



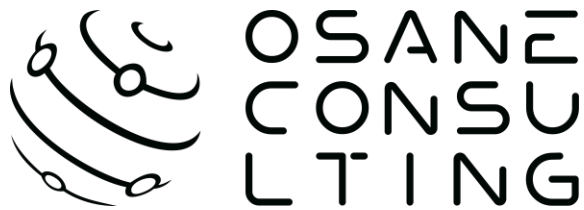
RED [S]TEAM

Diego León
Juan Antonio Calles



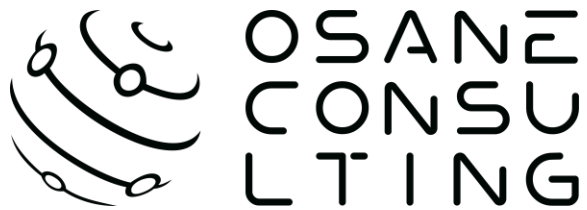
\$> whoami

- Diego León
- Grado en Informática y Postgrado en Ciberseguridad
- Responsable de Seguridad Ofensiva de ZEROLYNX



\$> whoami

- Juan Antonio Calles
- Doctor, Doble Postgrado e Ingeniero en Informática
- CEO de ZEROLYNX



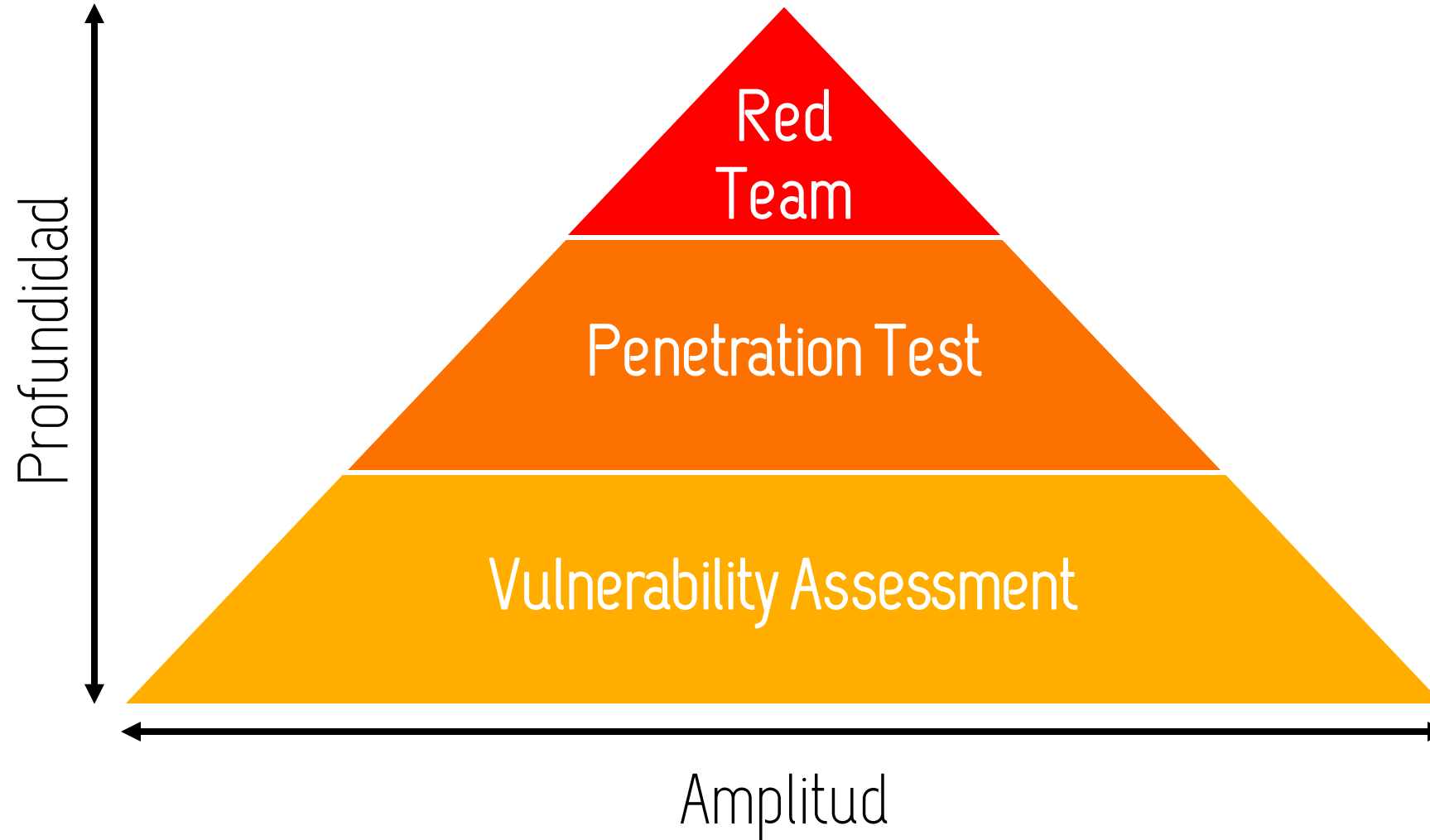
Índice de contenidos

1. Introducción
2. Un poquito de humo...
3. Monitorización & Detección
4. Compromiso Asumido
5. Tools
6. Red Teaming



Ethical Hacking services

¿Tiempo infinito?
¿Alcance?

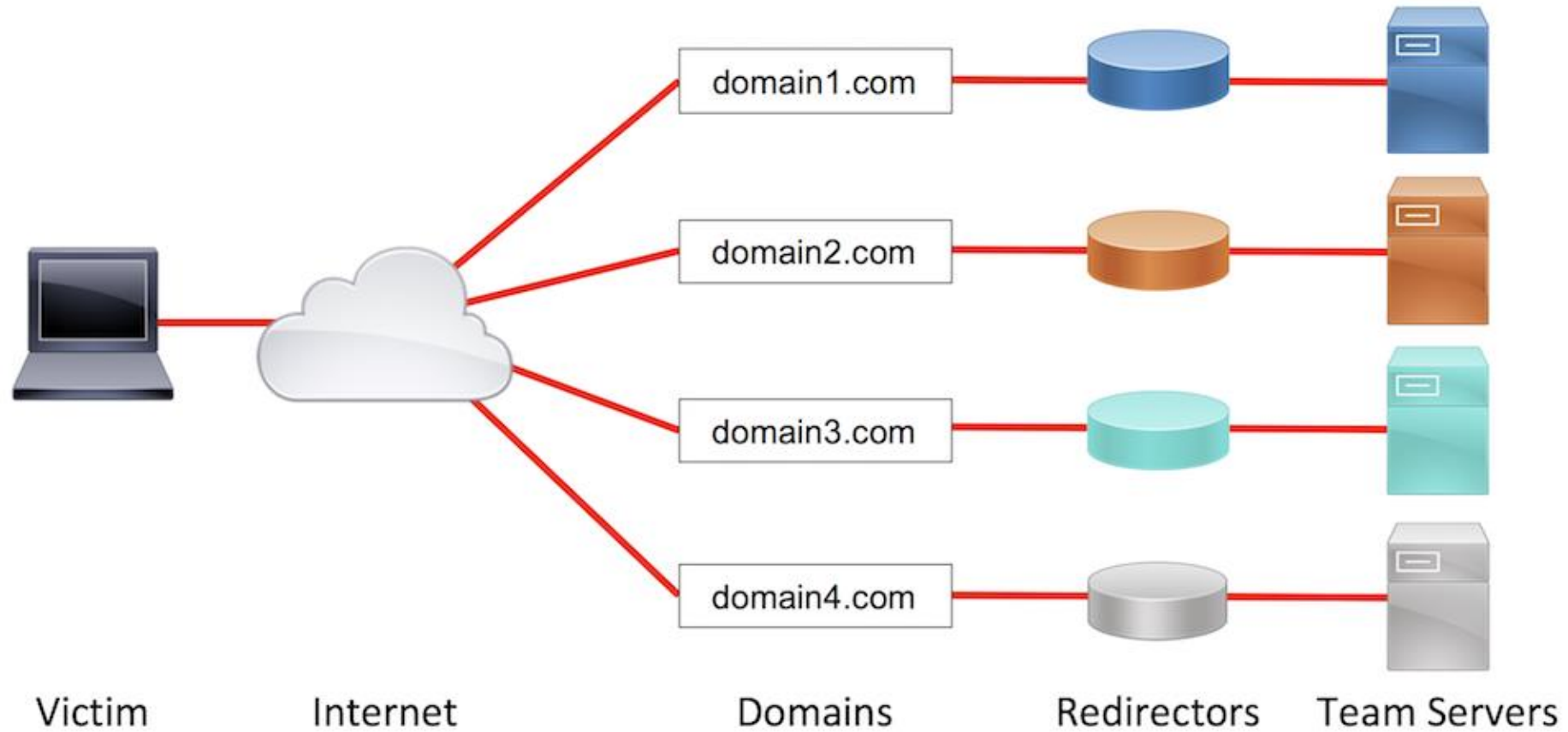


Índice de contenidos

1. Introducción
2. Un poquito de humo...
3. Monitorización & Detección
4. Compromiso Asumido
5. Tools
6. Red Teaming

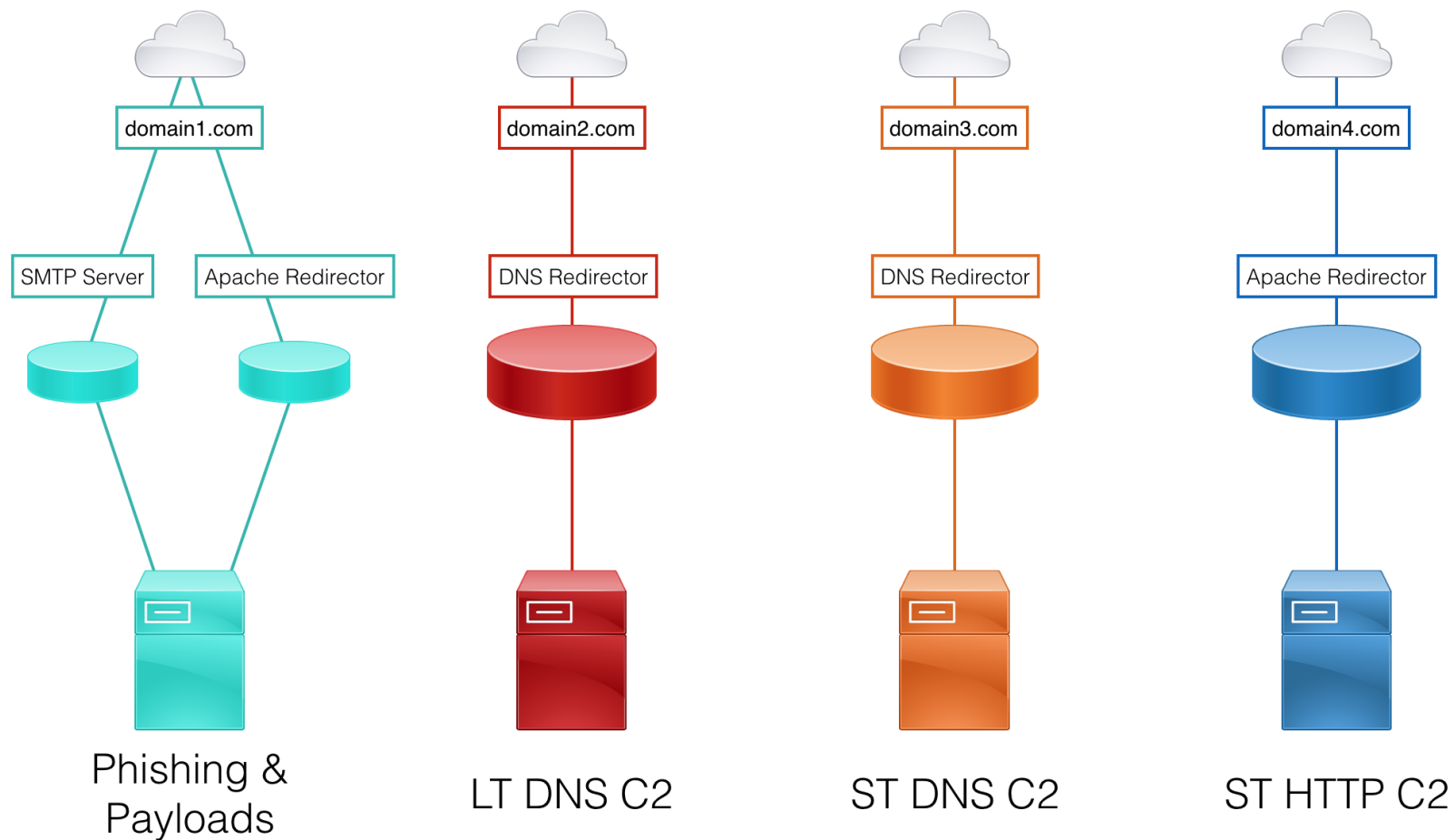


Smoke...



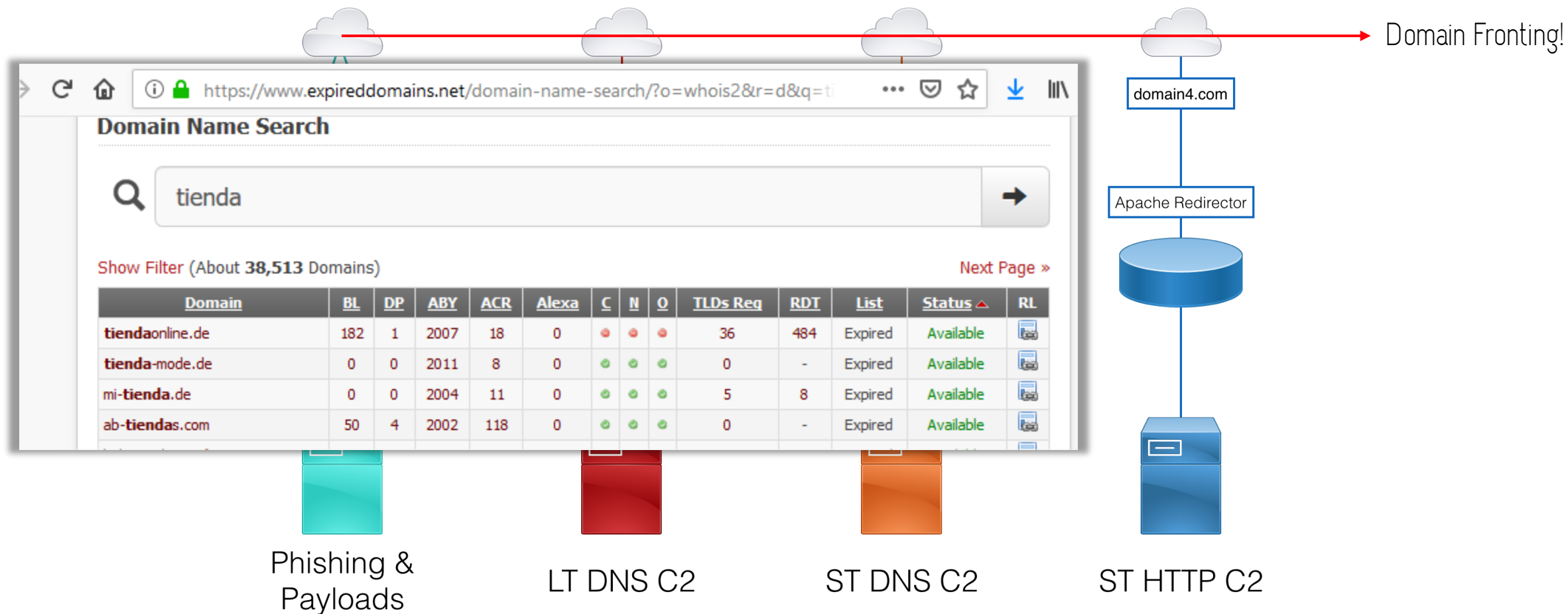
@Bluescreenofjeff (Jeff Dimmock's)

And more smoke...



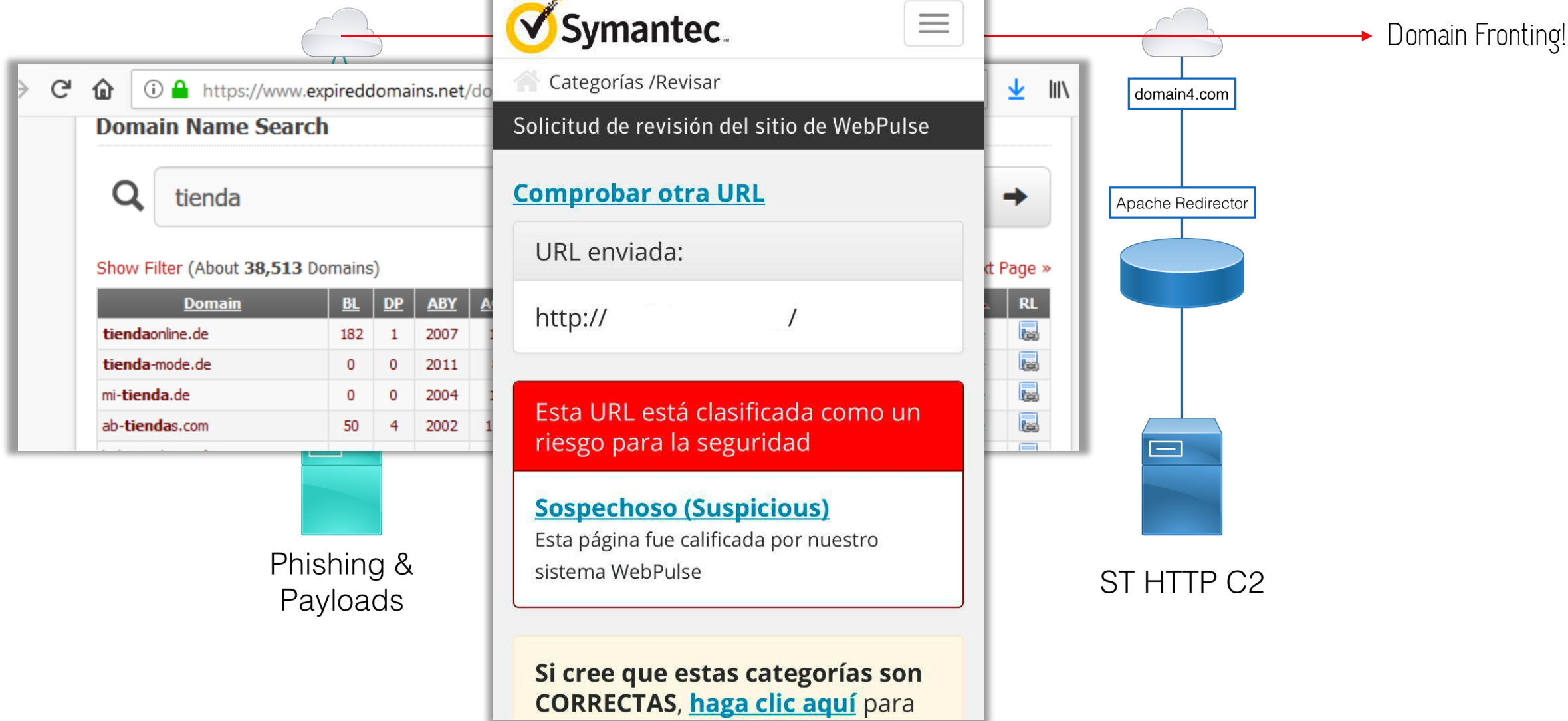
@Bluescreenofjeff (Jeff Dimmock's)

Moar...



@Bluescreenofjeff (Jeff Dimmock's)

Moar...



Moar...

Si cree que estas categorías son **CORRECTAS**, [haga clic aquí](#) para obtener más información sobre su política de acceso a Internet.
Si cree que estas categorías son **INCORRECTAS**, complete el formulario a continuación para que se revise la URL.

Servicio de filtrado:

Seleccione uno ▼

Requerido

Su categoría o categorías sugeridas ([leer descripciones](#)):

Seleccione una categoría ▼

Requerido

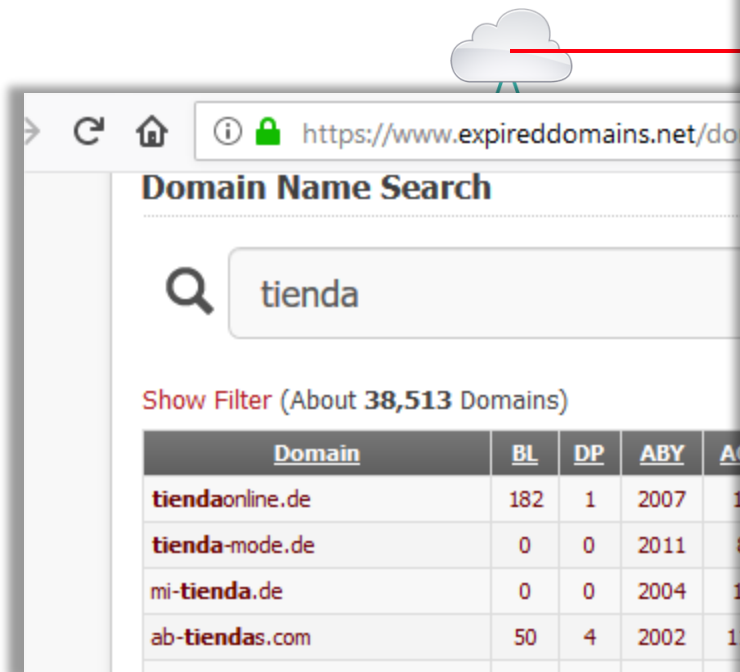
Seleccione una categoría ▼

☐ **Enviar los resultados de la revisión por correo electrónico**

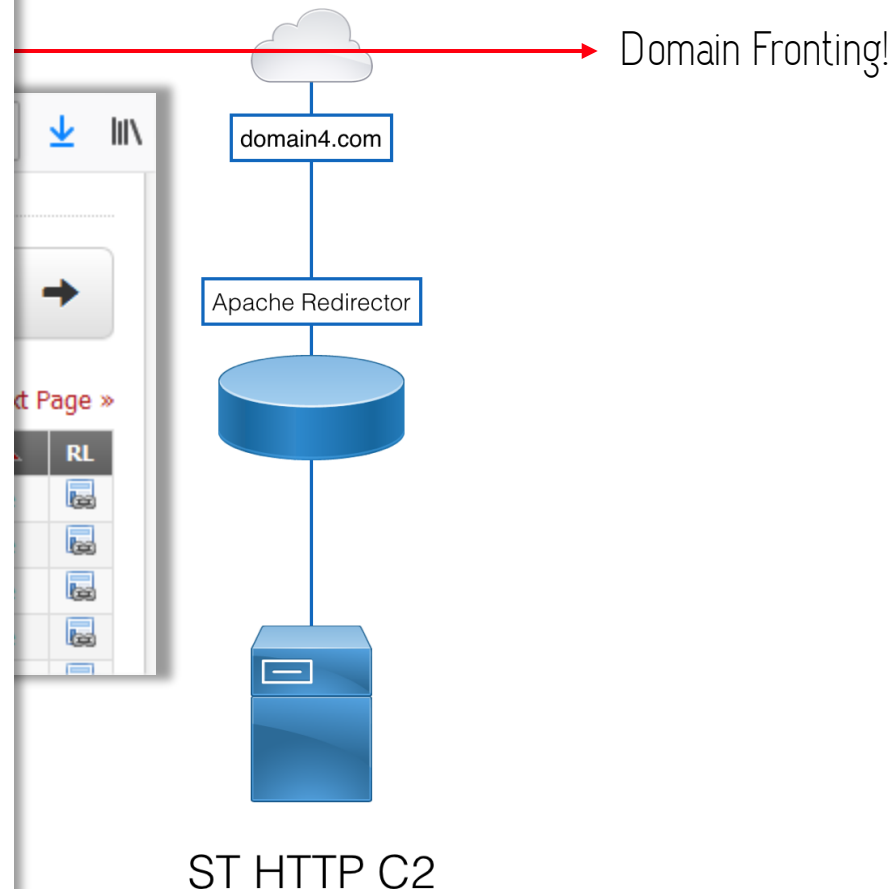
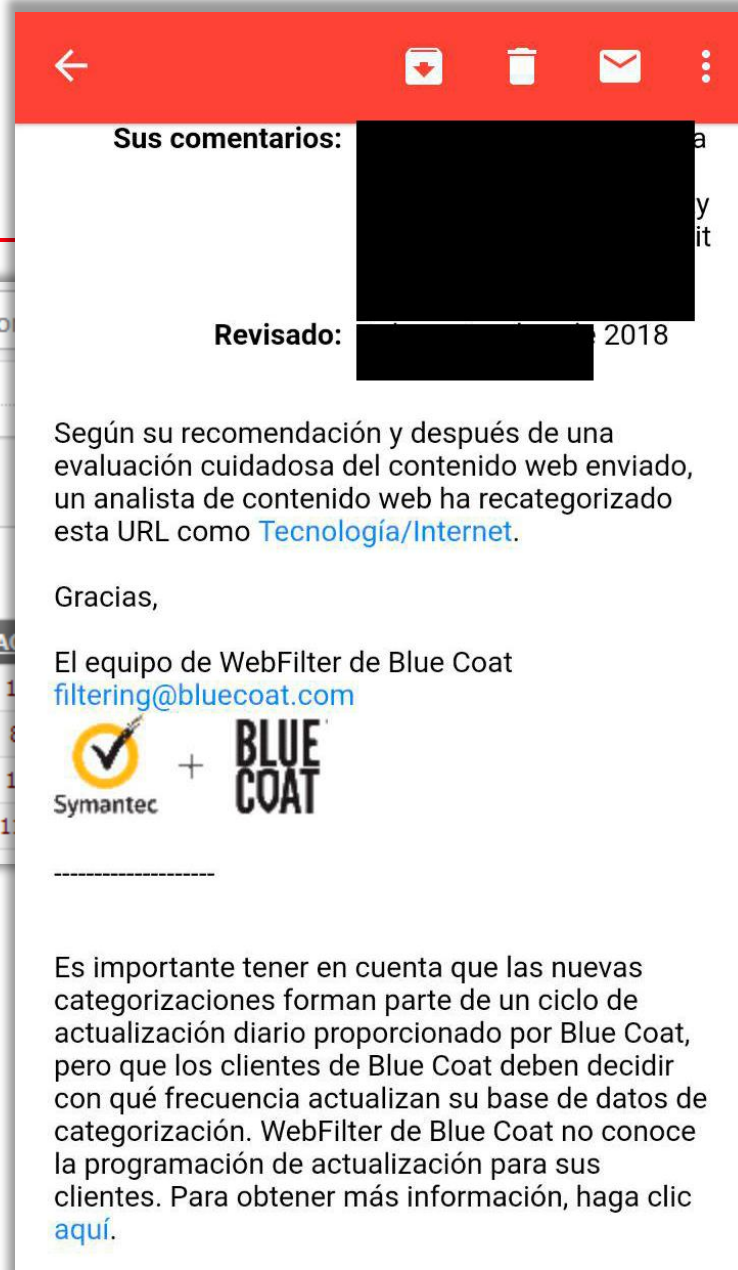
Comentarios y descripción del sitio (*proporcione tantos detalles como sea posible*):

Enviar para revisión

Moar...



Phishing &
Payloads



Moar...

Domain Name Search

tienda

Show Filter (About 38,513 Domains)

Domain	BL	DP	ABY	AC
tiendaonline.de	182	1	2007	18
tienda-mode.de	0	0	2011	8
mi-tienda.de	0	0	2004	11
ab-tiendas.com	50	4	2002	11

Phishing & Payloads

https://sitereview.bluecoat.com/#/ 2

Términos de servicio Español

Symantec

Categorías /Revisar

Solicitud de revisión del sitio de WebPulse

[Comprobar otra URL](#)

URL enviada:

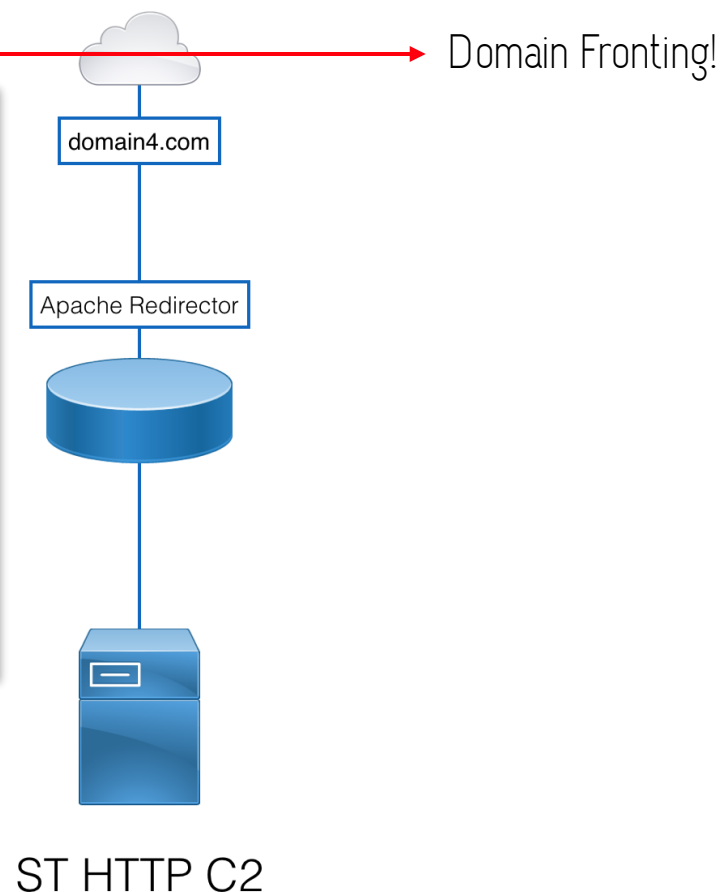
<http://>

Categorización actual:

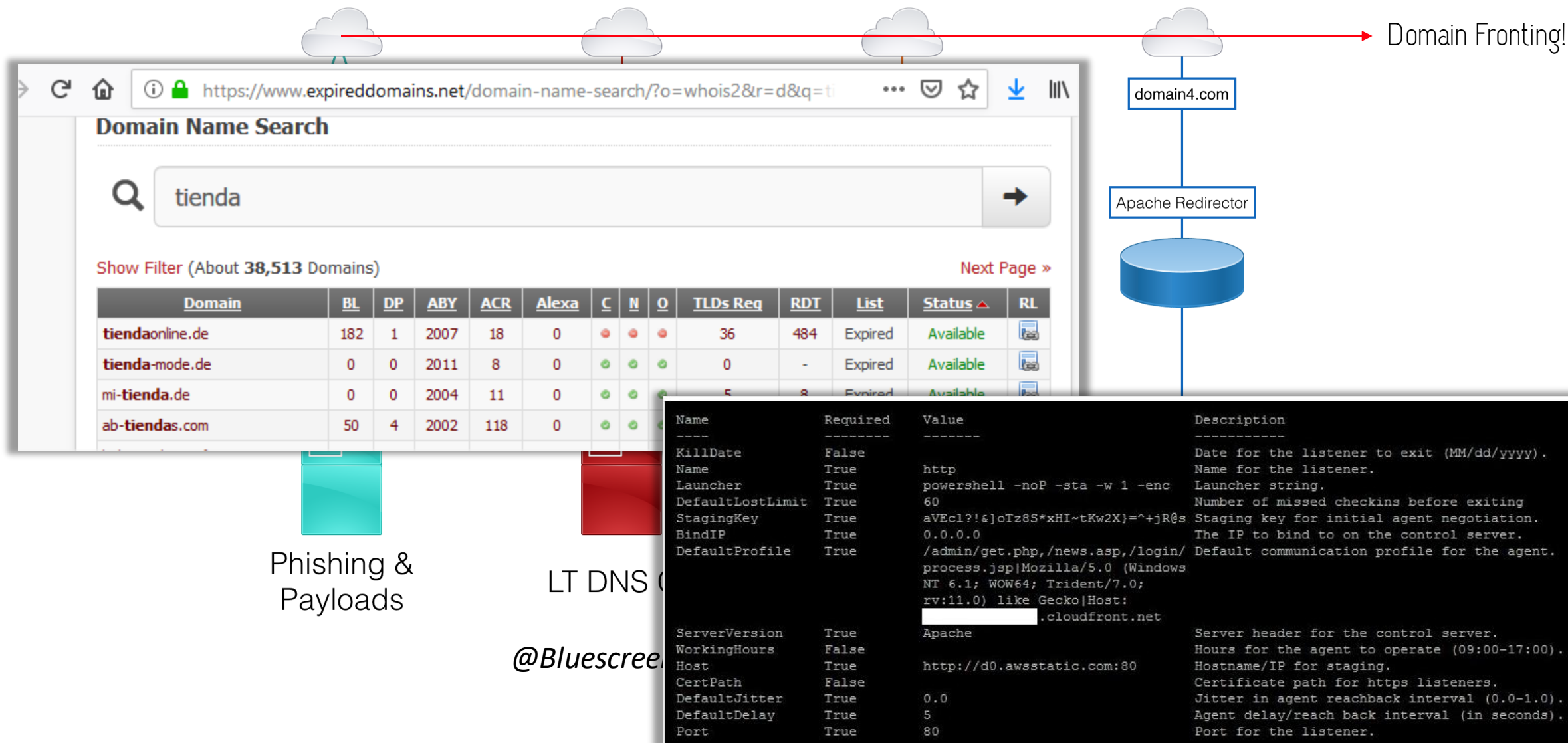
[Tecnología/Internet](#)
[\(Technology/Internet\)](#)

Última calificación/revisión: Invalid Date ?

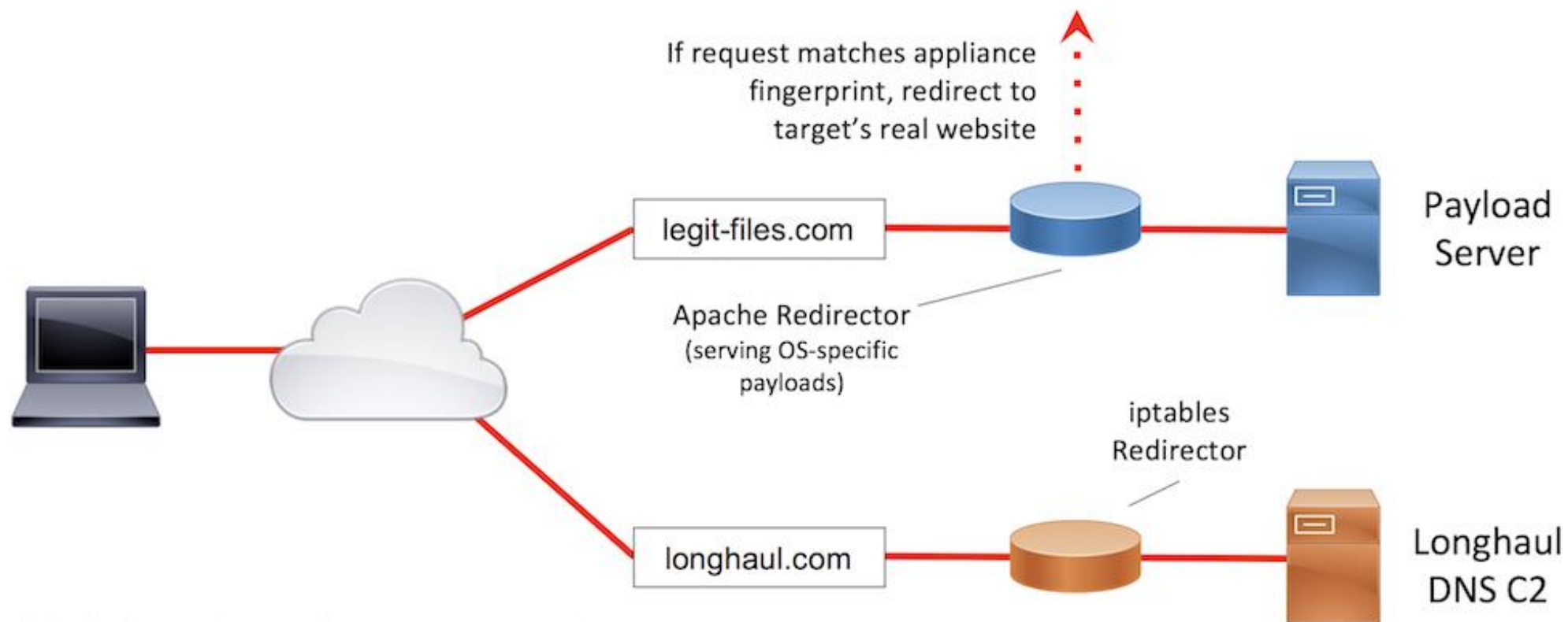
Si cree que estas categorías son **CORRECTAS**, [haga clic aquí](#) para obtener más información sobre su



Moar...



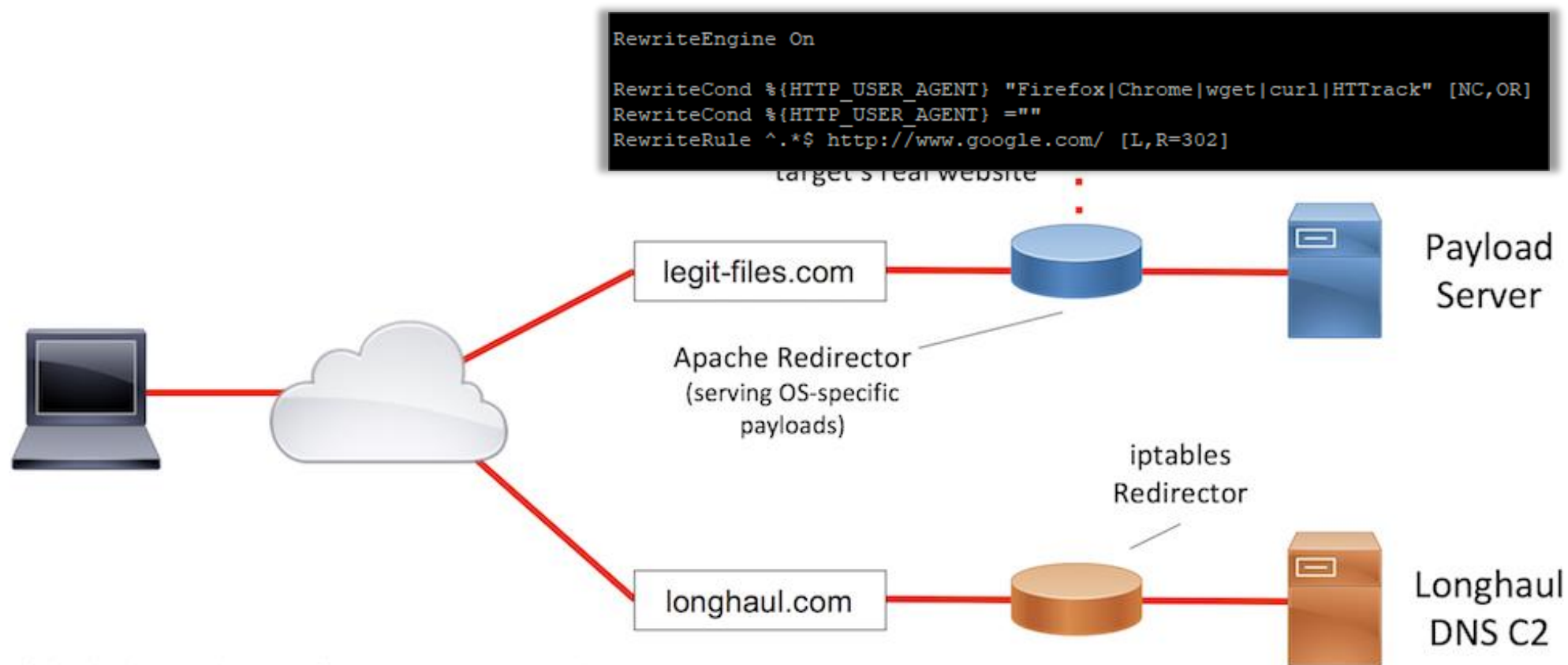
...plz stop.



**Shorthaul C2 and SMTP infrastructure not pictured*

@Bluescreenofjeff (Jeff Dimmock's)

...plz stop.



**Shorthaul C2 and SMTP infrastructure not pictured*

@Bluescreenofjeff (Jeff Dimmock's)

La dura realidad



Índice de contenidos

1. Introducción
2. Un poquito de humo...
3. Monitorización & Detección
4. Compromiso Asumido
5. Tools
6. Red Teaming





Seguridad Perimetral



Office 365



Proveedor_X
Proveedor_Y
Proveedor_Z

Seguridad Perimetral

Entorno hostil para el adversario



Índice de contenidos

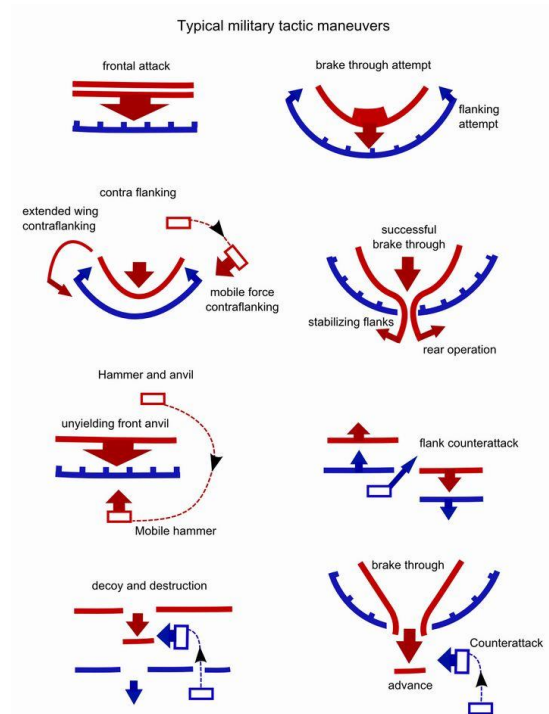
1. Introducción
2. Un poquito de humo...
3. Monitorización & Detección
4. Compromiso Asumido
5. Tools
6. Red Teaming



Simulación de Adversarios

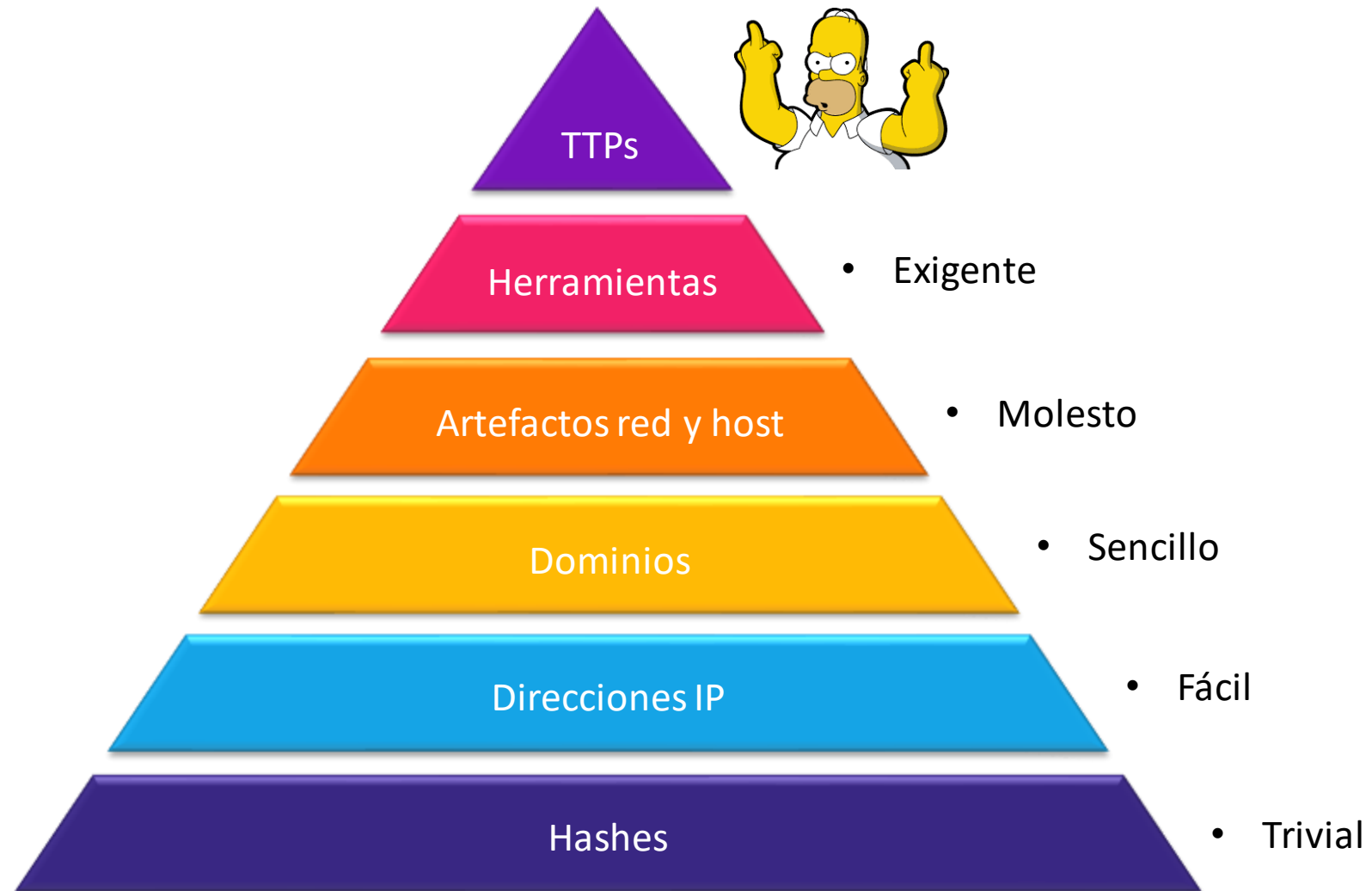


TTP: Tácticas, técnicas y procedimientos



Concepto de origen militar: modeliza el comportamiento del adversario

Pyramid Of Pain: ¿cómo dificultar el trabajo al enemigo?



MITRE ATT&CK: modela el comportamiento de adversarios

Incluye técnicas de las diferentes etapas de la cadena de ataque:
Acceso Inicial, Ejecución, Persistencia, Escalada de Privilegios, etc.

PRE-ATT&CK™

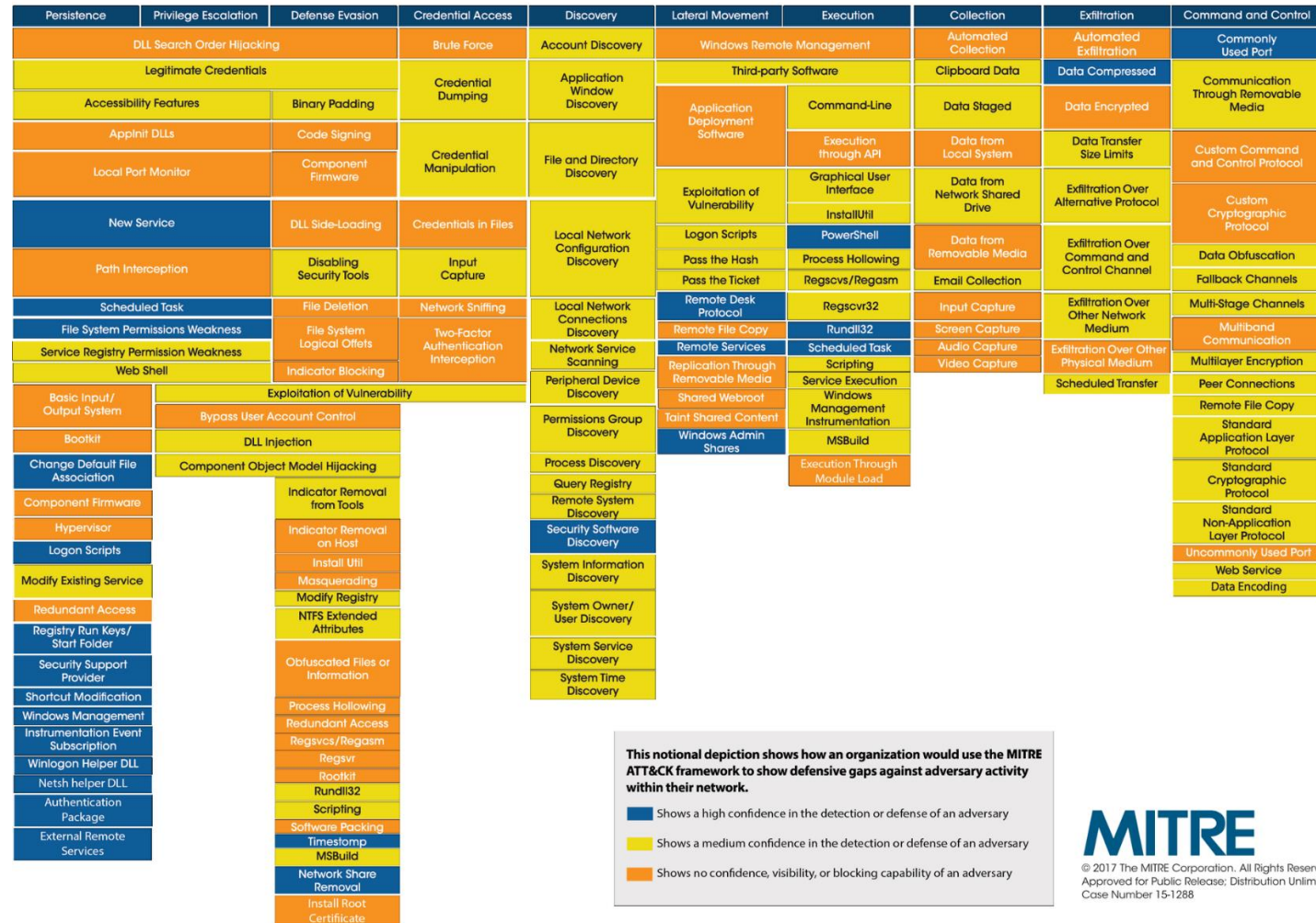
How is the adversary
targeting you?

ATT&CK™

Adversarial Tactics, Techniques
& Common Knowledge

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control
Drive-by Compromise	AppleScript	.bash_profile and .bashrc	Access Token Manipulation	Access Token Manipulation	Account Manipulation	Account Discovery	AppleScript	Audio Capture	Automated Exfiltration	Commonly Used Port
Exploit Public-Facing Application	CMSTP	Accessibility Features	Accessibility Features	BITS Jobs	Bash History	Application Window Discovery	Application Deployment Software	Automated Collection	Data Compressed	Communication Through Removable Media
Hardware Additions	Command-Line Interface	AppCert DLLs	AppCert DLLs	Binary Padding	Brute Force	Browser Bookmark Discovery	Distributed Component Object Model	Clipboard Data	Data Encrypted	Connection Proxy
Replication Through Removable Media	Control Panel Items	AppInit DLLs	AppInit DLLs	Bypass User Account Control	Credential Dumping	File and Directory Discovery	Exploitation of Remote Services	Data Staged	Data Transfer Size Limits	Custom Command and Control Protocol
Spearphishing Attachment	Dynamic Data Exchange	Application Shimming	Application Shimming	CMSTP	Credentials in Files	Network Service Scanning	Logon Scripts	Data from Information Repositories	Exfiltration Over Alternative Protocol	Custom Cryptographic Protocol

Heat Maps: Permite identificar las fortalezas y debilidades de nuestra organización



Heat Maps: permiten simular adversarios concretos

Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Execution	Collection	Exfiltration	Command and Control
Accessibility Features	Access Token Manipulation	Access Token Manipulation	Account Manipulation	Account Discovery	Application Deployment Software	Application Shimming	Audio Capture	Automated Exfiltration	Commonly Used Port
Applnit DLLs	Accessibility Features	Binary Padding	Brute Force	Application Window Discovery	Exploitation of Vulnerability	Command-Line Interface	Automated Collection	Data Compressed	Communication Through Removable Media
Application Shimming	Applnit DLLs	Bypass User Account Control	Create Account	File and Directory Discovery	Logon Scripts	Execution through API	Clipboard Data	Data Encrypted	Connection Proxy
Component Object Model Hijacking	Application Shimming	Code Signing	Credential Dumping	Network Service Scanning	Pass the Hash	Execution through Module Load	Data Staged	Data Transfer Size Limits	Custom Command and Control Protocol
DLL Search Order Hijacking	Bypass User Account Control	Component Firmware	Credentials in Files	Network Share Discovery	Pass the Ticket	Graphical User Interface	Data from Local System	Exfiltration Over Alternative Protocol	Custom Cryptographic Protocol
External Remote Services	DLL Injection	Component Object Model Hijacking	Exploitation of Vulnerability	Peripheral Device Discovery	Remote Desktop Protocol	InstallUtil	Data from Network Shared Drive	Exfiltration Over Command and Control Channel	Data Encoding
File System Permissions Weakness	DLL Search Order Hijacking	DLL Injection	Input Capture	Permission Groups Discovery	Remote File Copy	PowerShell	Data from Removable Media	Exfiltration Over Other Network Medium	Data Obfuscation
Hidden Files and Directories	Exploitation of Vulnerability	DLL Search Order Hijacking	Network Sniffing	Process Discovery	Remote Services	Process Hollowing	Email Collection	Exfiltration Over Physical Medium	Fallback Channels
Hypervisor	File System Permissions Weakness	Disabling Security Tools	Private Keys	Query Registry	Replication Through Removable Media	Regsvcs/Regasm	Input Capture	Scheduled Transfer	Multi-Stage Channels
Local Port Monitor	Local Port Monitor	Exploitation of Vulnerability	Two-Factor Authentication Interception	Remote System Discovery	Shared Webroot	Regsvr32	Screen Capture		Multiband Communication
Logon Scripts	New Service	File Deletion		Security Software Discovery	Taint Shared Content	Rundll32	Video Capture		Multilayer Encryption
Modify Existing Service	Path Interception	File System Logical Offsets		System Information Discovery	Third-party Software	Scheduled Task			Remote File Copy
New Service	Scheduled Task	Hidden Files and Directories		System Network Configuration Discovery	Windows Admin Shares	Scripting			Standard Application Layer Protocol
Redundant Access	Service Registry Permissions Weakness	Regsvcs/Regasm		System Network Connections Discovery	Windows Remote Management	Service Execution			Standard Cryptographic Protocol
Registry Run Keys / Start Folder	Valid Accounts	Regsvr32		System Owner/User Discovery		Third-party Software			Standard Non-Application Layer Protocol
Scheduled Task	Web Shell	Rootkit		System Service Discovery		Trusted Developer Utilities			Uncommonly Used Port
Shortcut Modification		Rundll32				Windows Remote Management			
System Firmware		Scripting							
Valid Accounts		Software Packing							
Web Shell		Timestamp							
Windows Management Instrumentation Event Subscription		Trusted Developer Utilities							
Winlogon Helper DLL		Valid Accounts							

CrowdStrike Falcon-to-ATT&CK Mapping – colored cells considered relevant for Gothic Panda/APT3:
Gray – not tested; Green – tested, detected; Yellow – tested, detection possible; Red – capability gaps

Índice de contenidos

1. Introducción
2. Un poquito de humo...
3. Monitorización & Detección
4. Compromiso Asumido
5. Tools
6. Red Teaming



Tools of the trade

CALDERA Threat Networks Operations Debug

Script Editor Settings admin (Admin)

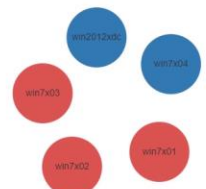
Operation Overview

Status: **running** Phase: **operation** Action: **execution**

Operation: test operation
Start Time: 11/30/2017, 8:38:57 PM
Compromised Hosts: 3

Adversary: test adversary
Starting Host: win7x01
Compromised Creds: 1

Operation Graph



Operation Details

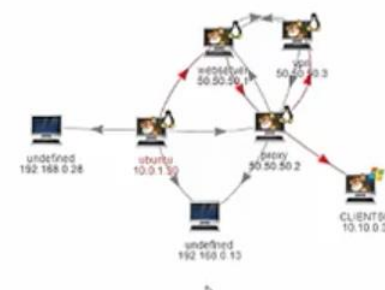
Cancel Operation

Steps Jobs Artifacts Cleanup Log BSF

- 1 Enumerating all computers in the domain
- 2 Running mimikatz to dump credentials on win7x01.mountainpeak.local
- 3 Enumerating the Windows and DNS information of this domain
- 4 Enumerating the Administrators group of win2012x06.mountainpeak.local
- 5 Enumerating the Administrators group of win7x03.mountainpeak.local
- 6 Enumerating the Administrators group of win7x01.mountainpeak.local
- 7 Enumerating the Administrators group of win7x02.mountainpeak.local
- 8 Mounting win7x02.mountainpeak.local's C\$ network share on win7x01.mountainpeak.local
- 9 Copying an implant from win7x01.mountainpeak.local to win7x02.mountainpeak.local
- 10 Starting a remote process on win7x02.mountainpeak.local using WMI
- 11 Running mimikatz to dump credentials on win7x02.mountainpeak.local
- 12 Mounting win7x03.mountainpeak.local's C\$ network share on win7x02.mountainpeak.local
- 13 Copying an implant from win7x02.mountainpeak.local to win7x03.mountainpeak.local
- 14 Creating a remote process on win7x03.mountainpeak.local using WMI

Monkey Island Admin

192.168.0.28 monkeyisland-1.gc.guardicore.com:5000/admin/index.html



Map Legend

- red arrow - exploit
- blue arrow - tunnel
- gray arrow - scan
- red label - patient zero

Monkey Details

proxy

Monkey not selected

Monkey Config

General Config

Load Update

New Monkeys Edit JSON

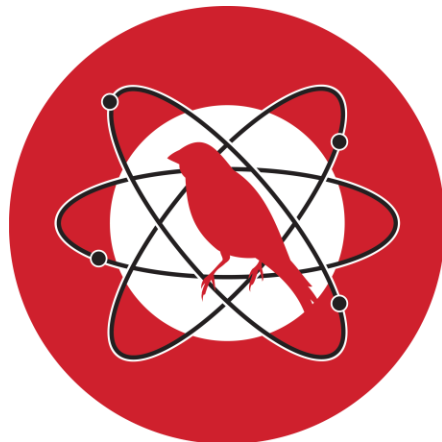
Test Management

Run Monkey on Island Kill All

Telemetry Feed

Show 10 entries Search:

Time	Type	Data
2016-08-04 03:42:09.881000+00:00	scan	[{"machine": {"ip_addr": "50.50.50.1", "default_server": null, "monkey_exe": null, "os": "Ubuntu-14.04", "type": "linux", "default_tunnel": null, "services": {"tcp-22": {"banner": "SSH-2.0-OpenSSH_7.2p2 Ubuntu-14.04.1", "name": "ssh", "cred": {}}, "scanner": {"tcp-scanner": {}}}}]
2016-08-04 03:42:15.724000+00:00	exploit	[{"machine": {"ip_addr": "50.50.50.1", "default_server": "50.50.50.105009", "monkey_exe": "monkey-krux-64", "os": "Ubuntu-14.04", "type": "linux", "default_tunnel": "50.50.50.10-49668", "services": {"tcp-22": {"banner": "SSH-2.0-OpenSSH_7.2p2 Ubuntu-14.04.1", "name": "ssh", "cred": {}}}}]

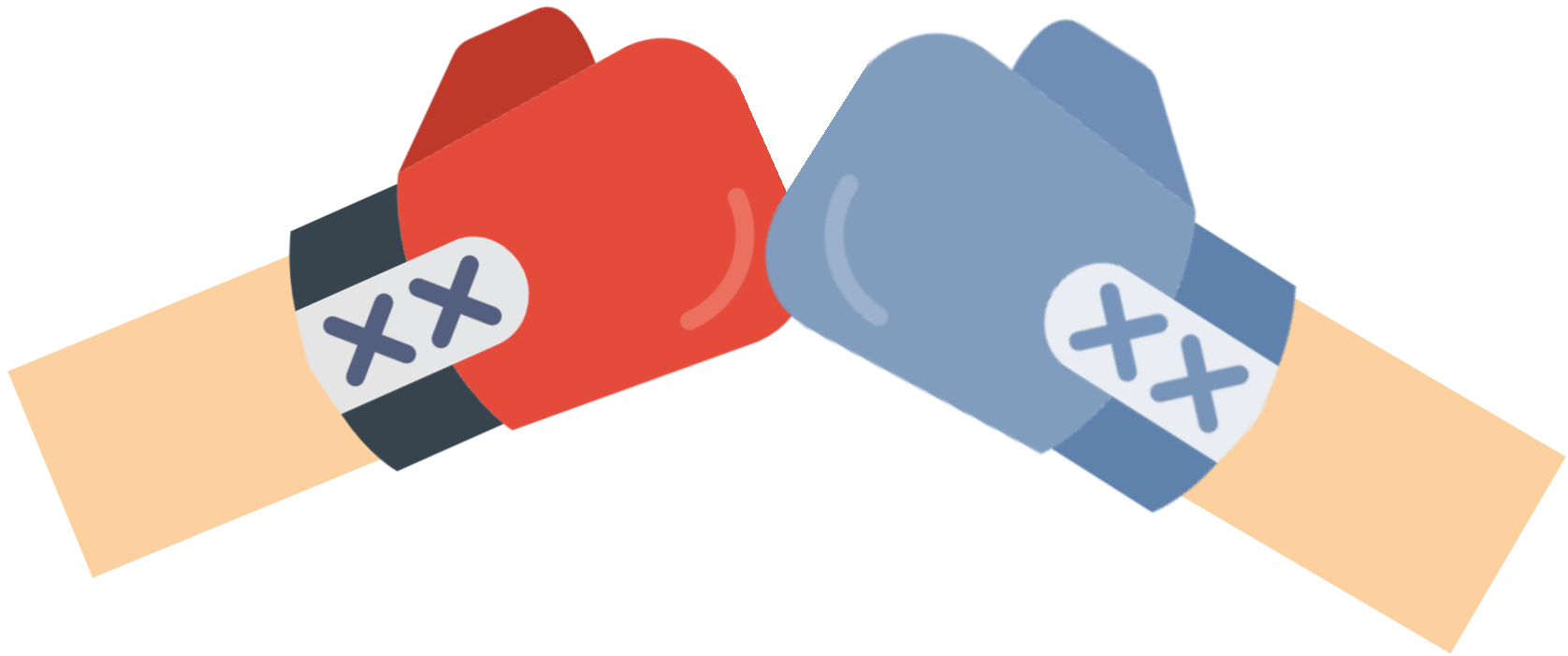


Índice de contenidos

1. Introducción
2. Un poquito de humo...
3. Monitorización & Detección
4. Compromiso Asumido
5. Tools
6. Red Teaming



Red Teaming




```
root@kali:~/Downloads/arethesebad# python arethesebad.py test/
```



Contacto



jcalles@zerolynx.com

dleon@zerolynx.com

info@zerolynx.com

[@jantonioCalles](#)

[@león_krav](#)

[@ZeroLynxOficial](#)

www.zerolynx.com



www.github.com/zerolynx



www.facebook.com/zerolynx



www.linkedin.com/company/zerolynx



[@ZeroLynxOficial](#)



[ZeroLynx Oficial](#)



blog.zerolynx.com

