#WEBINARSUNIA

# Ciberseguridad para profesionales online

Ponente:
Mar Cabra (@cabralens)

Webinars sobre TICs y herramientas de la web social para innovar Programa de Formación de Profesorado 2019-20
Área de Innovación (@uniainnova). Sede Tecnológica de Málaga. Universidad Internacional de Andalucía

# ¿Quién soy yo?

- Co-fundadora OdiseIA
- Junta directiva Global Editors Network; Consejo Asesor Compromiso Empresarial y The Bureau Local
- Ex jefa unidad datos, Consorcio Internacional de Periodistas de Investigación (ICIJ): pesca, tejidos humanos, paraísos fiscales (Papeles de Panamá y Paraíso)
- Ex vicepresidenta grupo español OKFN
- Ex directora de Fundación Ciudadana Civio
- Ex laSexta Noticias, CNN+ y otros
- Premio Pulitzer 2017, Data Journalism Awards 2015+2016, Premio Larra 2012 y +

# Aviso

Lo que voy a compartir son herramientas útiles que he ido investigando y encontrando en el camino como periodista de investigación.

No soy hacker ni me dedico a la ciberseguridad.

**The NSA files**

Glenn Greenwald on security and liberty

# Revealed: how US and UK spy agencies defeat internet privacy and security

- **NSA and GCHQ unlock encryption used to protect emails, banking and medical records**
- **$250m-a-year US program works covertly with tech companies to insert weaknesses into products**
- **Security experts say programs 'undermine the fabric of the internet'**

- **Q&A: submit your questions for our privacy experts**

**James Ball, Julian Borger** *and* **Glenn Greenwald**

Fri 6 Sep 2013 11.24 BST



▲ Through covert partnerships with tech companies, the spy agencies have inserted secret vulnerabilities into encryption software. Photograph: Kacper Pempel/Reuters

# ¿Tapaste ya la cámara de tu ordenador?

# Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach

**Whistleblower describes how firm linked to former Trump adviser Steve Bannon compiled user data to target American voters**

- **'I made Steve Bannon's psychological warfare tool': meet the data war whistleblower**
- **Mark Zuckerberg breaks silence on Cambridge Analytica**


▲ Cambridge Analytica whistleblower: 'We spent $1m harvesting millions of Facebook profiles' - video

# La polémica con FaceApp reabre el debate sobre la seguridad de los datos personales

- La popular «app» que envejece el rostro no es inofensiva: vulnera la privacidad de quien la descarga. La empresa dueña dice borrar las imágenes a las 48 horas pero, pese a que no es la única que solicita acceso a información personal, la polémica ha servido para recordar la importancia de la protección de datos


Imagen de Cristiano Ronaldo con el filtro de envejecimiento de FaceApp



J.M. Sánchez · SEGUIR Rodrigo Alonso · SEGUIR

Actualizado 30/07/2019 08:34h

# Contenidos I

1. Cómo evaluar los riesgos
2. El rival más débil: el password
3. Chatea seguro con tu móvil

# Contenidos II

# 1. Cómo evaluar los riesgos

# ¿Quién es tu “enemigo”?
# ¿Cuál es la amenaza?
# ¿Quién es el dueño de los datos?

Post con preguntas que debes hacerte.
Y este otro también.

# ¿Código abierto o cerrado?

**Open-source** = todo el mundo puede chequear el código y ver fallos

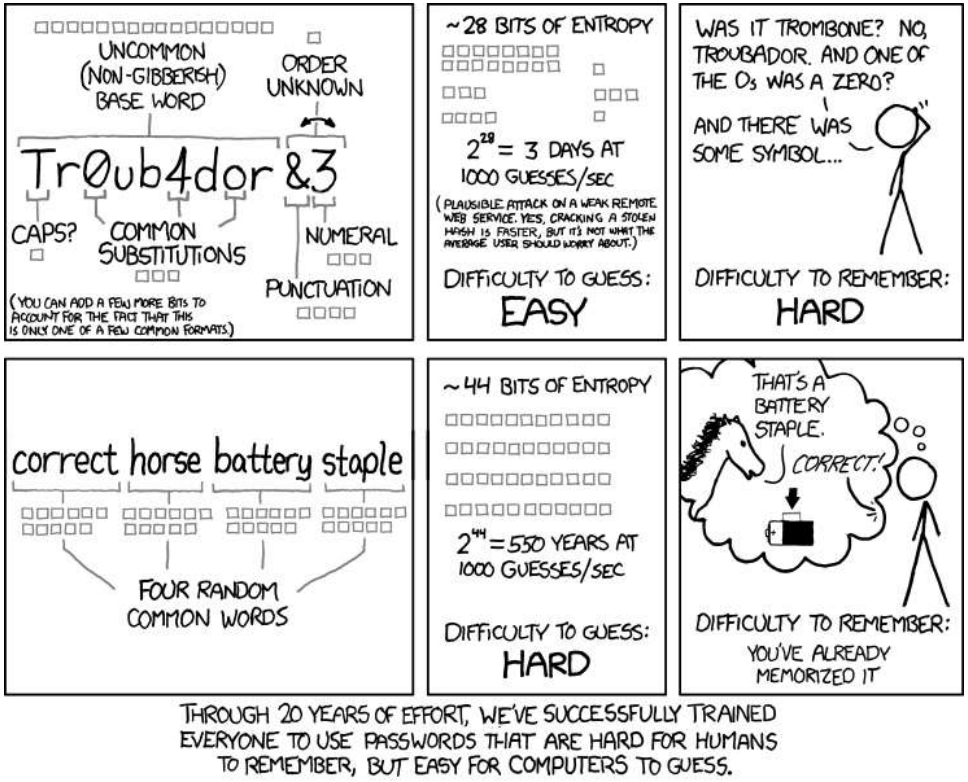
**Software propietario** = solo la compañía conoce el código

**¿Dónde se guardan los datos?**
**¿Los dan a las autoridades?**

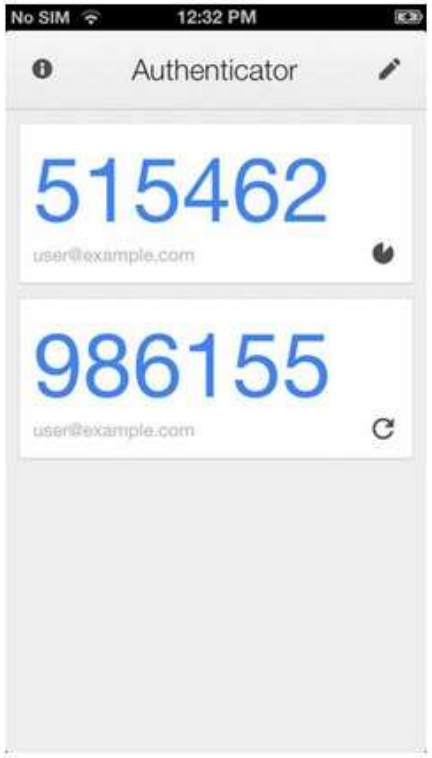
# 2. El rival más débil: el password

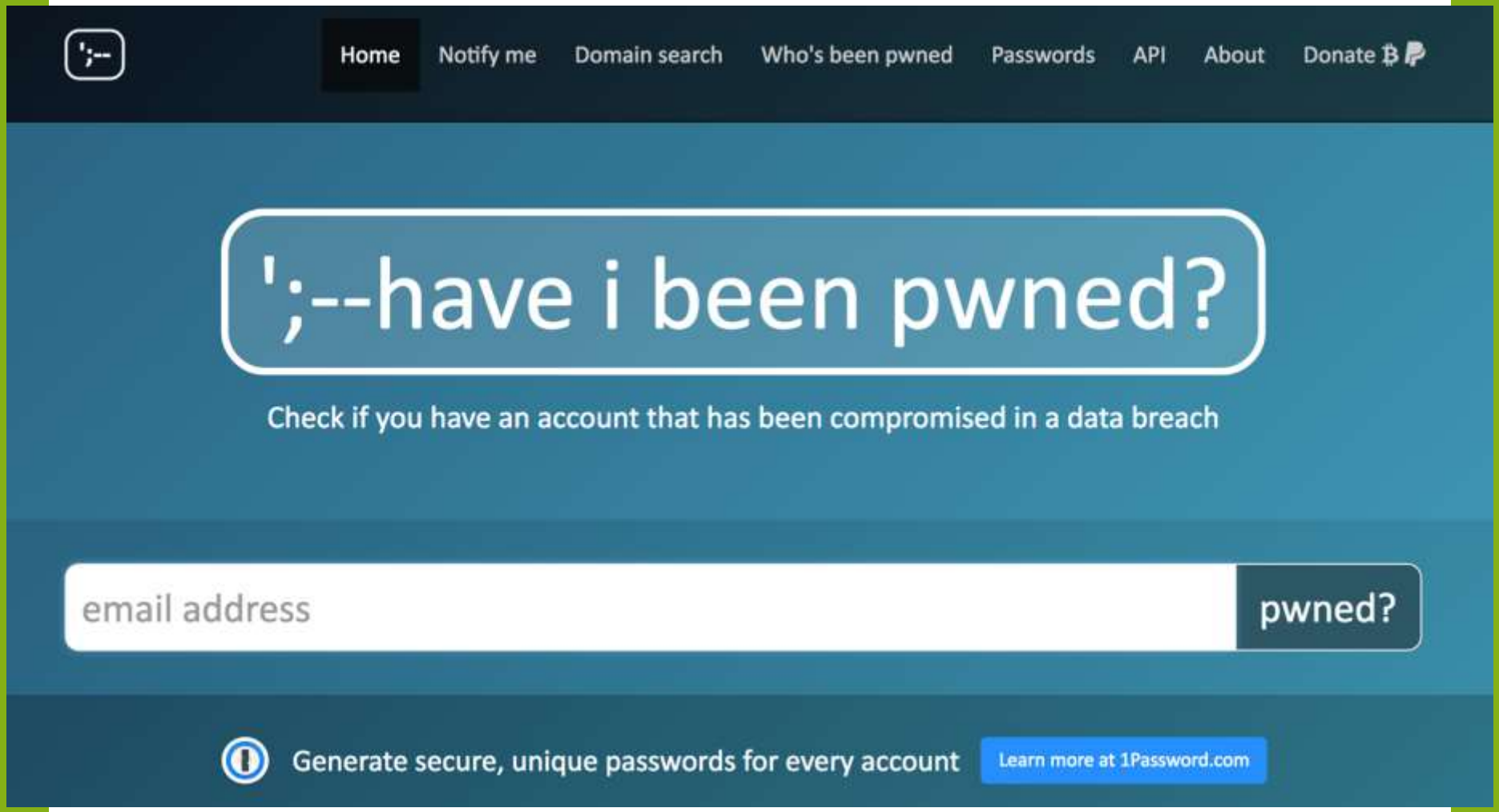
# Más que un password

**Passphrase** = password más largo, más fácil de recordar si es una frase



**Verificación en dos pasos (two-step authentication)** = password/passphrase y autenticación por segundo dispositivo
(pej- Google Authenticator o en Gmail, Facebook...)




Home
Notify me
Domain search
Who's been pwned
Passwords
API
About
Donate
';--have i been pwned?
Check if you have an account that has been compromised in a data breach
email address
pwned?
Generate secure, unique passwords for every account
Learn more at 1Password.com

# Gestores de passwords

- Keepass
- Lastpass

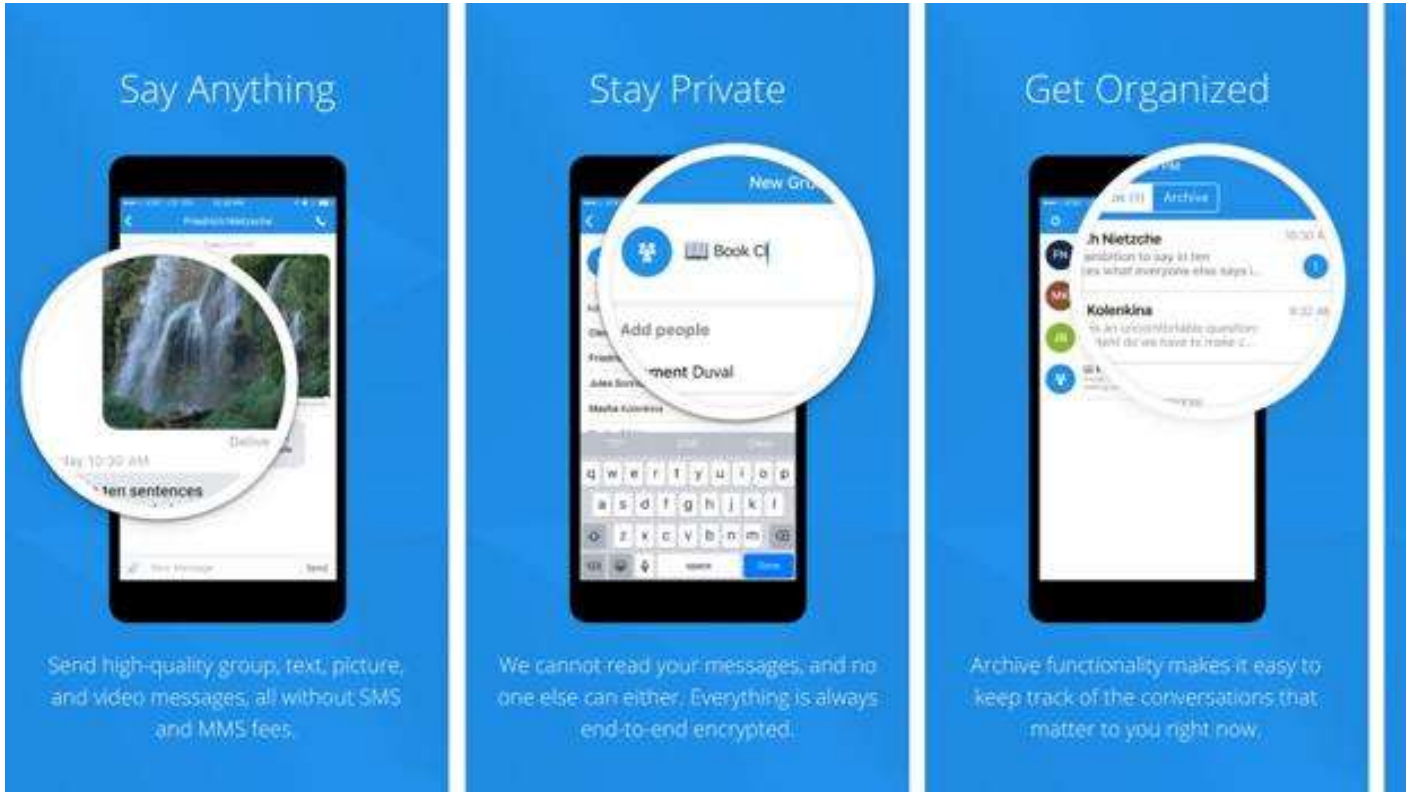
Y luego están las llaves físicas, como YubiKey

# 3. Chatea seguro con tu móvil

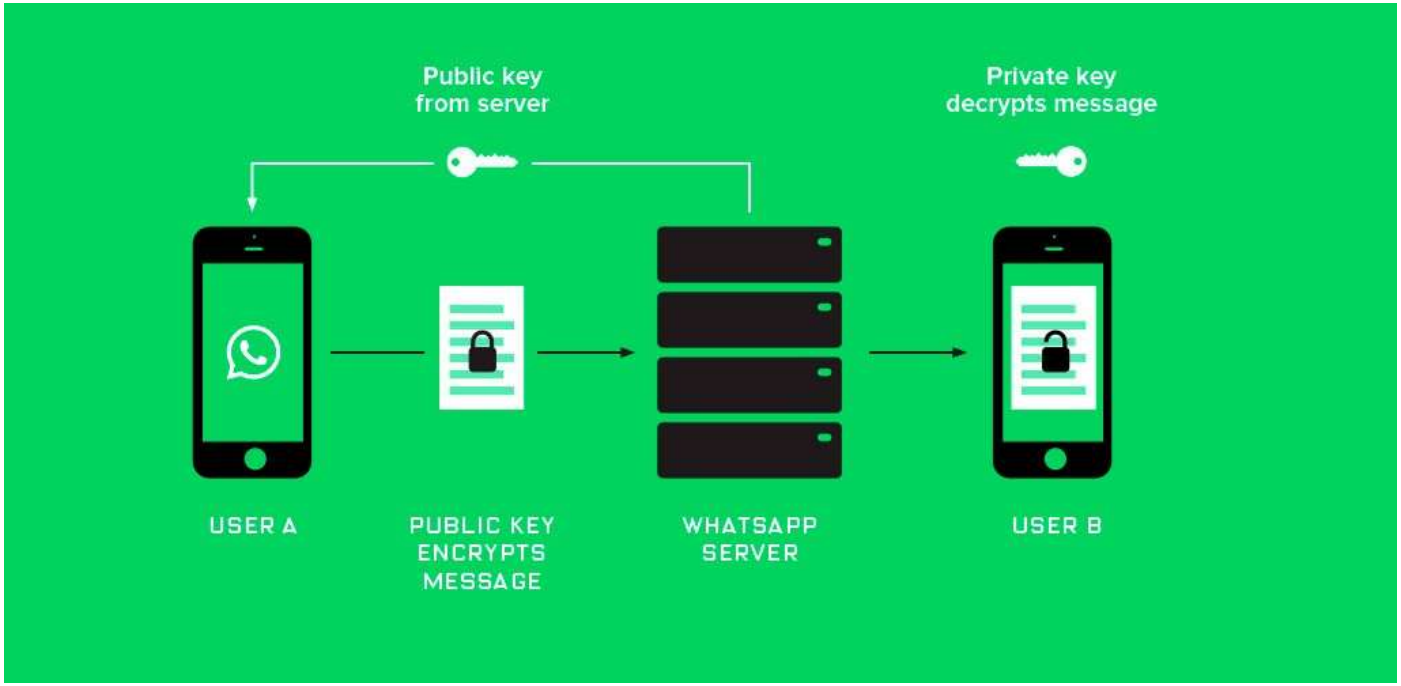
# Encriptación extremo a extremo

*(End-to-end encryption)*

# Signal


Say Anything
Send high-quality group, text, picture, and video messages, all without SMS and MMS fees.
Stay Private
Add people
We cannot read your messages, and no one else can either. Everything is always end-to-end encrypted.
Get Organized
Archive
Kolenkina
Archive functionality makes it easy to keep track of the conversations that matter to you right now.

# Whatsapp facebook




Fuente

# 4. Que no te lean los correos

# Email encriptado (muy fácil)

Hushmail

peerio

Tutanota®

# PGP *(pretty good privacy)*

**Emilia Diaz Struck** <diazs_emilia@yahoo.com> 13/11/17

para Cecile, Delphine, mi, Miguel, Rigoberto, Pierre


-----BEGIN PGP MESSAGE-----
Comment: GPGTools - https://gpgtools.org

hQIOA97vz9aLMRdREAf9GYVTRIwYNigiHXXoIOZakIFUG/7z0Zb0WdYAFqEMg8WO
PEAbUgmUlGgGuqTge0PHb3Z39QnJvBg2zpDX+3b+KSO+KoBP70l3VdZqF3qQf3O8
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Q4UCDANLzGGaB8GwYgEQAJqDwNCF4LvYvHGunSVd7iXZE9UijfytlWYAFm+N6VvS
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YHHLnks4KLvxShlkfDytbCVV/vNx8Hr0tnhY+FUE+wYo8YHEScl0O6OZySfNq7bN
kqMcS56pNiam/yP3m16qVvVYog4abljEG+PPd/Tf+P3mOvx/Hss4rNM+yHAv5t6n
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dgY7X2ascf7CVoblO1saJbHui9CXoowl7Y0e9A1D7tAvmgDzhJ3RO8X+noNaTo3s
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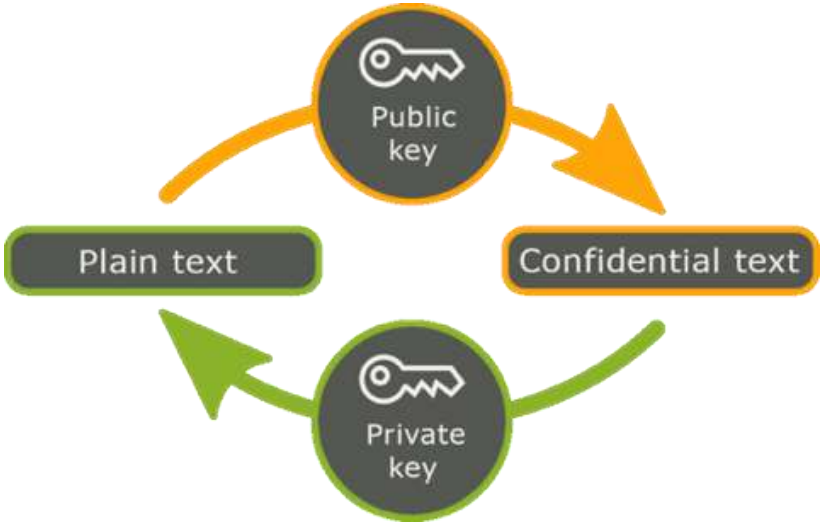
# ¿Cómo funciona? (I)


Fuente de foto

# ¿Cómo funciona? (II)

**Public key (llave pública)** = la llave que compartes. Y puedes poner en servidores.

**Private key (llave privada)** = solo para ti, la tienes que copiar en varios ordenadores




Fuente foto.
También puedes ver este vídeo

# Llave pública de PGP

```
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: GnuPG/MacGPG2 v2.0.19 (Darwin)
Comment: GPGTools - http://gpgtools.org

mQENBFHQousBCADDnSp+LotafjEd+oKgm+XOOGcWYL/keuAwfyMQ9M4MX9yW36Y4
Kl1z179iK838+1F70hRqeUL9SbkxvWreZrm0beTwGXtMyInA8PjE1Yw2jdTAQ/lk
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NCGscM+sSZDgUbd7ZxdoBJ3aKIJsr3iTWLFvLVNF60BbvNYWw63e8VEKtluxE4iy
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NgjQUM0rXI80p5i+UPNSyrXbVVGNZDiNl5wywJMt52t5+/7X6XImJIATudek5Jwj
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=zCCt
-----END PGP PUBLIC KEY BLOCK-----
```
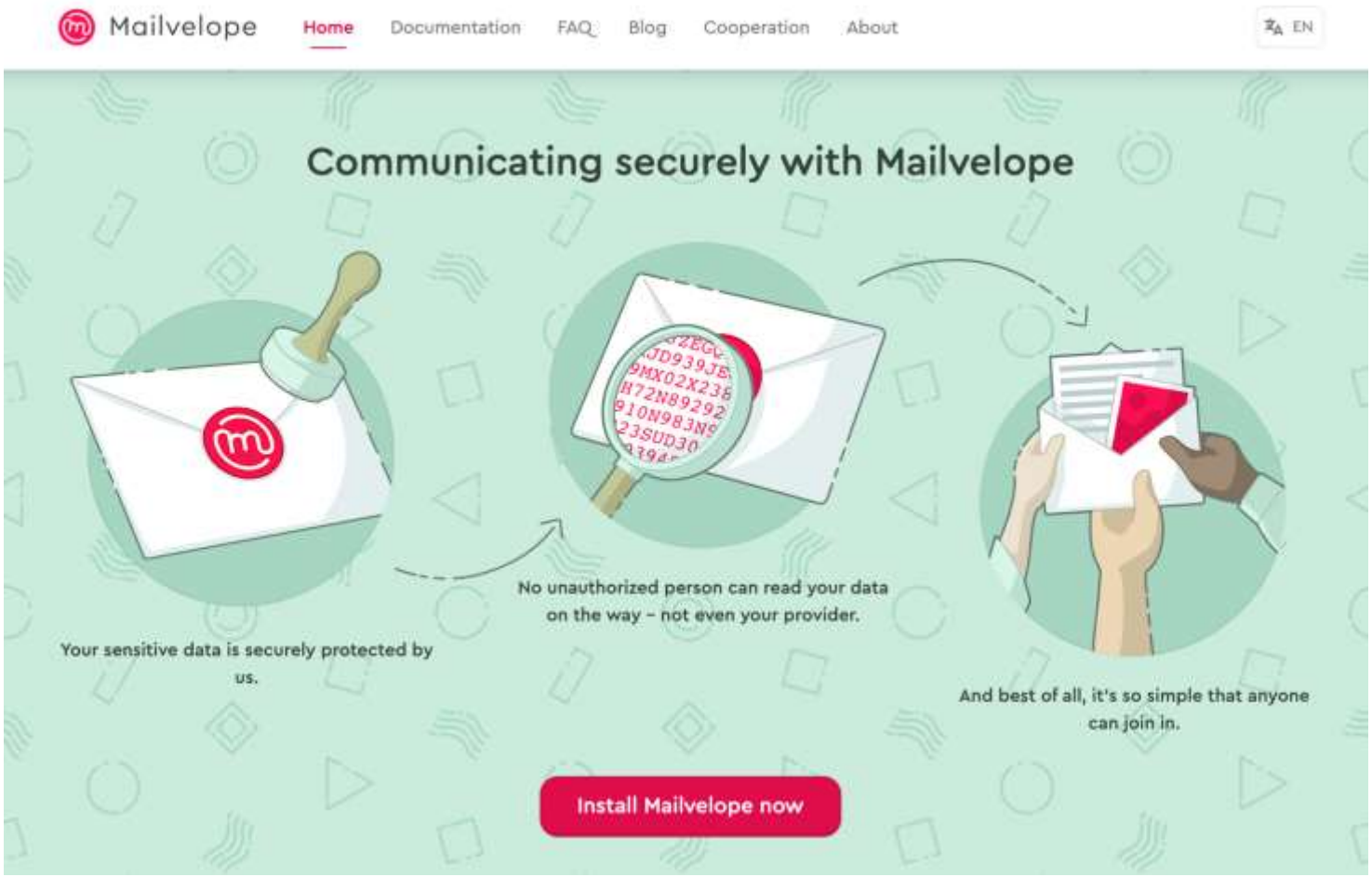

# Gestores de claves

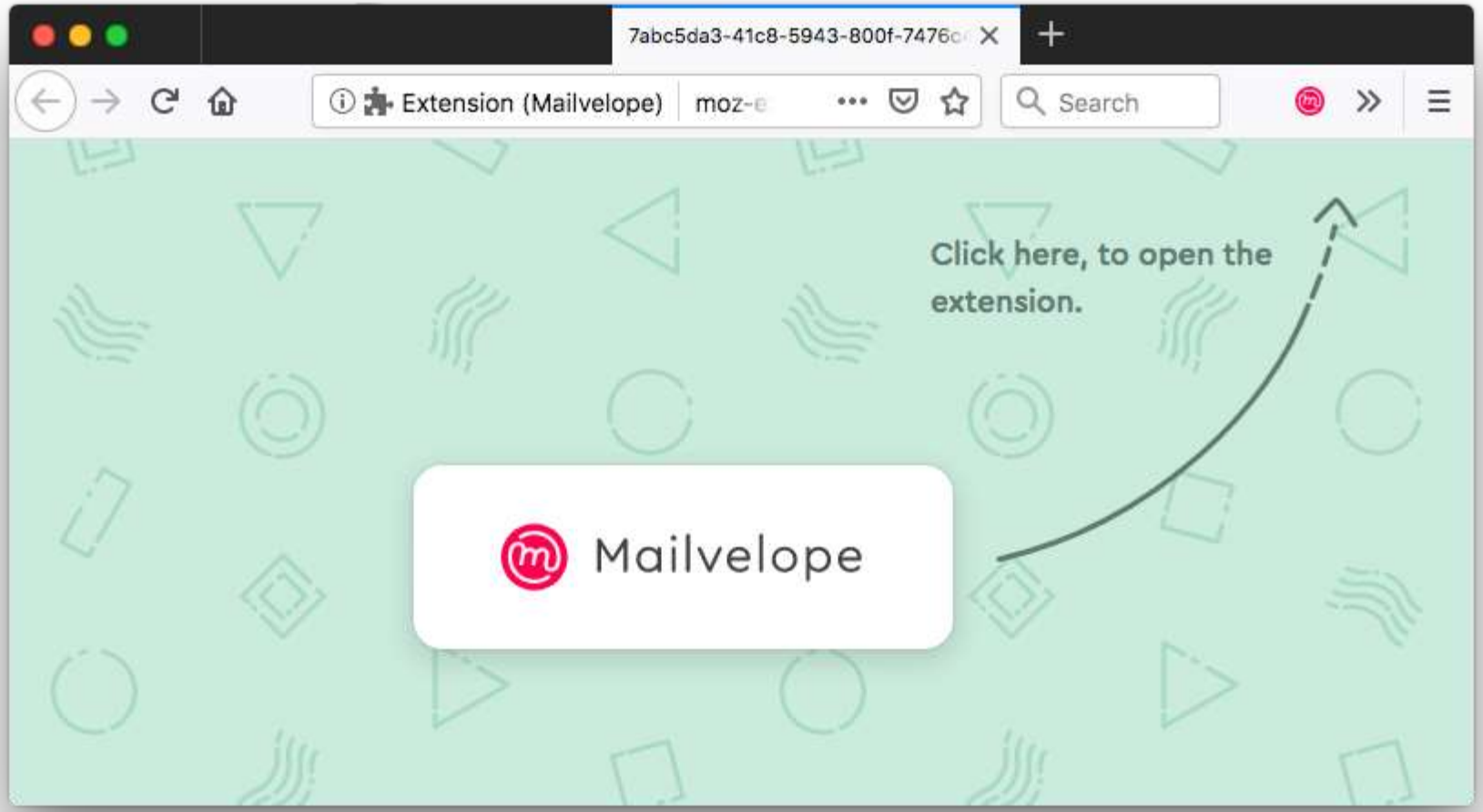
- Encriptar archivos
- Clientes de correo (Outlook, Thunderbird con Enigmail)


# Más sencillo: Mailvelope



## Compatible with almost all providers

So you can easily continue to use your current email account. And best of all: From now on, no one will read along. Because your information is only your business.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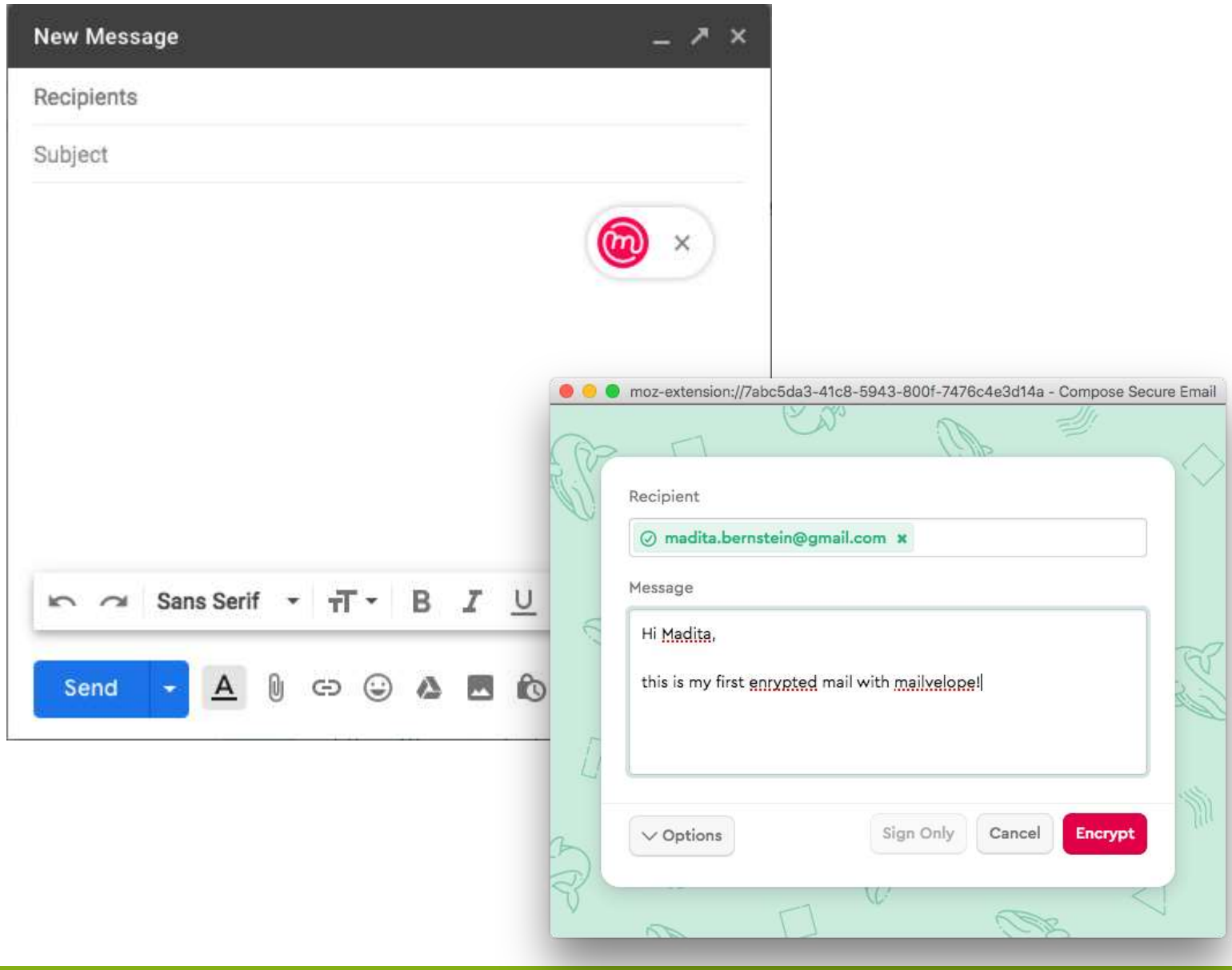
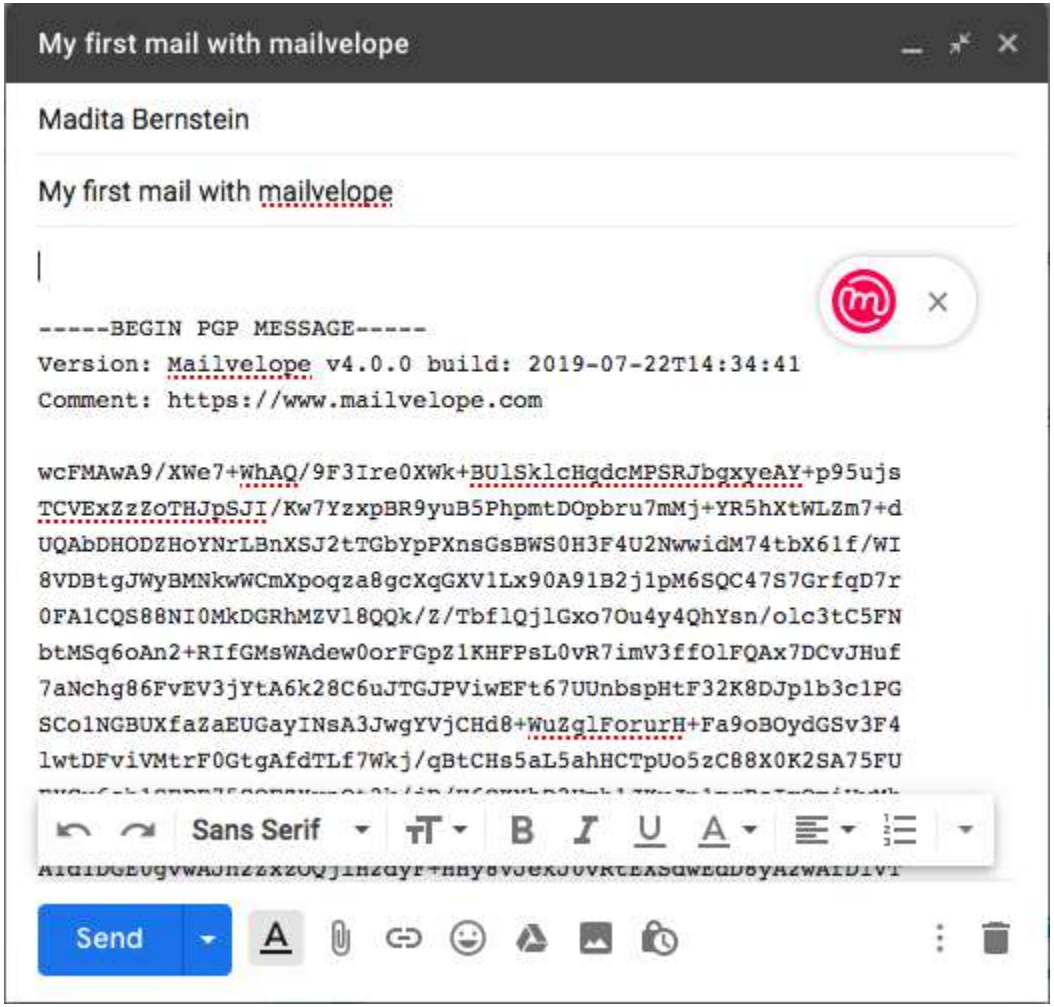
Extension (Mailvelope)
moz-e
Search
Click here, to open the extension.
Mailvelope


New Message
Recipients
Subject
Sans Serif
Send
moz-extension://7abc5da3-41c8-5943-800f-7476c4e3d14a - Compose Secure Email
Recipient
madita.bernstein@gmail.com
Message
Hi Madita,
this is my first enrypted mail with mailvelope!
Options
Sign Only
Cancel
Encrypt


My first mail with mailvelope
Madita Bernstein
My first mail with mailvelope
-----BEGIN PGP MESSAGE-----
Version: Mailvelope v4.0.0 build: 2019-07-22T14:34:41
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lwtDFviVMtrF0GtgAfdTLf7Wkj/qBtCHs5aL5ahHCTpUo5zC88X0K2SA75FU
Sans Serif
Send

**Lo que no se soluciona por mucha seguridad: el error humano.**

**En el correo te pillan con el “phishing”**

**From:** Mail Admin [mailto:lou.correa@bobsgunshop.com]
**Sent:** Wednesday, September 13, 2017 10:00 AM
**To:** undisclosed-recipients:
**Subject:** Security alert

Dear user,

We noticed your account was sign in from an unknown location

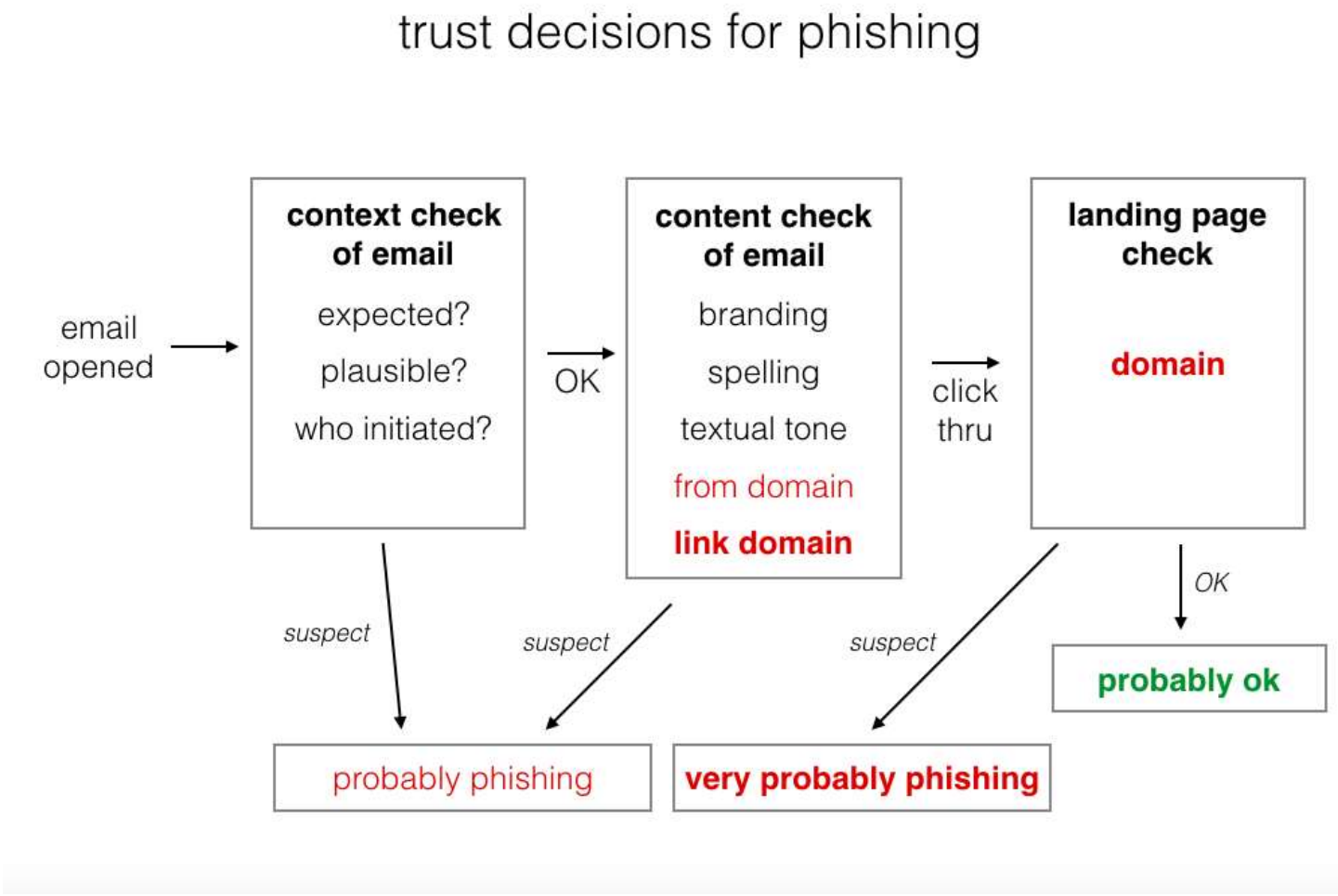
We recommend that you secure your account to avoid termination.

You are required to update through the link below.

# CONTINUE WITH VERIFICATION

Thanks for using Webmail!
Webmail Team.

Fuente


trust decisions for phishing
email opened
context check of email
expected?
plausible?
who initiated?
OK
content check of email
branding
spelling
textual tone
from domain
link domain
click thru
landing page check
domain
suspect
suspect
suspect
OK
probably ok
probably phishing
very probably phishing

# VIRUSTOTAL

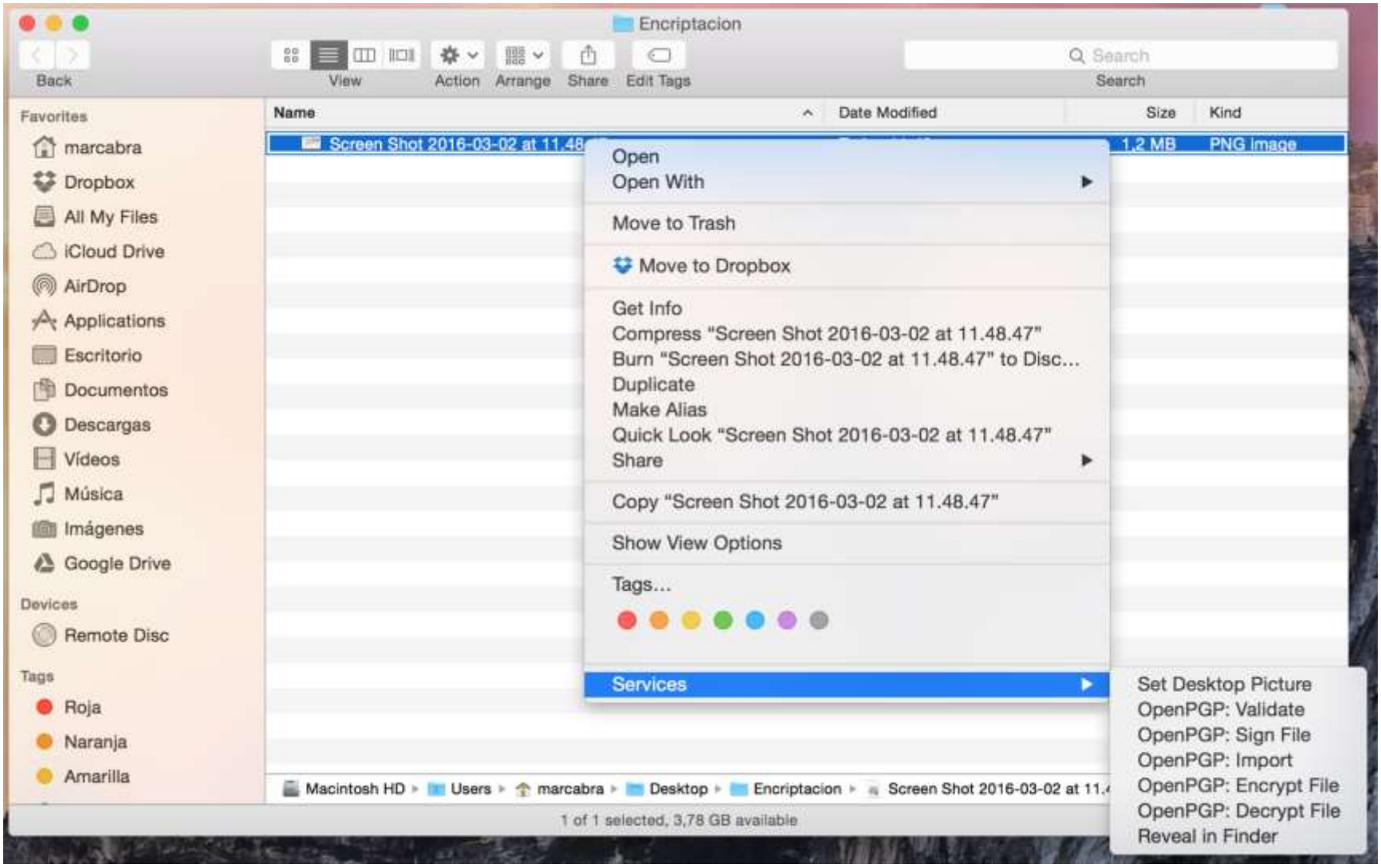
Analyze suspicious files and URLs to detect types of malware,
automatically share them with the security community

FILE | URL | SEARCH

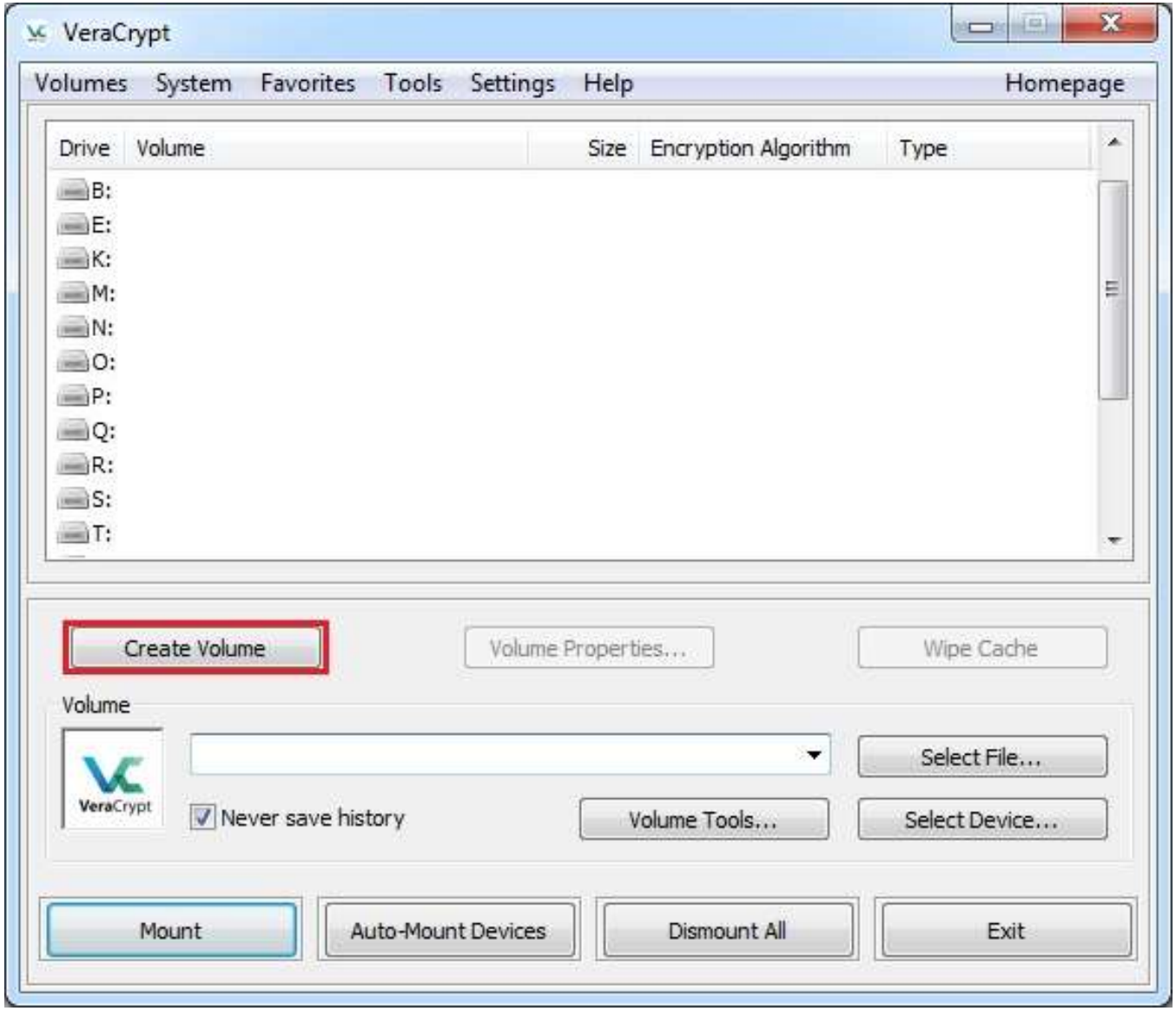
Choose file

By submitting your file to VirusTotal you are asking VirusTotal to share your submission with the security community and agree to our Terms of Service and Privacy Policy. Learn more.

# 5. Oculta archivos en tu ordenador

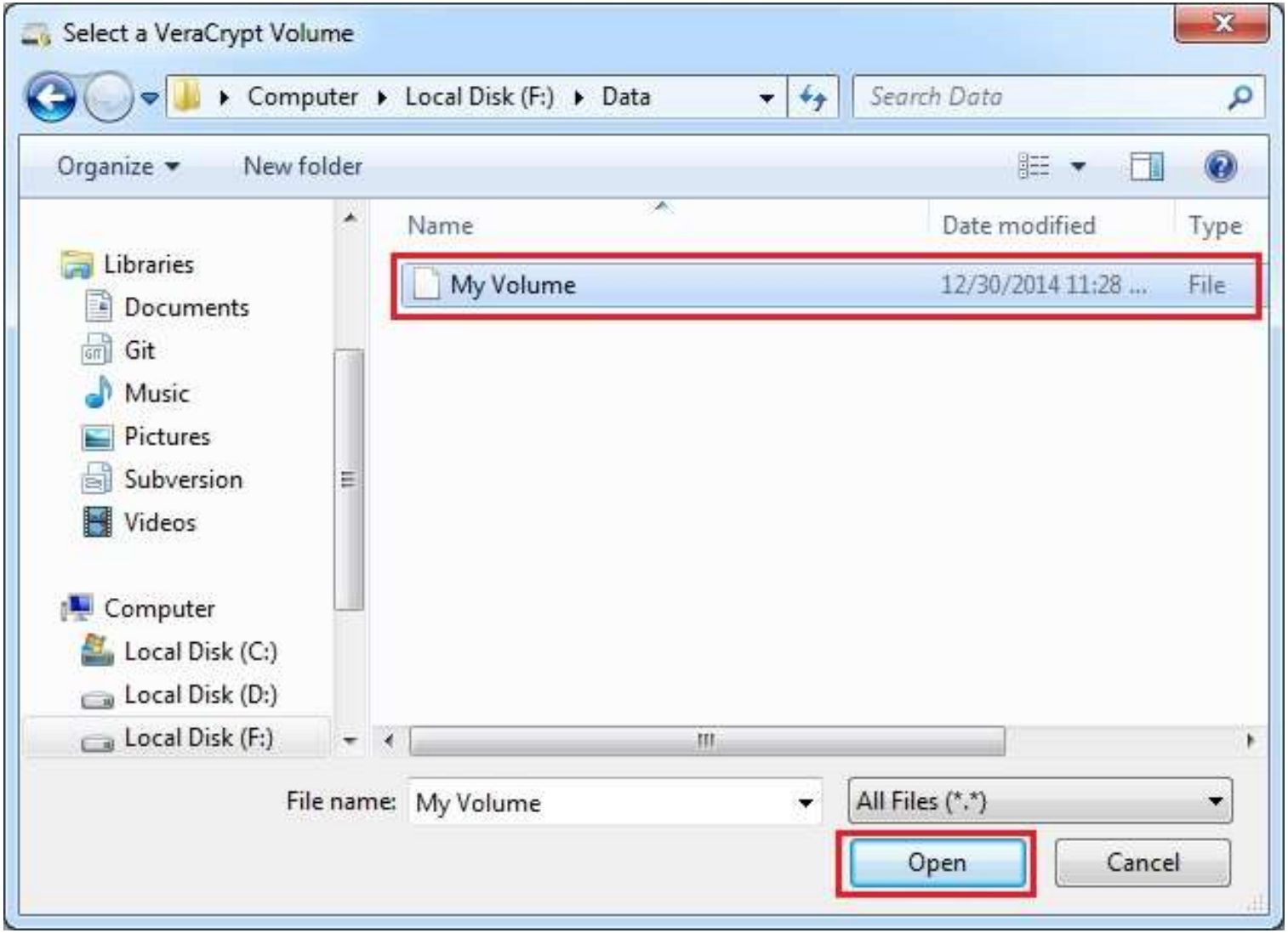

Encriptacion
Back
View
Action
Arrange
Share
Edit Tags
Search
Search
Favorites
marcabra
Dropbox
All My Files
iCloud Drive
AirDrop
Applications
Escritorio
Documentos
Descargas
Vídeos
Música
Imágenes
Google Drive
Devices
Remote Disc
Tags
Roja
Naranja
Amarilla
Name
Date Modified
Size
Kind
Screen Shot 2016-03-02 at 11.48
1,2 MB
PNG image
Open
Open With
Move to Trash
Move to Dropbox
Get Info
Compress "Screen Shot 2016-03-02 at 11.48.47"
Burn "Screen Shot 2016-03-02 at 11.48.47" to Disc...
Duplicate
Make Alias
Quick Look "Screen Shot 2016-03-02 at 11.48.47"
Share
Copy "Screen Shot 2016-03-02 at 11.48.47"
Show View Options
Tags...
Services
Set Desktop Picture
OpenPGP: Validate
OpenPGP: Sign File
OpenPGP: Import
OpenPGP: Encrypt File
OpenPGP: Decrypt File
Reveal in Finder
Macintosh HD
Users
marcabra
Desktop
Encriptacion
Screen Shot 2016-03-02 at 11.
1 of 1 selected, 3,78 GB available


Tutorial principiantes

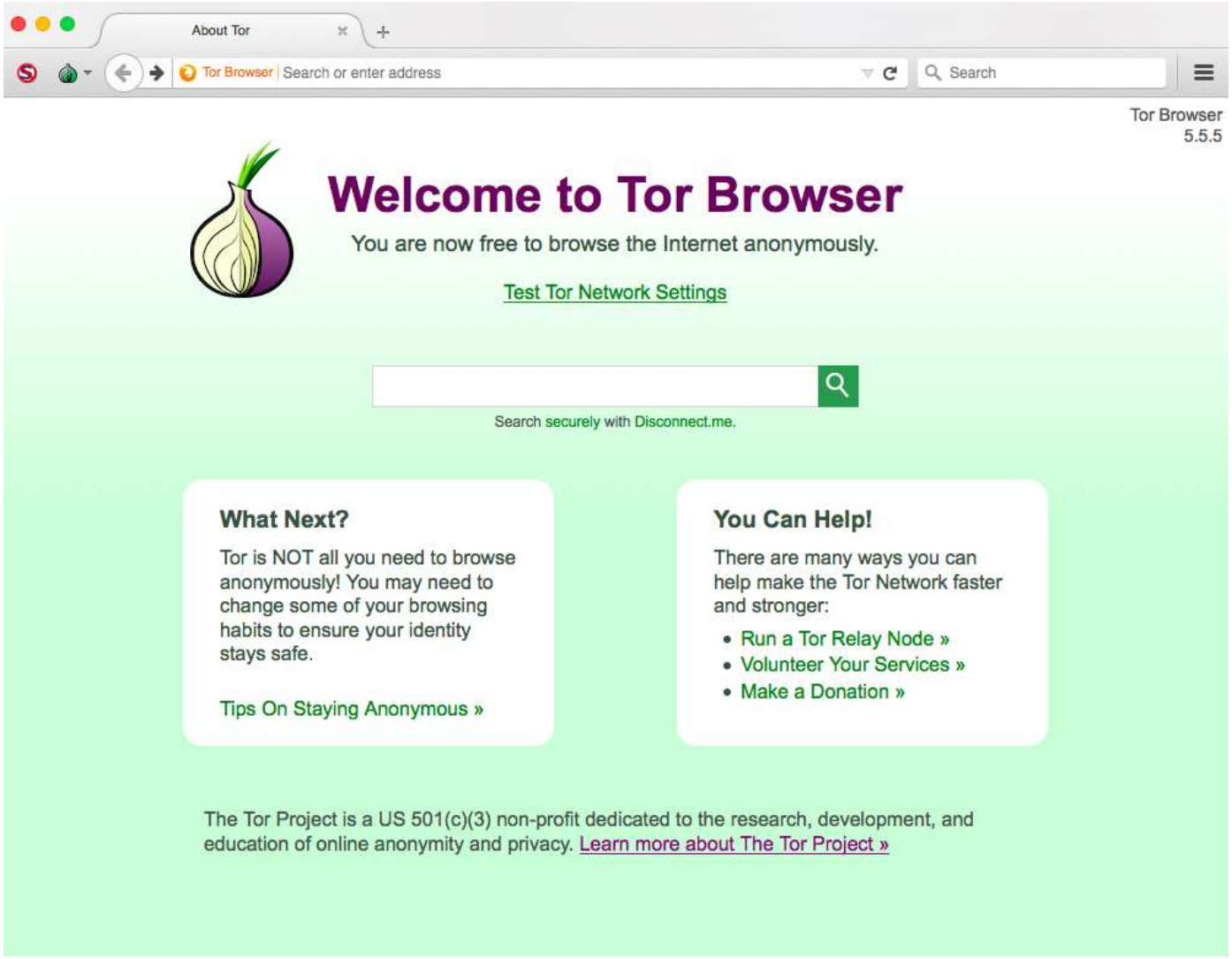

VeraCrypt
Volumes
System
Favorites
Tools
Settings
Help
Homepage
Drive
Volume
Size
Encryption Algorithm
Type
B:
E:
K:
M:
N:
O:
P:
Q:
R:
S:
T:
Create Volume
Volume Properties...
Wipe Cache
Volume
VeraCrypt
Select File...
Never save history
Volume Tools...
Select Device...
Mount
Auto-Mount Devices
Dismount All
Exit


VeraCrypt Volume Creation Wizard
VeraCrypt Volume Creation Wizard
Create an encrypted file container
Creates a virtual encrypted disk within a file. Recommended for inexperienced users.
More information
Encrypt a non-system partition/drive
Encrypts a non-system partition on any internal or external drive (e.g. a flash drive). Optionally, creates a hidden volume.
Encrypt the system partition or entire system drive
Encrypts the partition/drive where Windows is installed. Anyone who wants to gain access and use the system, read and write files, etc., will need to enter the correct password each time before Windows boots. Optionally, creates a hidden system.
More information about system encryption
VeraCrypt
Help
< Back
Next >
Cancel

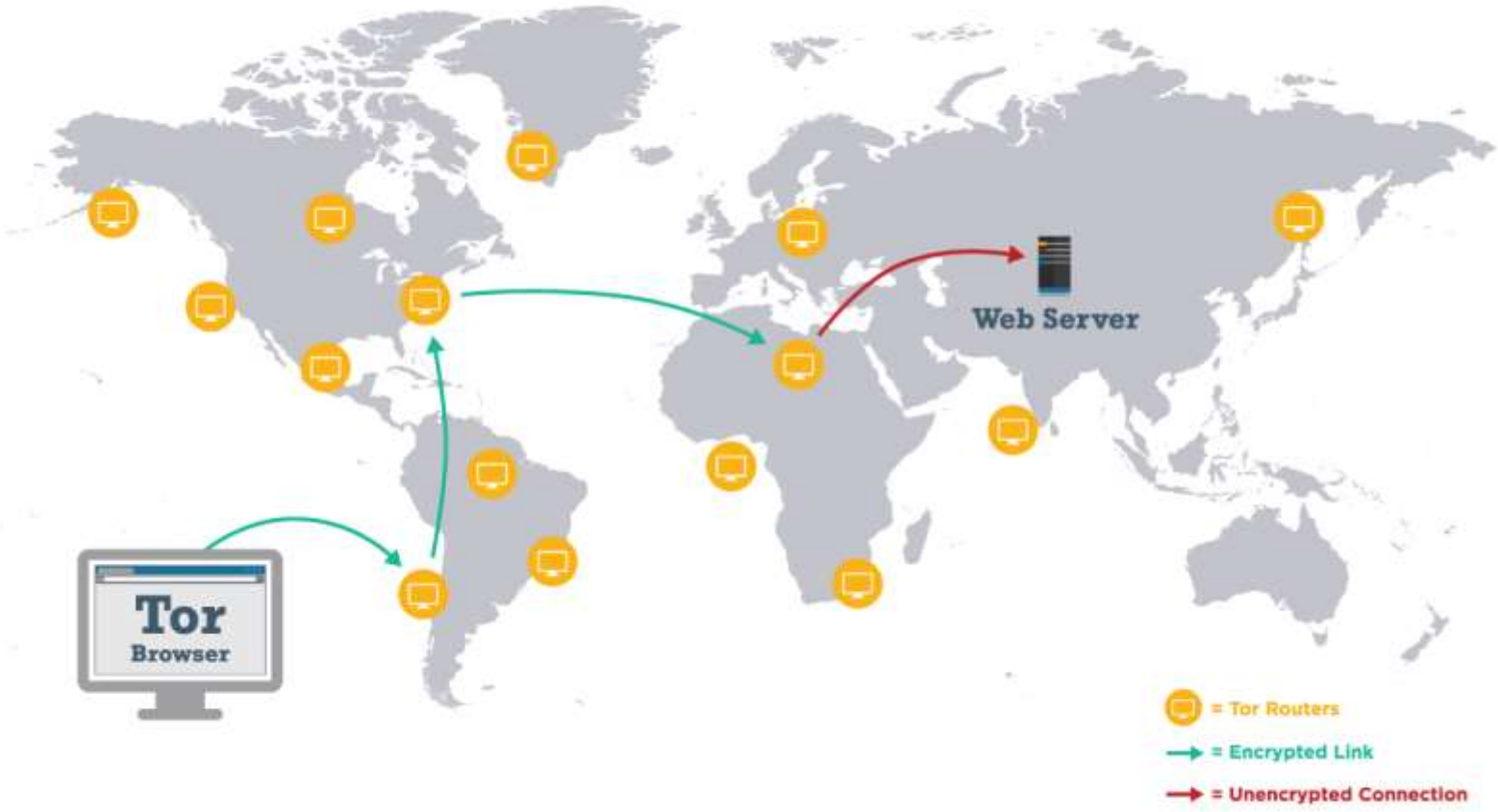

Volume Location
Select File...
Never save history
A VeraCrypt volume can reside in a file (called VeraCrypt container), which can reside on a hard disk, on a USB flash drive, etc. A VeraCrypt container is just like any normal file (it can be, for example, moved or deleted as any normal file). Click 'Select File' to choose a filename for the container and to select the location where you wish the container to be created.
WARNING: If you select an existing file, VeraCrypt will NOT encrypt it; the file will be deleted and replaced with the newly created VeraCrypt container. You will be able to encrypt existing files (later on) by moving them to the VeraCrypt container that you are about to create now.
Help
< Back
Next >
Cancel


Select a VeraCrypt Volume
Computer
Local Disk (F:)
Data
Search Data
Organize
New folder
Name
Date modified
Type
My Volume
12/30/2014 11:28 ...
File
Libraries
Documents
Git
Music
Pictures
Subversion
Videos
Computer
Local Disk (C:)
Local Disk (D:)
Local Disk (F:)
File name:
My Volume
All Files (*.*)
Open
Cancel

# Bonus: ¿Qué es eso de Tor?


About Tor
Tor Browser | Search or enter address
Search
Tor Browser
5.5.5
Welcome to Tor Browser
You are now free to browse the Internet anonymously.
Test Tor Network Settings
Search securely with Disconnect.me.
What Next?
Tor is NOT all you need to browse anonymously! You may need to change some of your browsing habits to ensure your identity stays safe.
Tips On Staying Anonymous »
You Can Help!
There are many ways you can help make the Tor Network faster and stronger:
Run a Tor Relay Node »
Volunteer Your Services »
Make a Donation »
The Tor Project is a US 501(c)(3) non-profit dedicated to the research, development, and education of online anonymity and privacy. Learn more about The Tor Project »

# How The Tor Network Works

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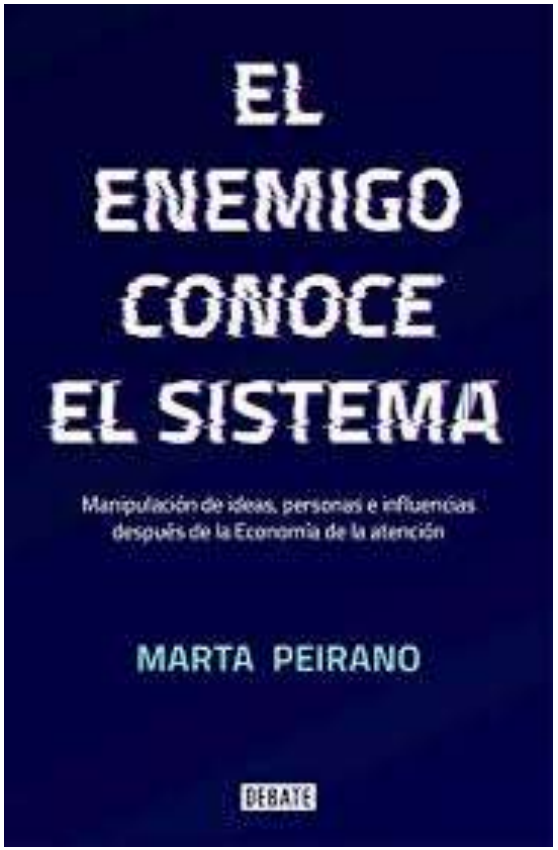
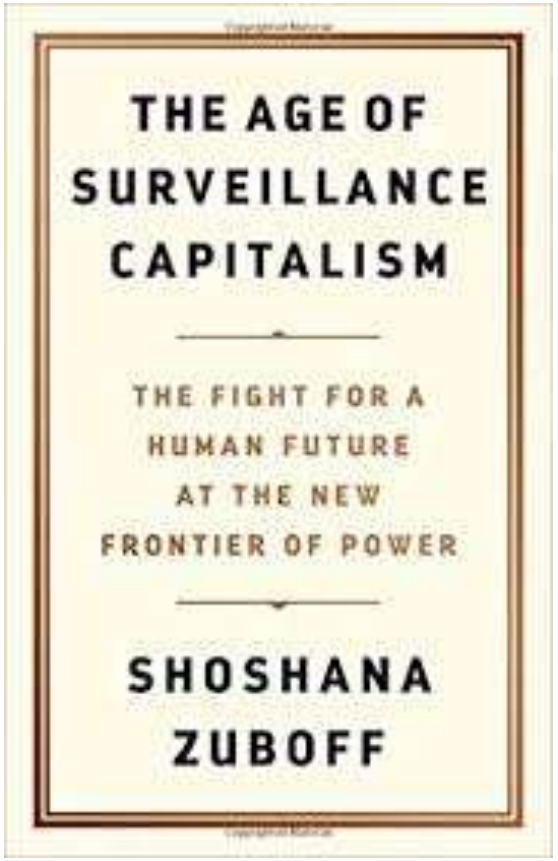
# Para seguir profundizando

- Field Guide for Security Training in Newsrooms
- Security in a Box
- Tow Center paper
- CIJ handbook
- GIJN resources page
- Surveillance self-defence, EFF
- Email self-defense

# Dos libros recomendados



# ¡Gracias!

¿Preguntas?

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