APT\_APT15.yar  
 APT\_APT17.yar  
 APT\_APT29\_Grizzly\_Steppe.yar  
 APT\_APT3102.yar  
 APT\_APT9002.yar  
 APT\_Backspace.yar

Select All Unselect All 0 Selected

Cancel Confirm Selection

+ Create 1 Collection

days

View

BakerStreetLabs.net  
Windows

Endpoints 1 Deselected

	Hostname
<input checked="" type="checkbox"/>	MORIARTY

## Create collections

- 1 Select a case
- 2 Select endpoints to scan
- 3 Select artifacts to acquire
- 4 Process settings

### YARA rules

Run Magnet's included set of YARA rules

Select from 236 of Magnet's pre-defined YARA rules.

5 Selected

Run Custom Rules

Upload your own set of YARA rules.

3 Selected

### Optional keywords

Add keywords individually, from a text file, or both.

Select...

Choose File no file selected

Scan Agent



+ Create 1 Collection

days

View



MAGNET NEXUS™

Case  
YARA Demonstration

Collection  
MORIARTY

Magnet Nexus

Region

United States

Doug Metz

Filters Date range ▾ Keywords ▾ Tags

Search collection

Advanced

☰  Scanning...

#### Artifacts

- > Application Usage 85
- > Connected Devices 236
- ▽ Indicators of compromise 1
  - Yara Rules** 1
- > Operating System 546321
- > Refined Results 641
- > Volatile Artifacts 1420

#### Yara Rules

Tag	File Name	File Size (Bytes)	Matching Conditions
	C:\Users\dwmetz\Downloads\EmployeeSalaries2024.xls.exe	229376	\$main_1, \$main_5, \$ent

#### YARA RULES

#### Hit Details

File Name:

C:\Users\dwmetz\Downloads\EmployeeSalaries2024.xls.exe

File Size (Bytes):

229376

Matching Conditions:

\$main\_1, \$main\_5, \$entrypoint\_all

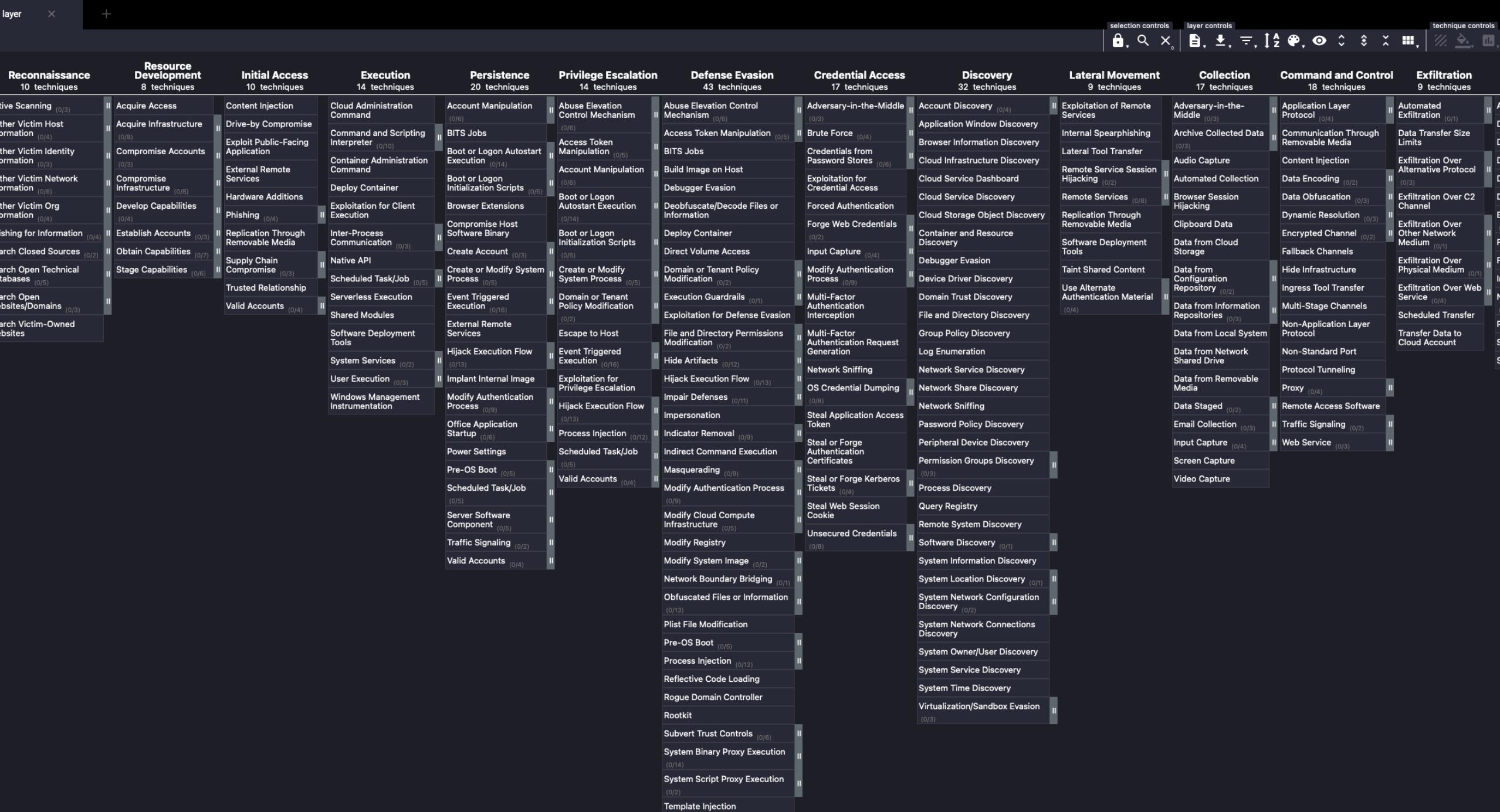
Matched Rules:

Win32\_Ransomware\_WannaCry

+ Tag

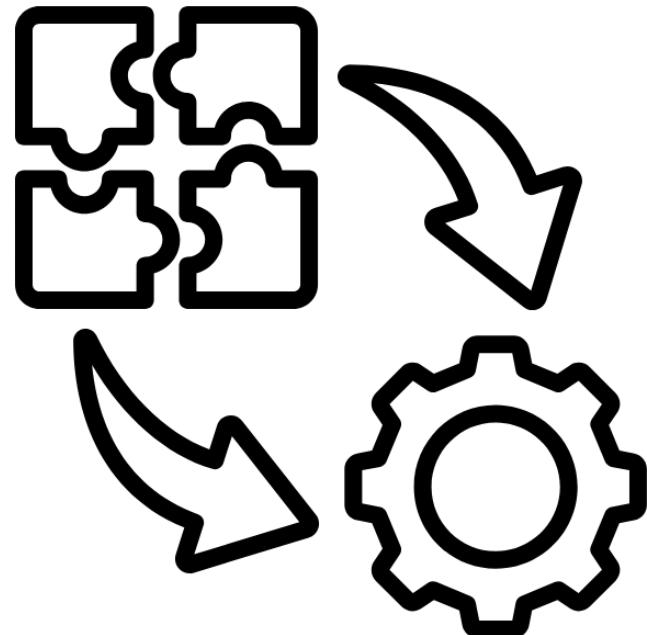


**MITRE**  
**ATT&CK™**



# Key Components of MITRE ATT&CK

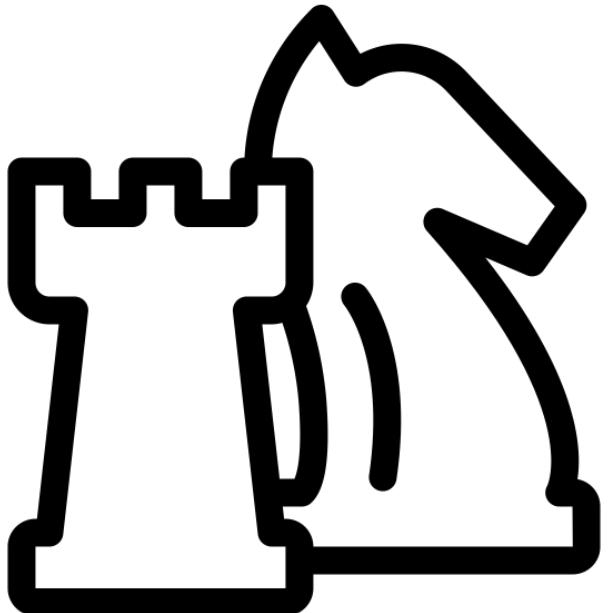
---



- Tactics
- Techniques
- Sub-techniques
- Procedures
- Mitigations
- Detections

# Tactics

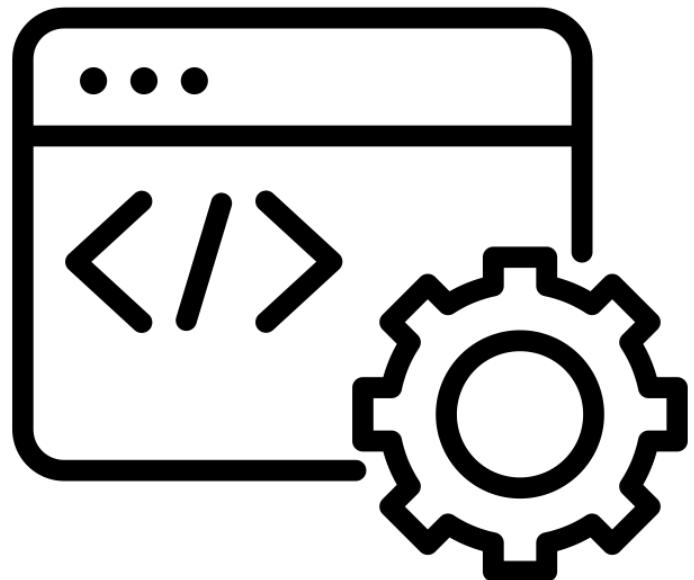
---



- High level objective or goals
- Each tactic represents a phase in attack lifecycle
  - Initial Access
  - Execution
  - Persistence
  - Privilege Escalation
  - Defense Evasion
  - Credential Access
  - Discovery
  - Lateral Movement
  - Collection
  - Command and Control (C2)
  - Exfiltration
  - Impact

# Techniques

---



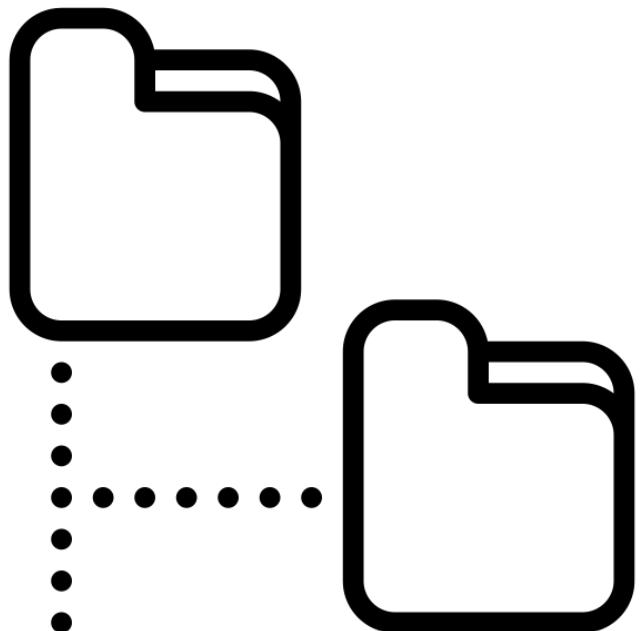
- Specific Methods or Procedures
- Each technique linked to a tactic

*Example:*

- Tactic: TA0002 - Execution
  - Technique: [T1059 – Command and Scripting Interpreter](#)

# Sub-techniques

---



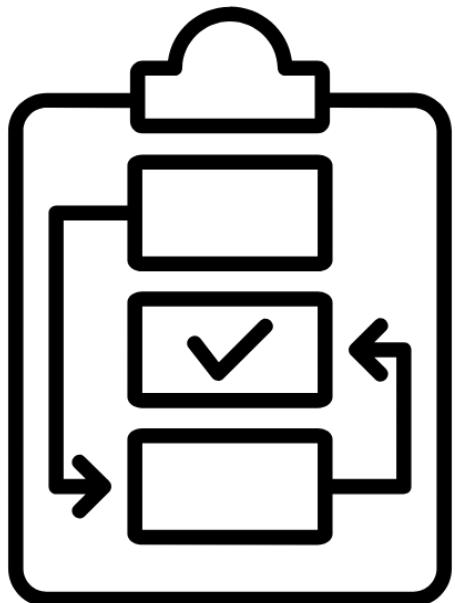
- More granular
- Provides detail on how it can be executed
- Each technique linked to a tactic

*Example:*

- Tactic: TA0002 - Execution
  - Technique: T1059 – Command and Scripting Interpreter
    - Sub-technique: [T1059.001 PowerShell](#)

# Procedures

---



- refer to the actual implementations or instances of techniques observed in real-world attacks

*Example:*

- Tactic: TA0002 - Execution
  - Technique: T1059 – Command and Scripting Interpreter
    - Sub-technique: T1059.001 PowerShell
      - Procedure: [G0073 APT19 used PowerShell commands to execute payloads](#)

# Mitigations

---



- Defensive Measures

*Example:*

- Mitigation: [M1038 Execution Prevention](#)

Use application control where appropriate. PowerShell Constrained Language mode can be used to restrict access to sensitive or otherwise dangerous language elements such as those used to execute arbitrary Windows APIs or files (e.g., Add-Type).

# Detections

---



- How to identify and detect techniques

*Example:*

- Detection: [DS0009 Execution Prevention](#)
- Data source: Process
- Data component: Process Creation

Monitor for newly executed processes that may abuse PowerShell commands and scripts ...

# Detections

## DETECTION: DS0009 Execution Prevention

Monitor for newly executed processes that may abuse PowerShell commands and scripts for execution. PowerShell is a scripting environment included with Windows that is used by both attackers and administrators. Execution of PowerShell scripts in most Windows versions is opaque and not typically secured by antivirus which makes using PowerShell an easy way to circumvent security measures. This analytic detects execution of PowerShell scripts.

Powershell can be used to hide monitored command line execution such as:

```
net usesc start
```

Note: - The logic for Analytic 1 is based around detecting on non-interactive Powershell sessions (i.e., those not launched by a user through explorer.exe). This may lead to false positives when used in a production environment, so we recommend tuning any such analytics by including additional logic (e.g., looking for suspicious parent processes) that helps filter such events.- The logic for Analytic 2 is based around detecting on remote Powershell sessions. PowerShell can be used over WinRM to remotely run commands on a host. When a remote PowerShell session starts, svchost.exe executes wsmprovhost.exe.

Analytic 1 - Non-interactive Powershell Sessions

```
(source="WinEventLog:Microsoft-Windows-Sysmon/Operational" EventCode="1") OR (source="WinEventLog:Security" EventCode="4688")  
Image="powershell.exe" AND ParentImage!="explorer.exe"
```

Analytic 2 - Remote Powershell Sessions

```
(source="WinEventLog:Microsoft-Windows-Sysmon/Operational" EventCode="1") OR (source="WinEventLog:Security" EventCode="4688")  
Image="wsmprovhost.exe" AND ParentImage="svchost.exe"
```

Analytic 3 - Powershell Execution

```
(source="WinEventLog:Microsoft-Windows-Sysmon/Operational" 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
```

# Key Features of Sigma Rules

---



- Sigma Rules
  - Platform Agnostic
  - Structured Format
  - Flexibility
  - Community Driven

*“Sigma is for logs, what YARA is for files.”*

```
1 title: Vshadow used to delete Volume Shadow Copies
2 id: 3a57232d-8d26-44f5-8fe6-b2f662513772
3 status: experimental
4 description: Detects the usage of the LOLBAS vshadow.exe to delete volume shadow copies.
5 references:
6   - https://lolbas-project.github.io/lolbas/OtherMSBinaries/Vshadow/
7   - https://learn.microsoft.com/en-us/windows/win32/vss/vshadow-tool-and-sample
8 author: Doug Metz '@dwmetz'
9 date: 2024/06/21
Add Tag
10 tags:
11   - attack.t1490
12 logsource:
13   category: process_creation
14   product: windows
Look Up
15 detection:
16   fileName:
17     winlog.event_data.OriginalFileName: vshadow.exe
18   delete_commands:
19     CommandLine|contains:
20       - vshadow -da
21       - vshadow -do
22       - vshadow *-dx
23       - vshadow *-ds
24   condition: fileName and delete_commands
25 falsepositives:
26   - Unknown
27 level: critical
28
```

# Sigma Rule Conversion

---



```
winlog.channel:Microsoft\Windows\Sysmon\Operational AND (winlog.event_id:1 AND  
(winlog.event_data.OriginalFileName:vshadow.exe AND (winlog.event_data.CommandLine:  
("*vshadow\ \-da*" OR "*vshadow\ \-do*" OR "*vshadow\ *\-\dx*" OR "*vshadow\ *\-\  
ds*"))))
```

Previously shown Sigma rule converted to Elastic query

## Event Viewer

File Action View Help



- > Security-Adminless
- > Security-Audit-Configuration-Client
- > Security-EnterpriseData-FileRevocationManager
- > Security-ExchangeActiveSyncProvisioning
- > Security-IdentityListener
- > Security-Isolation-BrokeringFileSystem
- > Security-Kerberos
- > Security-LessPrivilegedAppContainer
- > Security-Mitigations
- > Security-Netlogon
- > Security-SPP-UX-GenuineCenter-Logging
- > Security-SPP-UX-Notifications
- > Security-UserConsentVerifier
- > SecurityMitigationsBroker
- > SENSE
- > SenseiR
- > Service Reporting API
- > SettingSync
- > SettingSync-Azure
- > SettingSync-OneDrive
- > Shell-ConnectedAccountState
- > Shell-Core
- > ShellCommon-StartLayoutPopulation
- > SmartCard-Audit
- > SmartCard-DeviceEnum
- > SmartCard-TPM-VCard-Module
- > SmartScreen
- > SMBClient
- > SMBDirect
- > SMBServer
- > SMBWitnessClient
- > StateRepository
- > Storage-Tiering
- > StorageManagement
- > StorageManagement-PartUtil
- > StorageSettings
- > StorageSpaces-Api
- > StorageSpaces-Driver
- > StorageSpaces-ManagementAgent
- > StorageSpaces-Parser
- > StorageSpaces-SpaceManager
- > StorDiag
- > Store
- > StorPort
- > Storsvc
- > Sysmon
  - Operational
  - > SystemSettingsThreshold
  - > TaskScheduler
  - > TCPIP
  - > TenantRestrictions

## Operational Number of events: 54,004

Level	Date and Time	Source	Event ID	Task Ca...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:56 AM	Sysmon	3	Networ...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:48 AM	Sysmon	1	Proces...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:47 AM	Sysmon	1	Proces...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:47 AM	Sysmon	1	Proces...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:47 AM	Sysmon	1	Proces...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:47 AM	Sysmon	1	Proces...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:43 AM	Sysmon	3	Networ...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:38 AM	Sysmon	8	Create...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:38 AM	Sysmon	1	Proces...
<span style="color: #0070C0;">i</span> Information	8/7/2024 11:17:37 AM	Sysmon	1	Proces...

## Event 3, Sysmon

[General](#) [Details](#)

Network connection detected:  
 RuleName: Usermode  
 UtcTime: 2024-08-07 15:16:36.775  
 ProcessGuid: {04b30b05-b7b0-66b2-767d-000000008400}  
 ProcessId: 16260  
 Image: C:\Users\dwmetz\AppData\Local\Microsoft\OneDrive\OneDrive.exe  
 User: MORIARTY\jmoriarty  
 Protocol: tcp  
 Initiated: true  
 SourceIsIPv6: false  
 SourceIp: 192.168.4.88  
 SourceHostname: moriarty.bakerstreetlabs.net  
 SourcePort: 46122  
 SourcePortName: -  
 DestinationIsIPv6: false  
 DestinationIp: 52.168.117.175  
 DestinationHostname: -  
 DestinationPort: 443  
 DestinationPortName: https

Log Name: Microsoft-Windows-Sysmon/Operational  
 Source: Sysmon Logged: 8/7/2024 11:17:43 AM  
 Event ID: 3 Task Category: Network connection detected (rule: NetworkConnect)  
 Level: Information Keywords:  
 User: SYSTEM Computer: moriarty.bakerstreetlabs.net  
 OpCode: Info  
 More Information: [Event Log Online Help](#)

## Actions

## Operational

- Open Saved Log...
- Create Custom View...
- Import Custom View...
- Clear Log...
- Filter Current Log...
- Properties
- Disable Log
- Find...
- Save All Events As...
- Attach a Task To this Log...
- View

## Event 3, Sysmon

- Event Properties
- Attach Task To This Event...
- Copy
- Save Selected Events...
- Refresh
- Help

# Knowing Your Enemy with TTPs

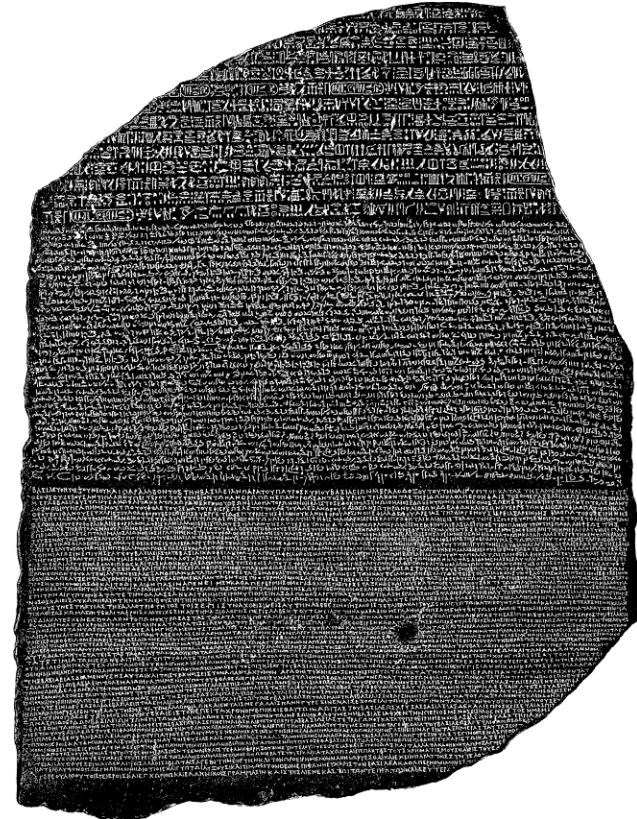
---



- Predictive Capabilities
- Tailored Defenses

# Advantages of a Common Security Language

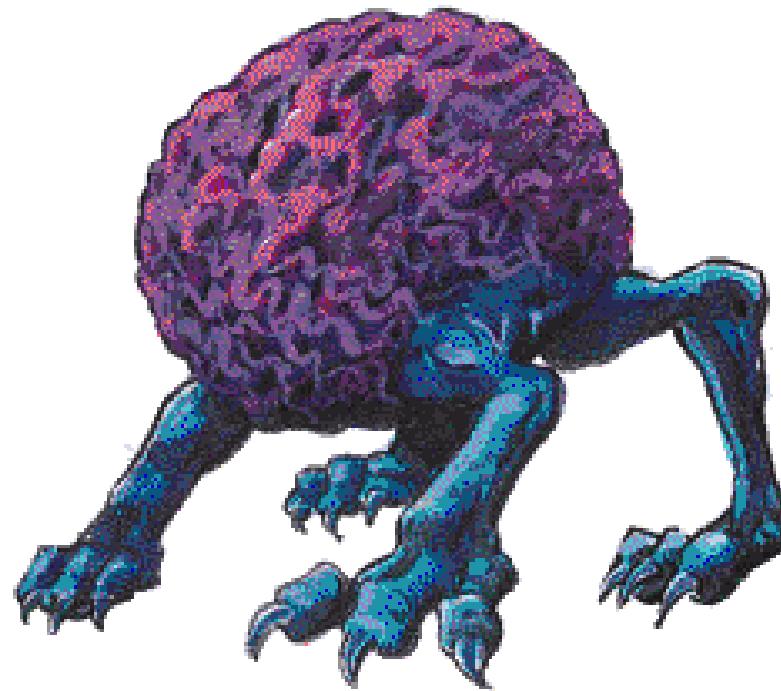
---



- Improved Collaboration
- Consistent Reporting
- Training and Awareness

# Improving Your Threat Intelligence

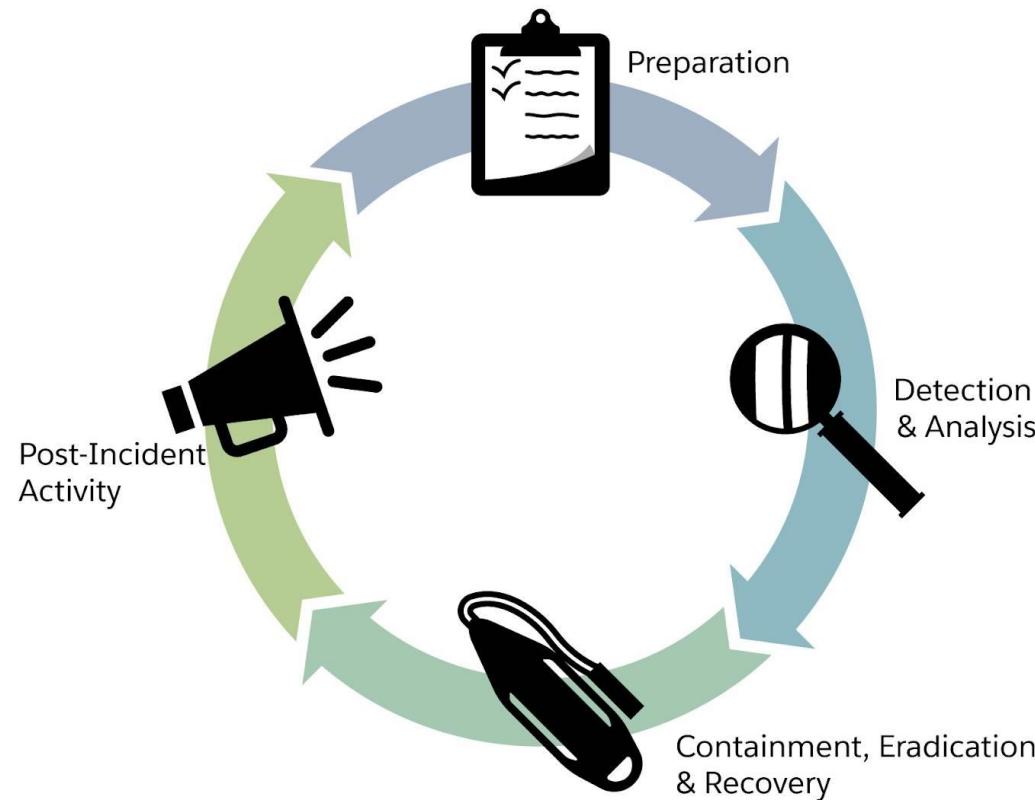
---



- Contextual Awareness
- Proactive Defense
- Enhanced Analysis

# How MITRE ATT&CK Supports Post-Incident Analysis

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- Root Cause Analysis
- Lessons Learned
- Improved Incident Response Plans

**MAGNET  
AXIOM CYBER™**

AND **MITRE  
ATT&CK™**

## CASE DETAILS

### EVIDENCE SOURCES

1

### PROCESSING DETAILS

Search archives and mobile backups

On

Decode file-based encryption

Add keywords to search

Extract text from files (OCR)

Calculate hashes and find matches

On

Analyze chats with Magnet.AI

Analyze pictures with Magnet.AI

Identify TTPs and malware

Find more artifacts

### ARTIFACT DETAILS

207

Mobile artifacts

Cloud artifacts

Computer artifacts

207 of 269

Vehicle artifacts

Parse and carve artifacts

Privileged content

Date range filter

### ANALYZE EVIDENCE

## IDENTIFY TTPS USING MITRE ATT&CK® FRAMEWORK

Axiom Process can use SIGMA rules to identify TTPs using the MITRE ATT&CK® framework. For a listing of the rules that can be applied, see [SIGMA rules GitHub](#).

**NOTE:** You must download the sigma\_core.zip prior to using SIGMA rules. For detailed steps on how to download the sigma\_core.zip, see [Download sigma\\_core.zip from SigmaHQ](#).

sigma\_core.zip - release r2024-05-13 - successfully applied. Click EDIT to provide an updated sigma\_core.zip. [EDIT](#)

Use SIGMA rules to identify TTPs

### YARA RULE SETS

Use YARA rules to identify matching files. You can import YARA rule sets from a folder containing .yar or .yara files, or you can manually add YARA rule sets.

**NOTE:** Running several YARA rule sets at once might increase scan times.

Reading YARA rule sets from 1 synced folder(s). [EDIT](#)

Search by name or source path...

[SELECT ALL](#)[ADD NEW RULE SET](#)[REFRESH](#)

Enabled	Rule set name	Source path	Source	Date created
<input type="checkbox"/>	Email_generic_phishing.yar	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA	User	7/17/2024 12:21:02 PM
<input type="checkbox"/>	Linux.Virus.Vityara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.Awfull.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.Cmay.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.DeadCode.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.Elerad.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.Greenp.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.Mocket.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Virus.Negt.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Trojan.CaddyWiper.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM
<input type="checkbox"/>	Win32.Trojan.Dridex.yara	C:\Program Files\Magnet Forensics\Magnet AXIOM\YARA\ReversingLabs-2022...	User	12/29/2022 10:22:21 AM

# Axiom Cyber and MITRE ATT&CK

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## **IDENTIFY TTPS USING MITRE ATT&CK® FRAMEWORK**

Axiom Process can use SIGMA rules to identify TTPs using the MITRE ATT&CK® framework. For a listing of the rules that can be applied, see [SIGMA rules GitHub](#).

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sigma\_core.zip - release r2024-05-13 - successfully applied. Click EDIT to provide an updated sigma\_core.zip. [EDIT](#)

Use SIGMA rules to identify TTPs



WEB RELATED 10

MEDIA 9

DOCUMENTS 3

OPERATING SYSTEM 37,579

CONNECTED DEVICES 12

MITRE ATT&amp;CK 2,498

TA0001 Initial Access 66

TA0002 Execution 328

TA0003 Persistence 115

TA0004 Privilege Escalation 738

TA0005 Defense Evasion 857

TA0006 Credential Access 325

TA0007 Discovery 8

TA0008 Lateral Movement 25

TA0011 Command and Control 28

TA0040 Impact 8

KEYWORD SNIPPETS 9,839

## MATCHING RESULTS (328 of 328)

Tactic	Technique	SIGMA rule title
TA0002 Execution	T1021.003 Remote Services: Distributed Component...	MMC20 Lateral Move
TA0002 Execution	T1047 Windows Management Instrumentation	Suspicious Process C...
TA0002 Execution	T1047 Windows Management Instrumentation	Suspicious Process C...
TA0002 Execution	T1047 Windows Management Instrumentation	Suspicious Microsoft
TA0002 Execution	T1047 Windows Management Instrumentation	Suspicious Microsoft
TA0002 Execution	T1047 Windows Management Instrumentation	Suspicious Microsoft
TA0002 Execution	T1053.005 Scheduled Task/Job: Scheduled Task	Suspicious Schtasks S...
TA0002 Execution	T1053.005 Scheduled Task/Job: Scheduled Task	Suspicious Schtasks S...
TA0002 Execution	T1055.012 Process Injection: Process Hollowing	HackTool - CACTUSTO...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	Windows Defender TI...
TA0002 Execution	T1059 Command and Scripting Interpreter	PowerShell Download...

## DETAILS

## ARTIFACT INFORMATION

Tactic TA0002 Execution

Technique T1053.005 Scheduled Task/Job: Scheduled Task

SIGMA rule title Suspicious Schtasks Schedule Types

SIGMA rule description Detects scheduled task creations or modification on a suspicious schedule type

SIGMA rule creation date 09/09/2022 00:00:00

SIGMA rule author Nasreddine Bencherchali (Nextron Systems)

SIGMA rule path C:\Users\dmetz\OneDrive - Magnet Forensics Inc\Desktop\AXIOM - MITRE\MITREATTACK\rules\windows\process\_creation\proc\_creation\_win\_schtasks\_schedule\_type.yml

Artifact type TA0002 Execution

Item ID 19855

Original artifact Windows Event Logs

**MATCHING RESULTS** (328 of 328)

Column view

Tactic	Technique	SIGMA rule title	SIGMA rule description
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution		Wusa.EXE Extracting Cab Files From Suspicious Paths	Detects usage of the "wusa.exe" (Windows Update S...
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution		Wusa.EXE Extracting Cab Files From Suspicious Paths	Detects usage of the "wusa.exe" (Windows Update S...
TA0002 Execution		Wusa.EXE Extracting Cab Files From Suspicious Paths	Detects usage of the "wusa.exe" (Windows Update S...
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059 Command and Scripting Interpreter	Parent in Public Folder Suspicious Process	This rule detects suspicious processes with parent i...
TA0002 Execution	T1564 Hide Artifacts	Parent in Public Folder Suspicious Process	This rule detects suspicious processes with parent i...
TA0002 Execution		Wusa.EXE Extracting Cab Files From Suspicious Paths	Detects usage of the "wusa.exe" (Windows Update S...
TA0002 Execution		Wusa.EXE Extracting Cab Files From Suspicious Paths	Detects usage of the "wusa.exe" (Windows Update S...
TA0002 Execution		Wusa.EXE Extracting Cab Files From Suspicious Paths	Detects usage of the "wusa.exe" (Windows Update S...
TA0002 Execution		Operator Bloopers Cobalt Strike Com...	
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Com...	
TA0002 Execution	T1059 Command and Scripting Interpreter	Parent in Public Folder Suspicious Pro...	
TA0002 Execution	T1564 Hide Artifacts	Parent in Public Folder Suspicious Pro...	
TA0002 Execution		Wusa.EXE Extracting Cab Files From S...	
TA0002 Execution		Operator Bloopers Cobalt Strike Com...	
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Com...	
TA0002 Execution		Wusa.EXE Extracting Cab Files From S...	
TA0002 Execution	T1059 Command and Scripting Interpreter	Parent in Public Folder Suspicious Pro...	
TA0002 Execution	T1564 Hide Artifacts	Parent in Public Folder Suspicious Pro...	
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution		PsExec Service Child Process Execution as LOCAL SY...	Detects suspicious launch of the PSEXESVC service o...
TA0002 Execution	T1053.005 Scheduled Task/Job: Scheduled Task	Suspicious Schtasks Schedule Types	Detects scheduled task creations or modification on...
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution		Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.
TA0002 Execution	T1059.003 Command and Scripting Interpreter: Win...	Operator Bloopers Cobalt Strike Commands	Detects use of Cobalt Strike commands accidentally.

TA0002 Execution

EVTX-Samples

## DETAILS

ARTIFACT INFORMATION

Tactic	<b>TA0002 Execution</b>
Technique	<b>T1053.005 Scheduled Task/Job: Scheduled Task</b>
SIGMA rule title	<b>Suspicious Schtasks Schedule Types</b>
SIGMA rule description	<b>Detects scheduled task creations or modification on a suspicious schedule type</b>
SIGMA rule creation date	<b>09/09/2022 00:00:00</b>
SIGMA rule author	<b>Nasreddine Bencherchali (Nextron Systems)</b>
SIGMA rule path	<b>C:\Users\dmetz\OneDrive - Magnet Forensics Inc\Desktop\AXIOM - MITRE\MITREATTACK\rules\windows\process_creation\proc_creation_win_schtasks_schedule_type.yml</b>
Artifact type	<b>TA0002 Execution</b>
Item ID	<b>19855</b>

Item ID 19855

## Original artifact

## Windows Event Logs



## EVIDENCE INFORMATION

MITRE ATT&CK®

```
title: Suspicious Schtasks Schedule Types
id: 24c8392b-aa3c-46b7-a545-43f71657fe98
related:
  - id: 7a02e22e-b885-4404-b38b-1ddc7e65258a
    type: similar
status: test
description: Detects scheduled task creations or
modification on a suspicious schedule type
```

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**TA0001 Initial Access**

**ARTIFACT INFORMATION**

Tactic	TA0001 Initial Access
Technique	T1566.001 Phishing: Spearphishing Attachment
SIGMA rule title	HTML Help HH.EXE Suspicious Child Process
SIGMA rule description	Detects a suspicious child process of a Microsoft HTML Help (HH.exe)
SIGMA rule path	C:\Users\dmetz\OneDrive - Magnet Forensics Inc\Desktop\AXIOM - MITRE\MITREATTACK\rules\windows\process_creation\proc_creation_win_hh_html_help_suspend_child_process.yml
Artifact	Windows Event Logs
Artifact ID	13308

**EVIDENCE INFORMATION**

Source	EVTX-Samples.zip\D\EVTX-ATTACK-SAMPLES\Execution\Sysmon_Exec_CompiledHTML.evt
Recovery method	Unknown
Deleted source	
Location	File Offset 10712

100%

DATA SOURCES

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ARTIFACTS (338)

## EXTERNAL FILES

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	SIGMA rule title Default RDP Port Changed to Non
	<b>TA0006 CREDENTIAL ACCESS</b>
	Tactic TA0006 Credential Access
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	SIGMA rule title External Remote SMB Logon from
	<b>TA0006 CREDENTIAL ACCESS</b>
	Tactic TA0006 Credential Access
	Technique T1078 Valid Accounts
	SIGMA rule title External Remote SMB Logon from
	<b>TA0006 CREDENTIAL ACCESS</b>
	Tactic TA0006 Credential Access
	Technique T1110 Brute Force
	SIGMA rule title External Remote SMB Logon from
	<b>TA0006 CREDENTIAL ACCESS</b>

# MAGNET FORENSICS®

## Speed is Power



# TRIAGE & BEYOND: HOW MAGNET FORENSICS POWERS INCIDENT RESPONSE

Resources:

## Free Tools

Magnet Response:

<https://www.magnetforensics.com/resources/magnet-response/>

Microsoft Sysmon:

<https://learn.microsoft.com/en-us/sysinternals/downloads/sysmon>

Sigma CLI: <https://github.com/SigmaHQ/sigma-cli>

Strings (Mac, Linux): *included in operating system*

Strings (Windows):

<https://learn.microsoft.com/en-us/sysinternals/downloads/strings>

VS Code Sigma Extension:

<https://marketplace.visualstudio.com/items?itemName=humpalum.sigma>

## PowerShell & Python

CyberPipe: <https://github.com/dwmetz/CyberPipe>

Defender Response PowerShell:

<https://github.com/MagnetForensics/Magnet-RESPONSE-PowerShell>

Ginsu: <https://github.com/dwmetz/ginsu>

Magnet Response PowerShell:

<https://github.com/MagnetForensics/Magnet-RESPONSE-PowerShell>

Strings2Yara: <https://github.com/dwmetz/Toolbox/blob/main/Strings2Yara.py>

## Repositories

Awesome YARA: <https://github.com/InQuest/awesome-yara>

Sigma Rules: <https://github.com/SigmaHQ/sigma/releases>

YARA-Forge: <https://yarahq.github.io>

## Products

Magnet Axiom Cyber:

<https://www.magnetforensics.com/products/magnet-axiom-cyber/>

Magnet Exhibit Builder:

<https://www.magnetforensics.com/blog/elevate-your-digital-forensics-reports-with-magnet-exhibit-builder/>

Magnet Nexus: <https://magnetnexus.com>

## References

Baker Street Forensics <https://bakerstreetforensics.com>

Cyber Unpacked: <https://www.magnetforensics.com/cyber-unpacked/>

HTCIA - High Tech Crime Investigators Association <https://www.htcia.org>

Magnet Response CLI Guide: [https://github.com/MagnetForensics/Magnet-RESPONSE-PowerShell/blob/main/Magnet\\_RESPONSE\\_CLI\\_Guide.pdf](https://github.com/MagnetForensics/Magnet-RESPONSE-PowerShell/blob/main/Magnet_RESPONSE_CLI_Guide.pdf)

MITRE ATT&CK: <https://attack.mitre.org>

Sigma Detection Format: <https://sigmahq.io>

YARA: <https://virustotal.github.io/yara>



# Thank You

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