UNIVERSIDAD
DE GRANADA

INTERNET PROFUNDA – RED TOR

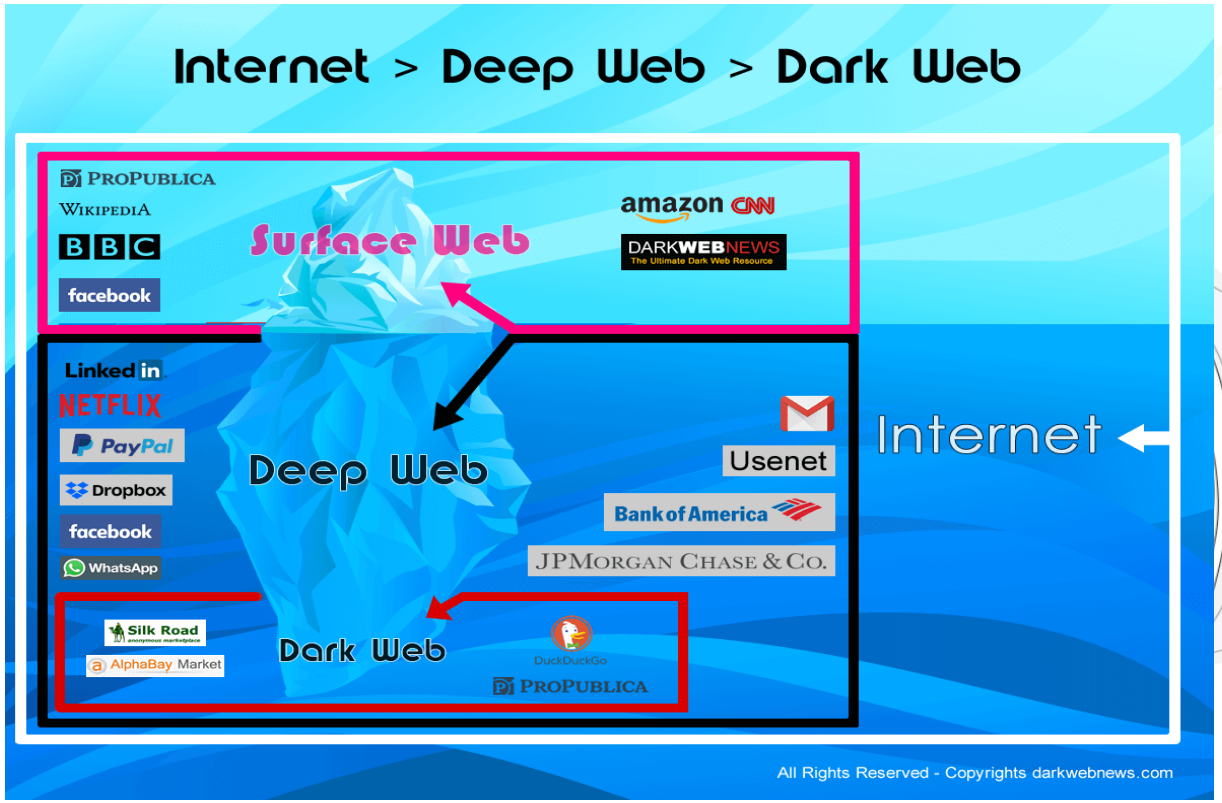
Fundamentos de Redes

Carmen Rosa López - Ignacio Vellido Expósito

Índice

Demostración con Wireshark

Niveles de Internet

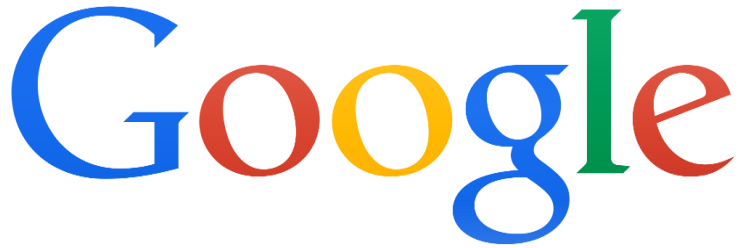


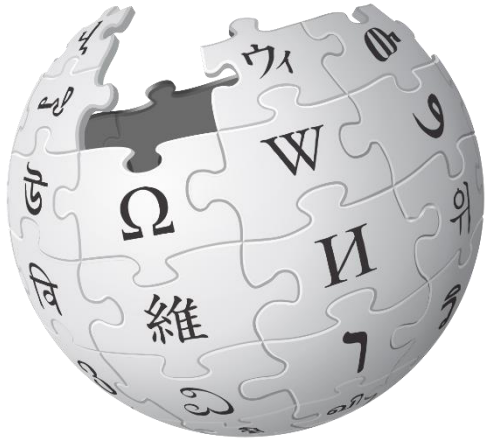
Web Superficial ➡ **4%**

Web Profunda ➡ **96%**

↳ **Web Oscura** ➡ **6%**

Internet Superficial

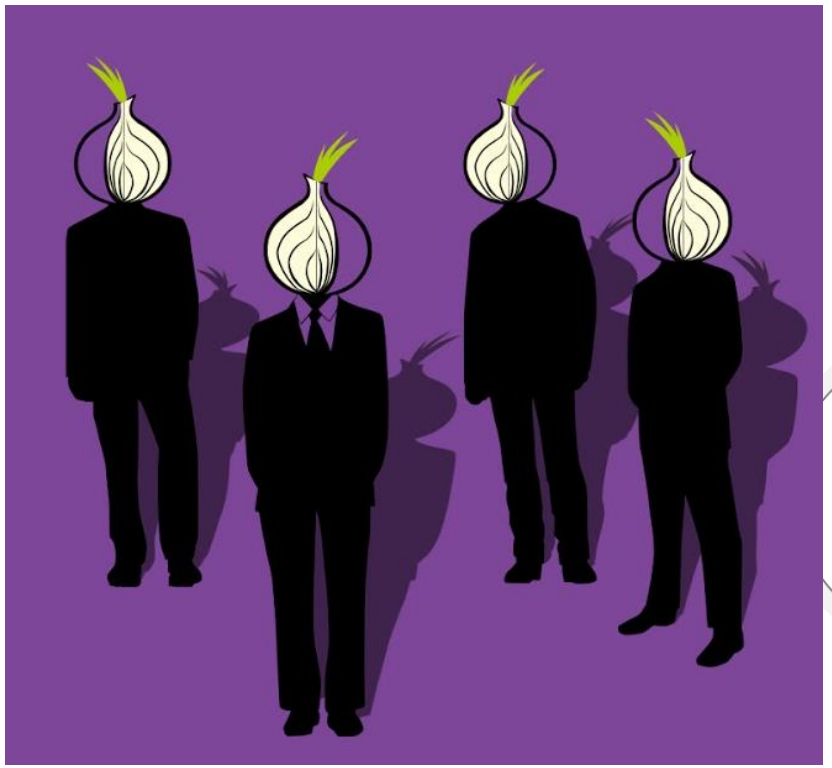




Deep Web

Dark Web

¿Qué es Tor?



The Onion Router

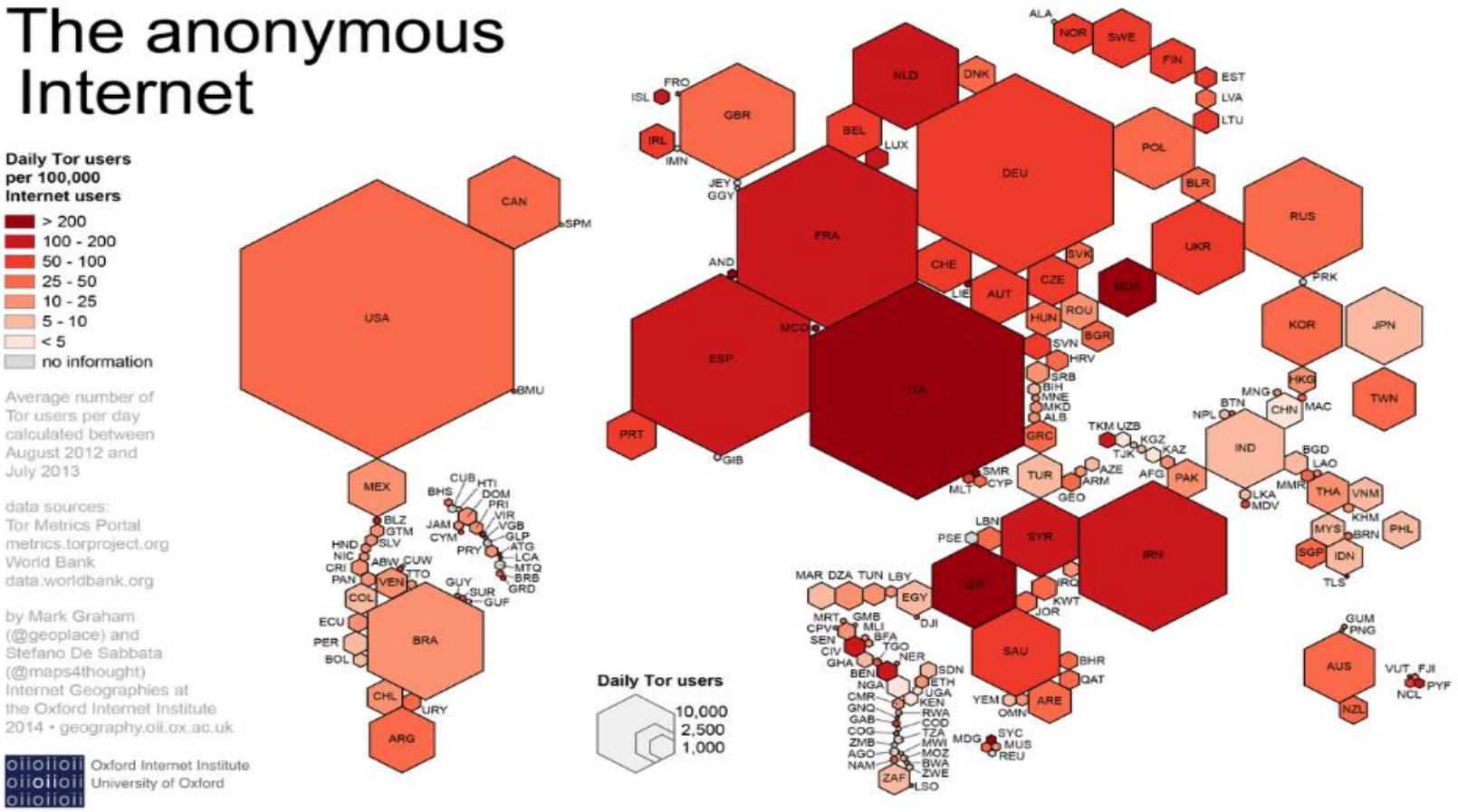
- Mantiene la privacidad del usuario
- Busca el anonimato

Red Tor

Financiación:

- Personales
- Mozilla
- Google
- ...

Red Tor

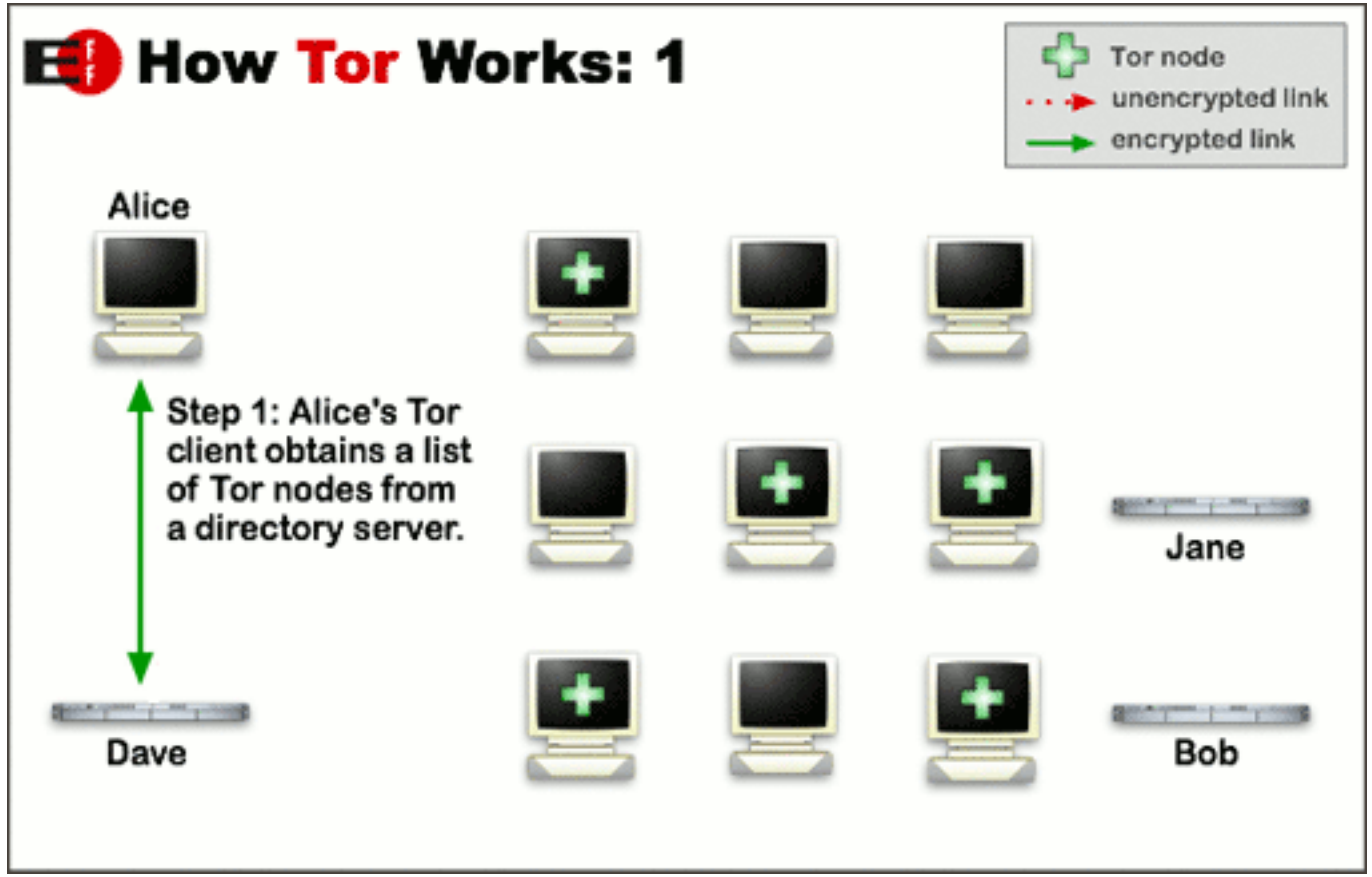

The anonymous Internet
Daily Tor users per 100,000 Internet users
> 200
100 - 200
50 - 100
25 - 50
10 - 25
5 - 10
< 5
no information
Average number of Tor users per day calculated between August 2012 and July 2013
data sources:
Tor Metrics Portal
metrics.torproject.org
World Bank
data.worldbank.org
by Mark Graham (@geoplace) and Stefano De Sabbata (@maps4thought)
Internet Geographies at the Oxford Internet Institute
2014 • geography.oii.ox.ac.uk
Oxford Internet Institute
University of Oxford
Daily Tor users
10,000
2,500
1,000

Red Tor

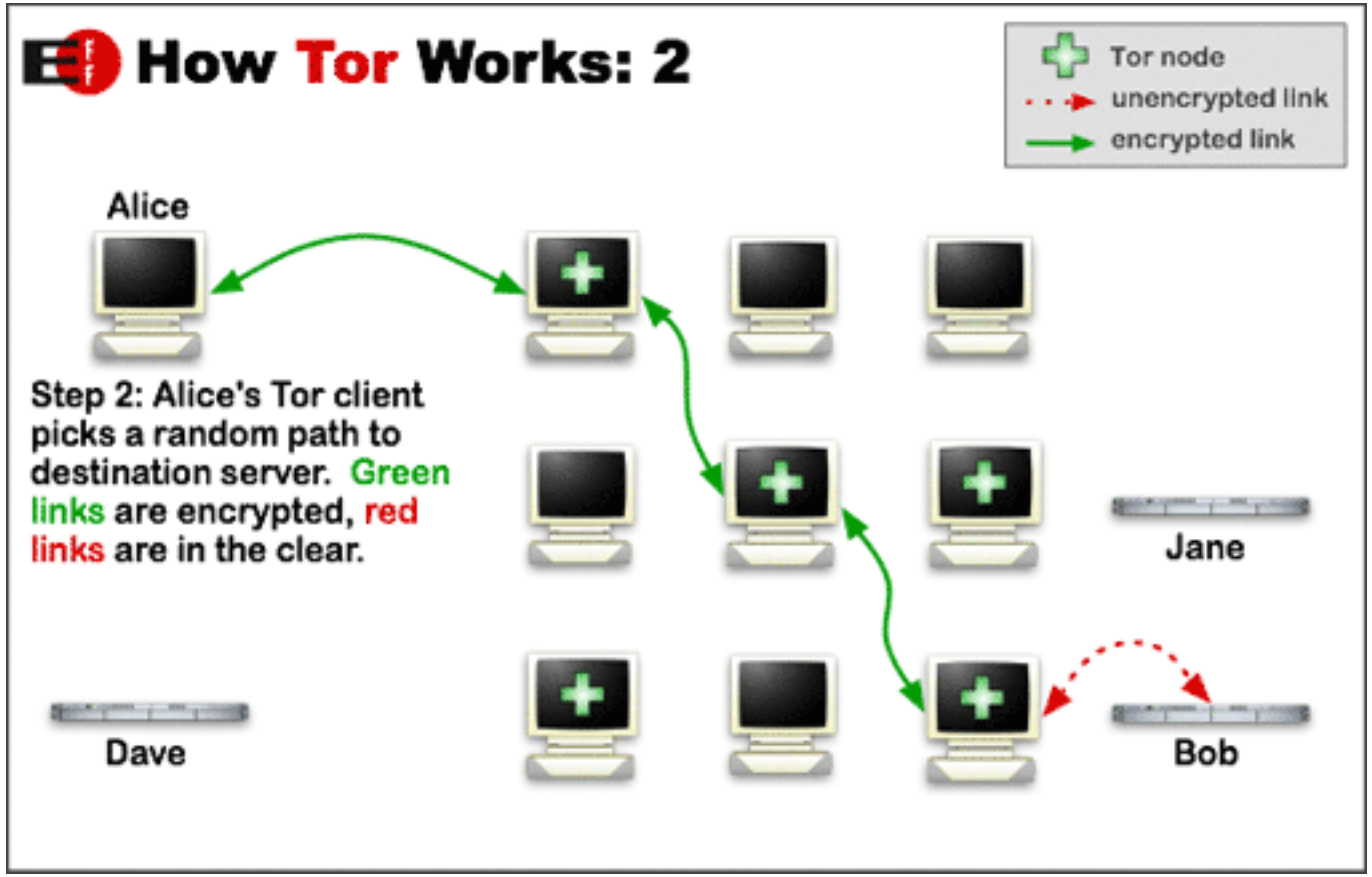
¿Cómo funciona Tor?

- **Se basa en un método por capas**
- **Encripta cada comunicación**

Enrutamiento de Cebolla



Enrutamiento de Cebolla



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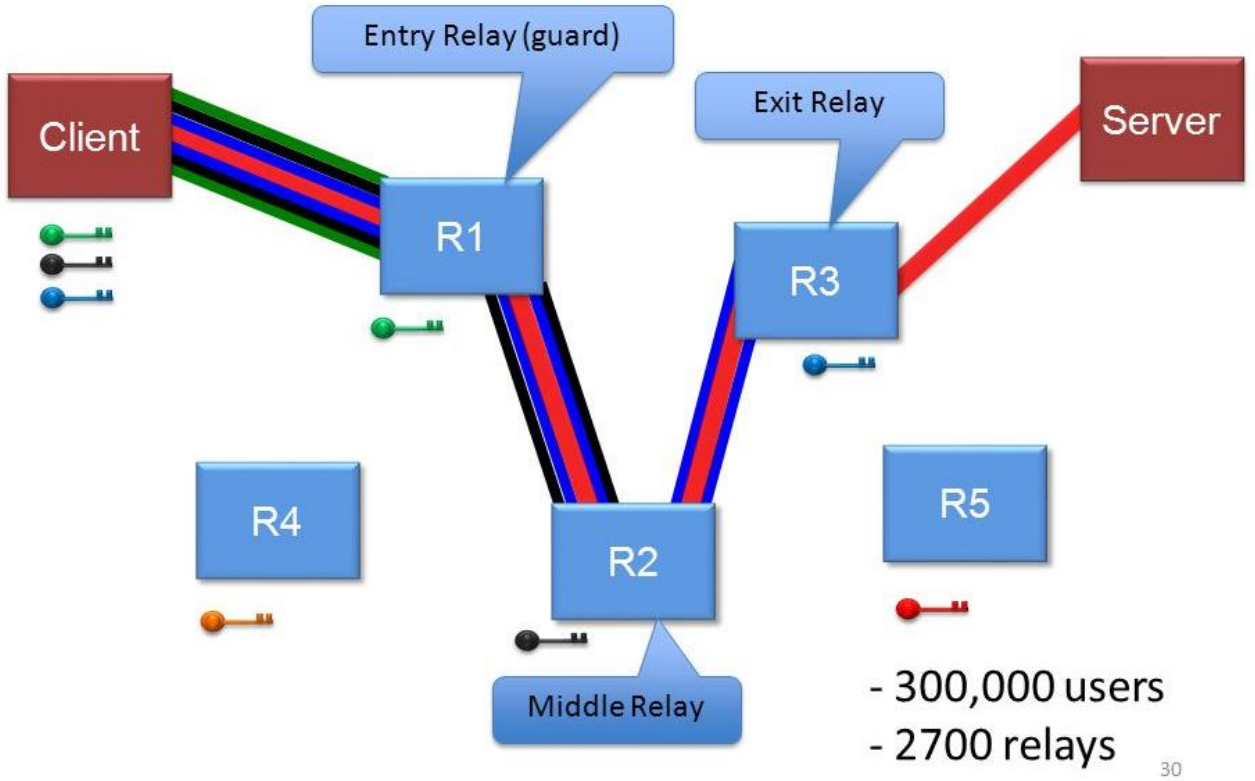
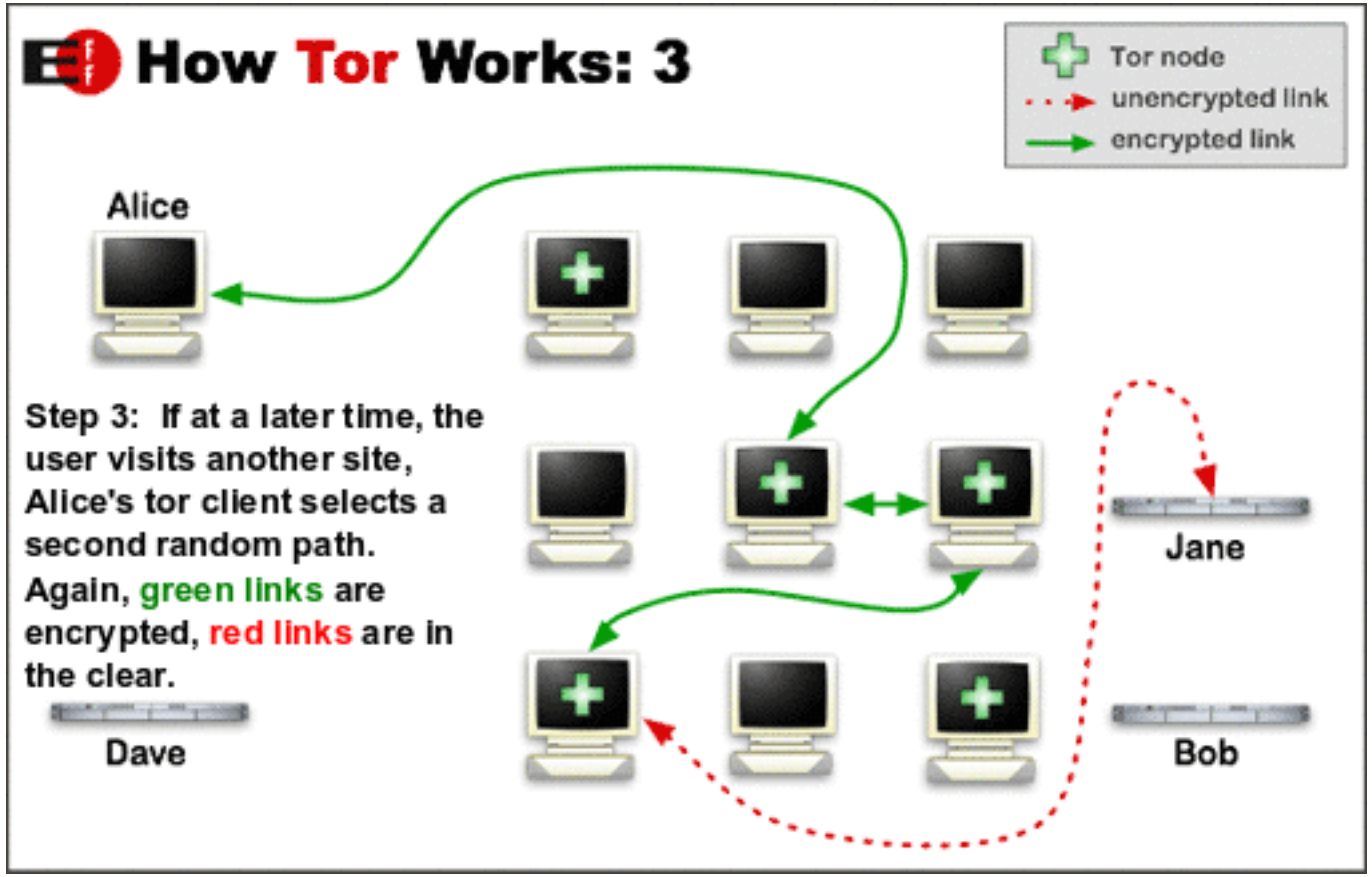
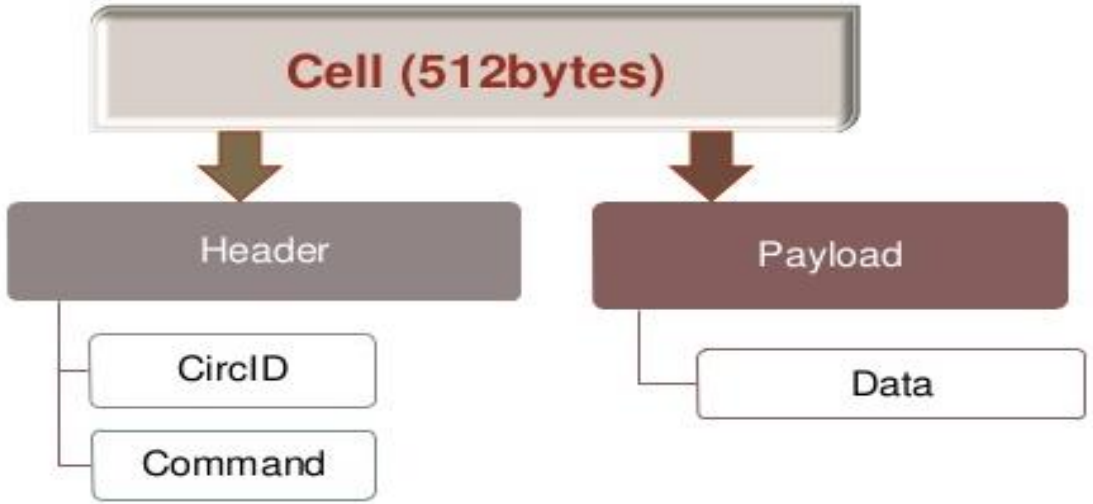


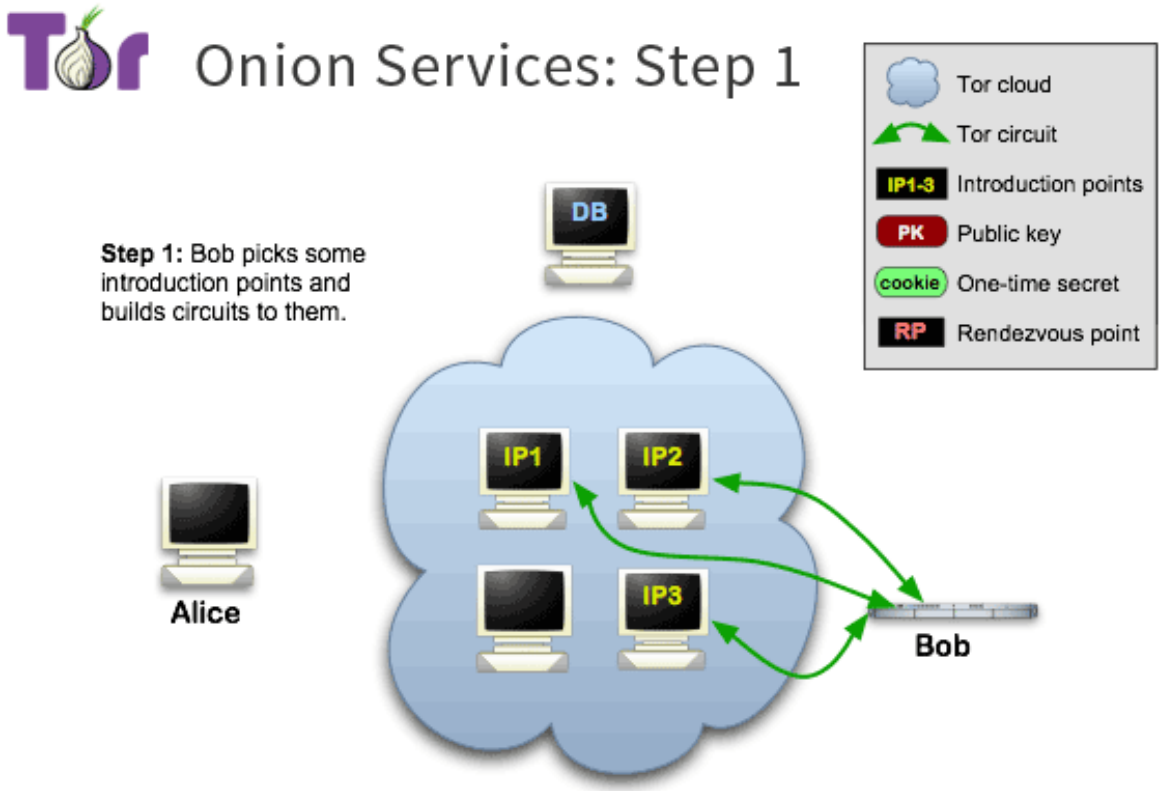
Enrutamiento de Cebolla



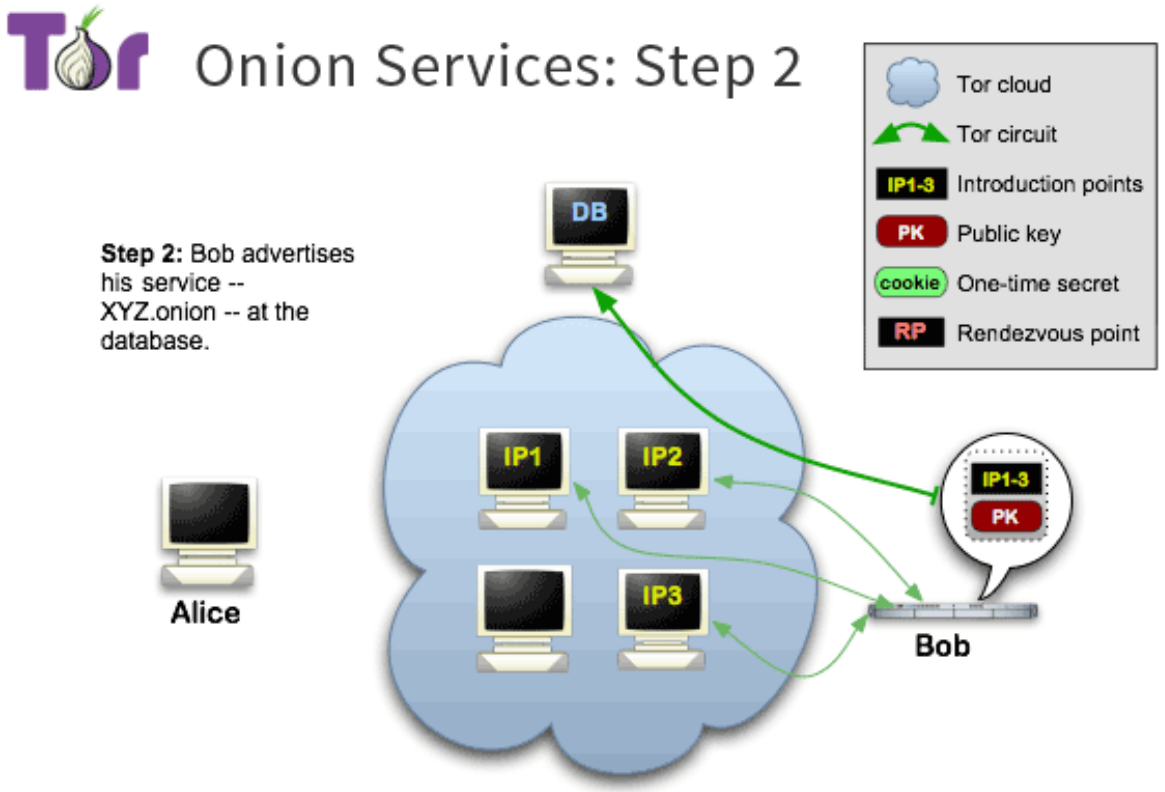
Células



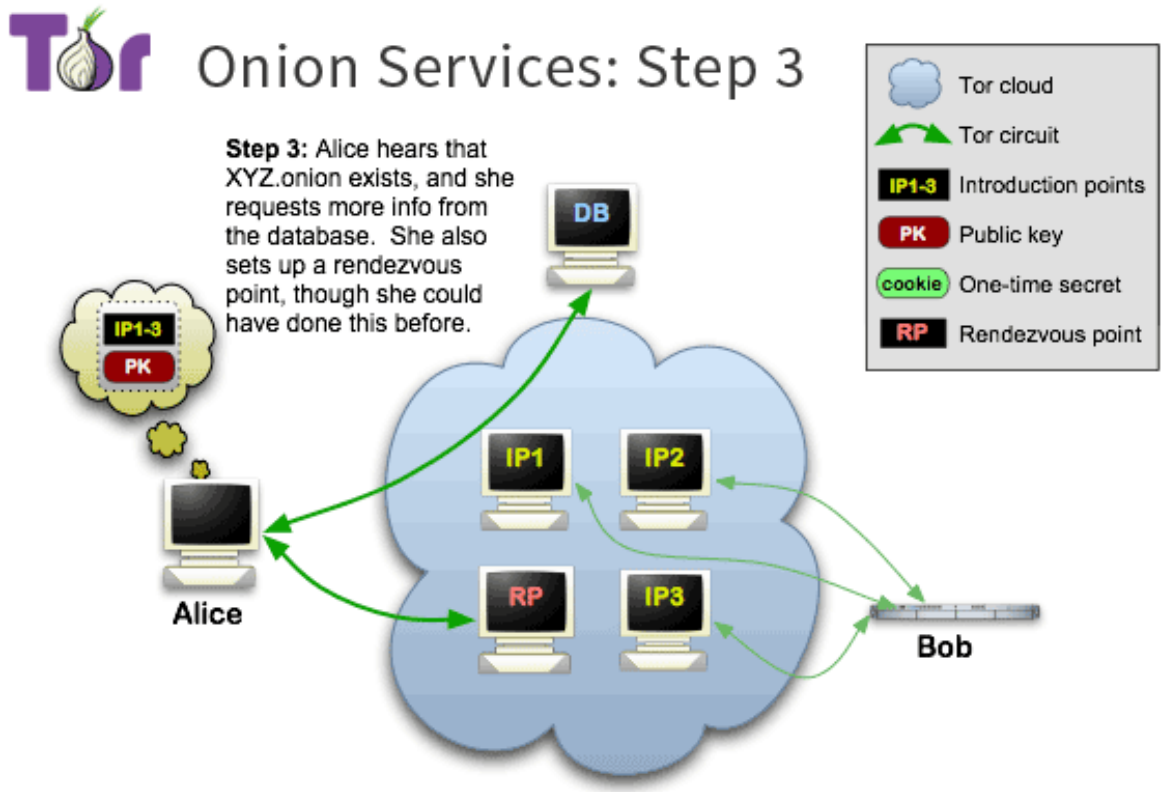
Servicios ocultos



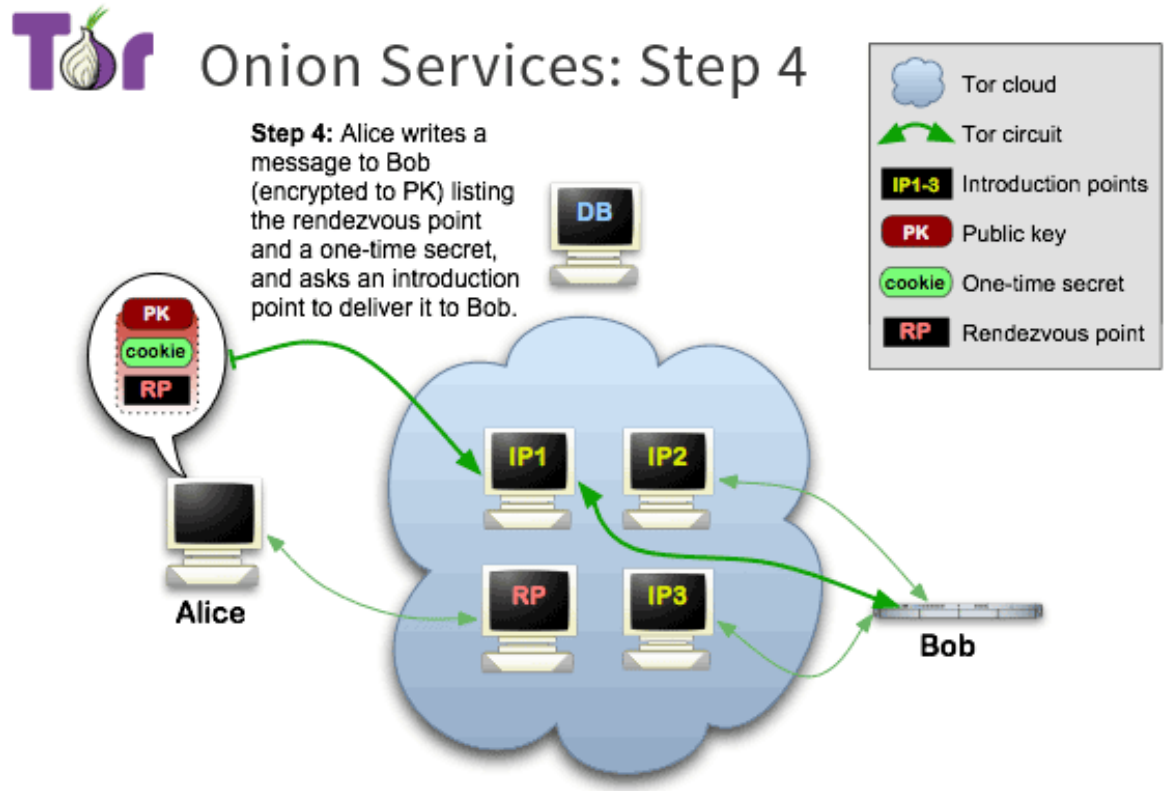
Servicios ocultos



Servicios ocultos



Servicios ocultos



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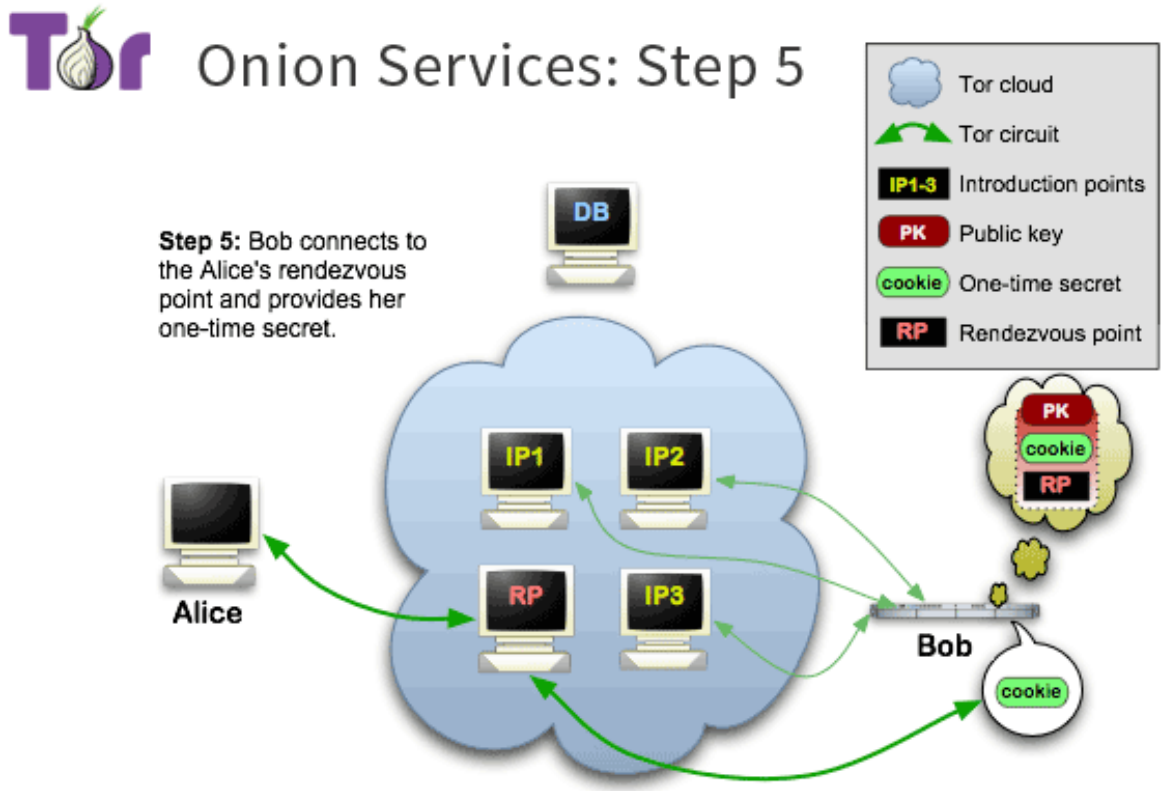
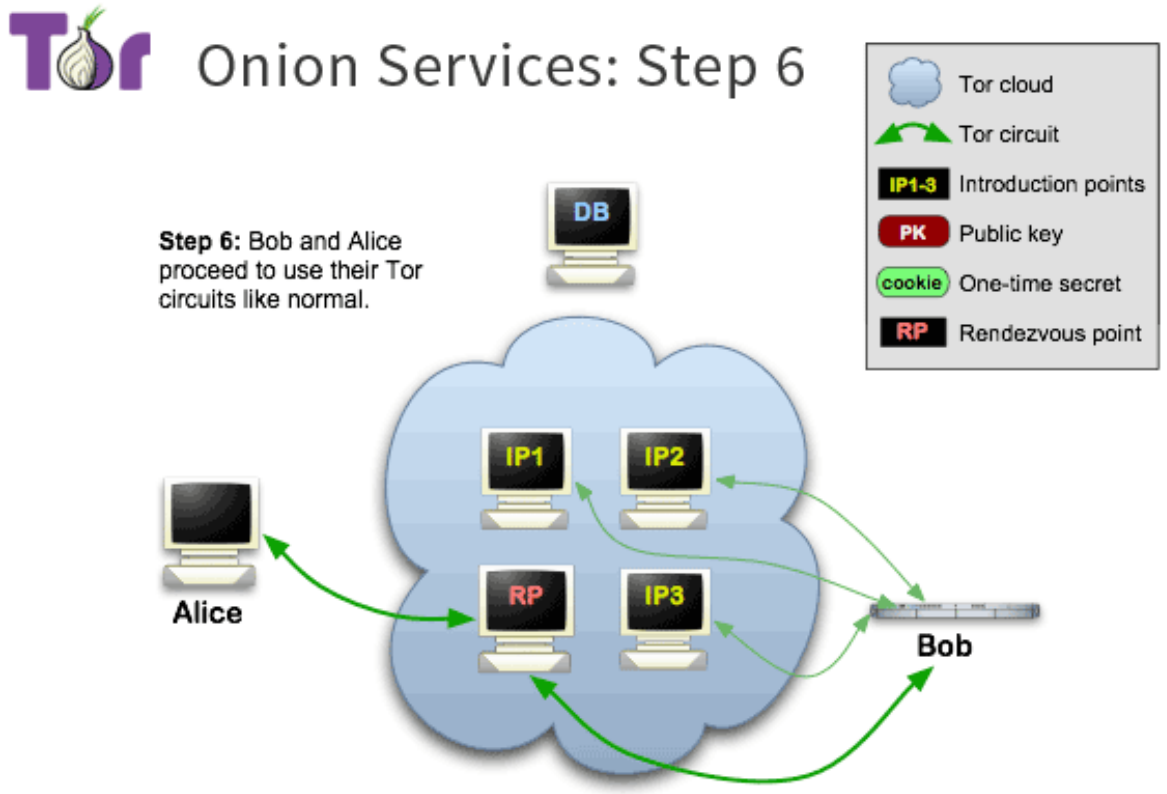


Servicios ocultos



Pero… ¿ son todo ventajas en Tor ?

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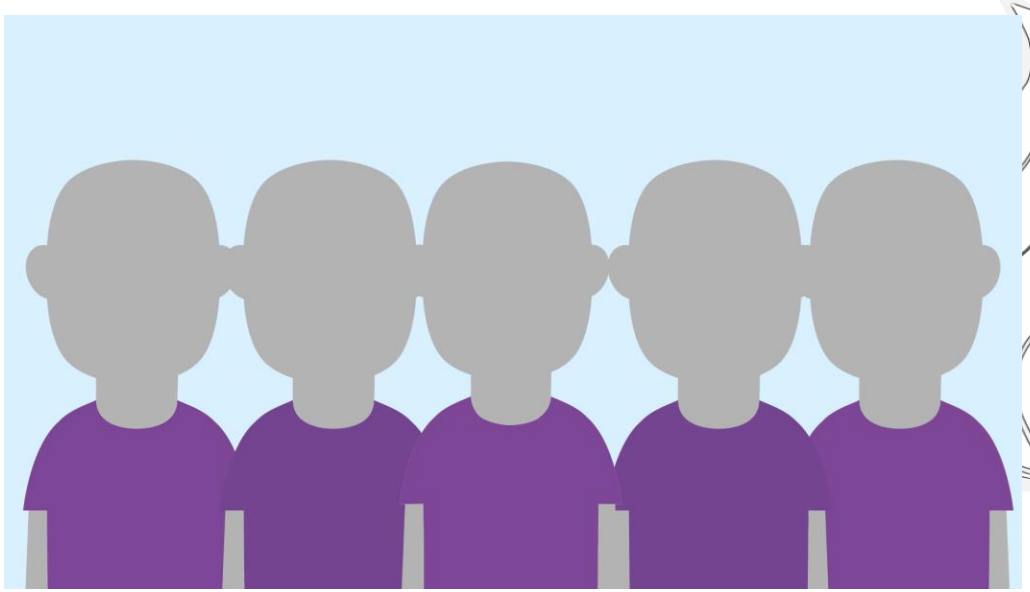
Ventajas

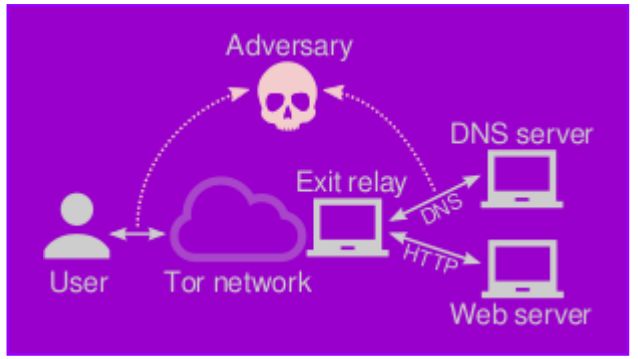


- **Seguridad**
- **Privacidad**

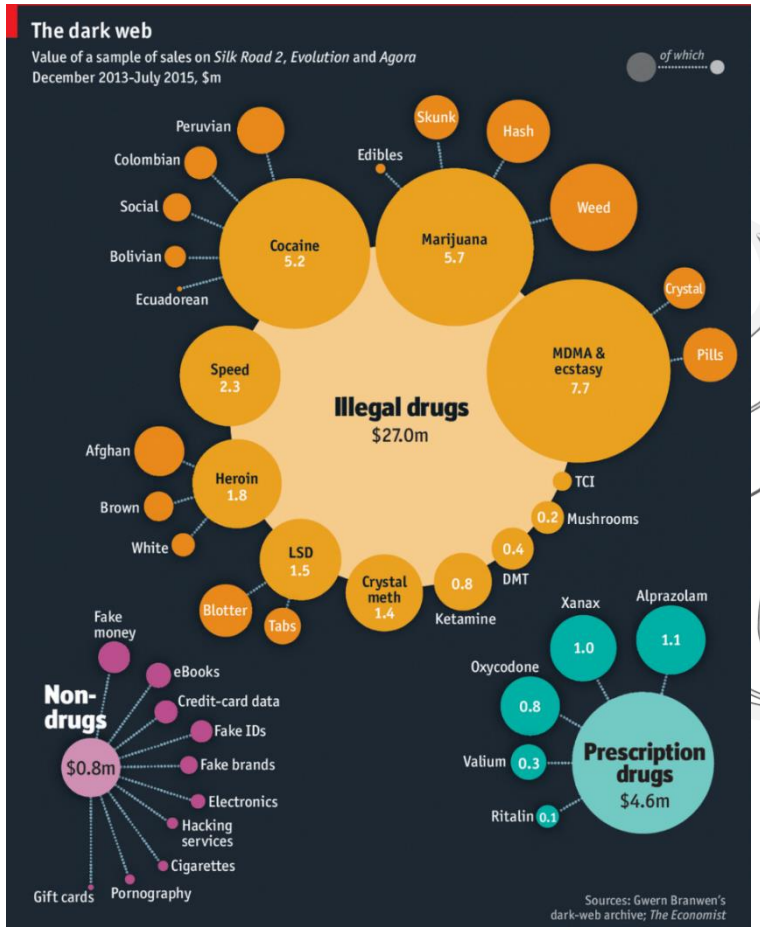
Pero… ¿ es todo ventajas en Tor ?

Inconvenientes

- No es 100% fiable
- Negocios ilegales



Darknet Markets



AlphaBay Market

Dream Market

Silk Road
anonymous marketplace

Referencias

- https://www.torproject.org/
- https://gitweb.torproject.org/
- https://gitweb.torproject.org/torspec.git/tree/tor-spec.txt
- http://geography.oii.ox.ac.uk/the-anonymous-internet/
- https://github.com/torproject/torspec/blob/master/rend-spec-v3.txt

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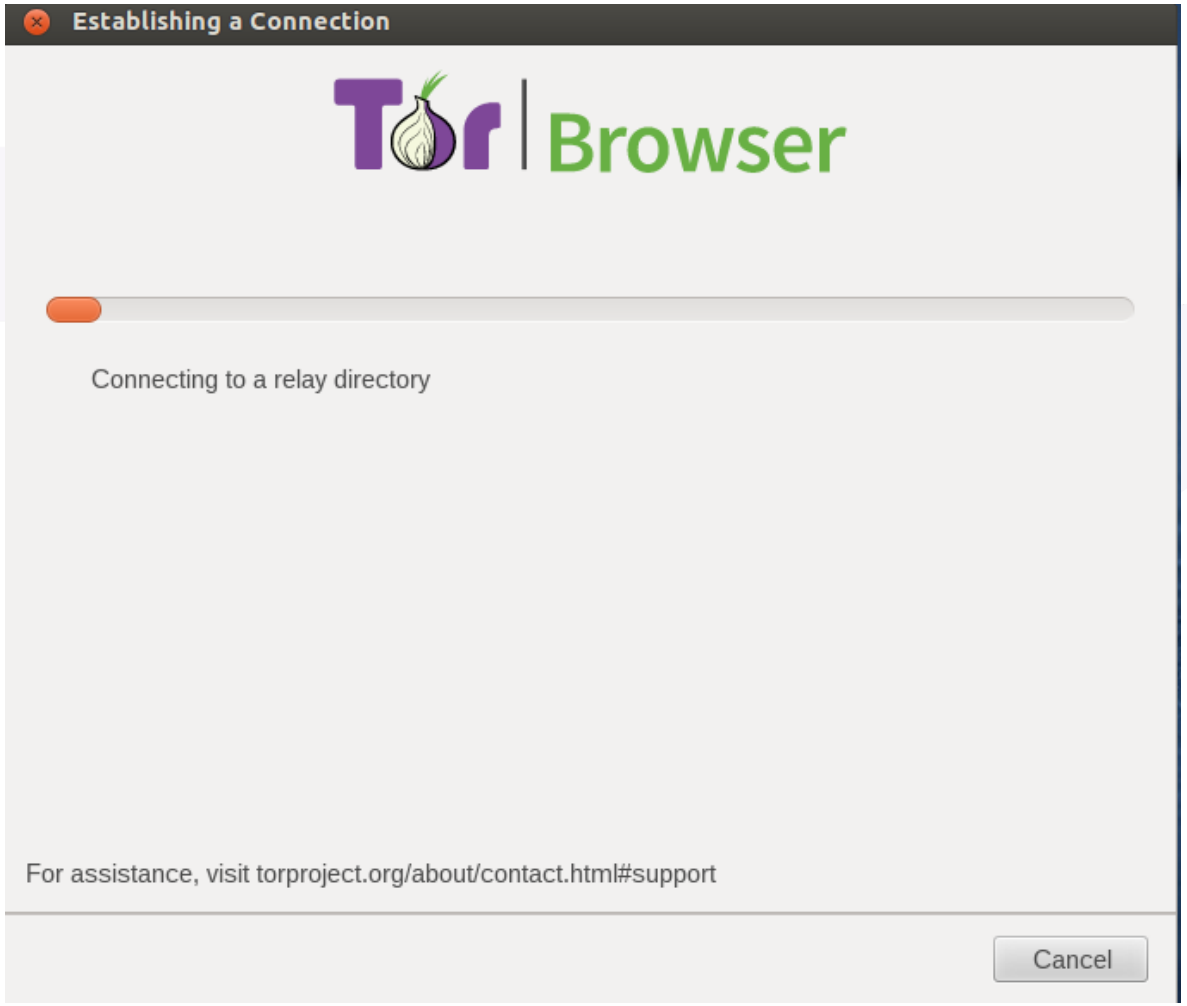
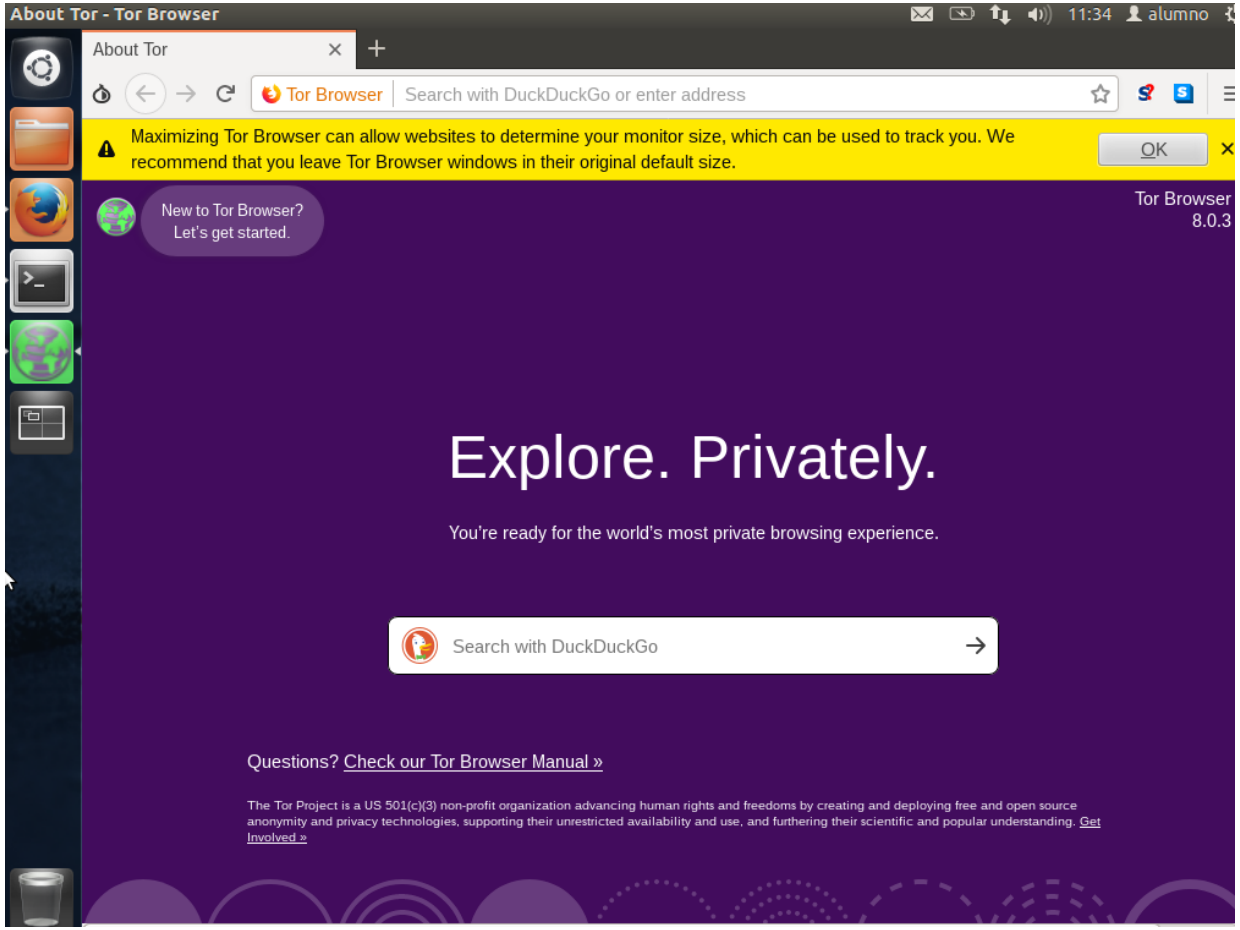
Demostración



Demostración



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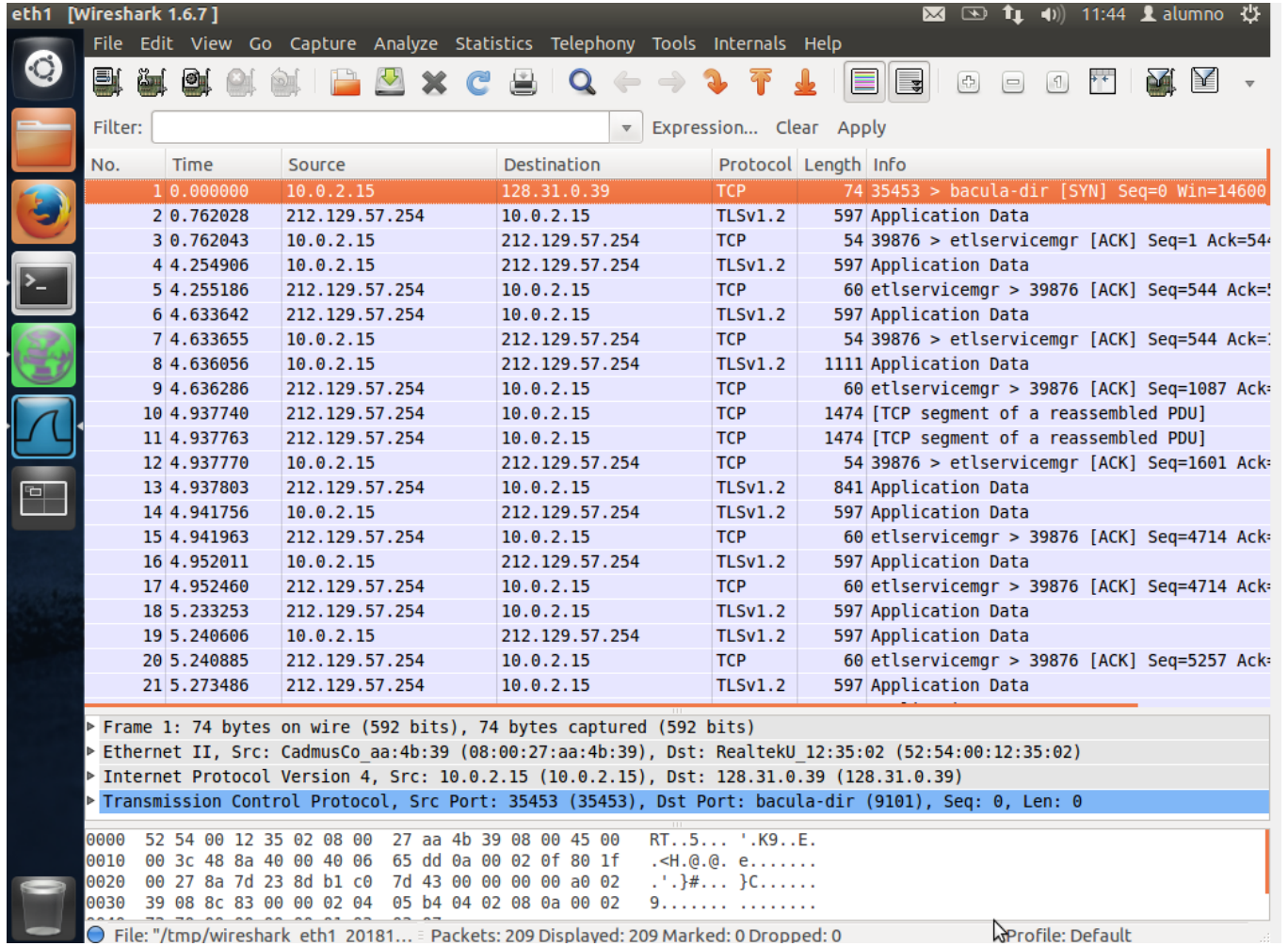

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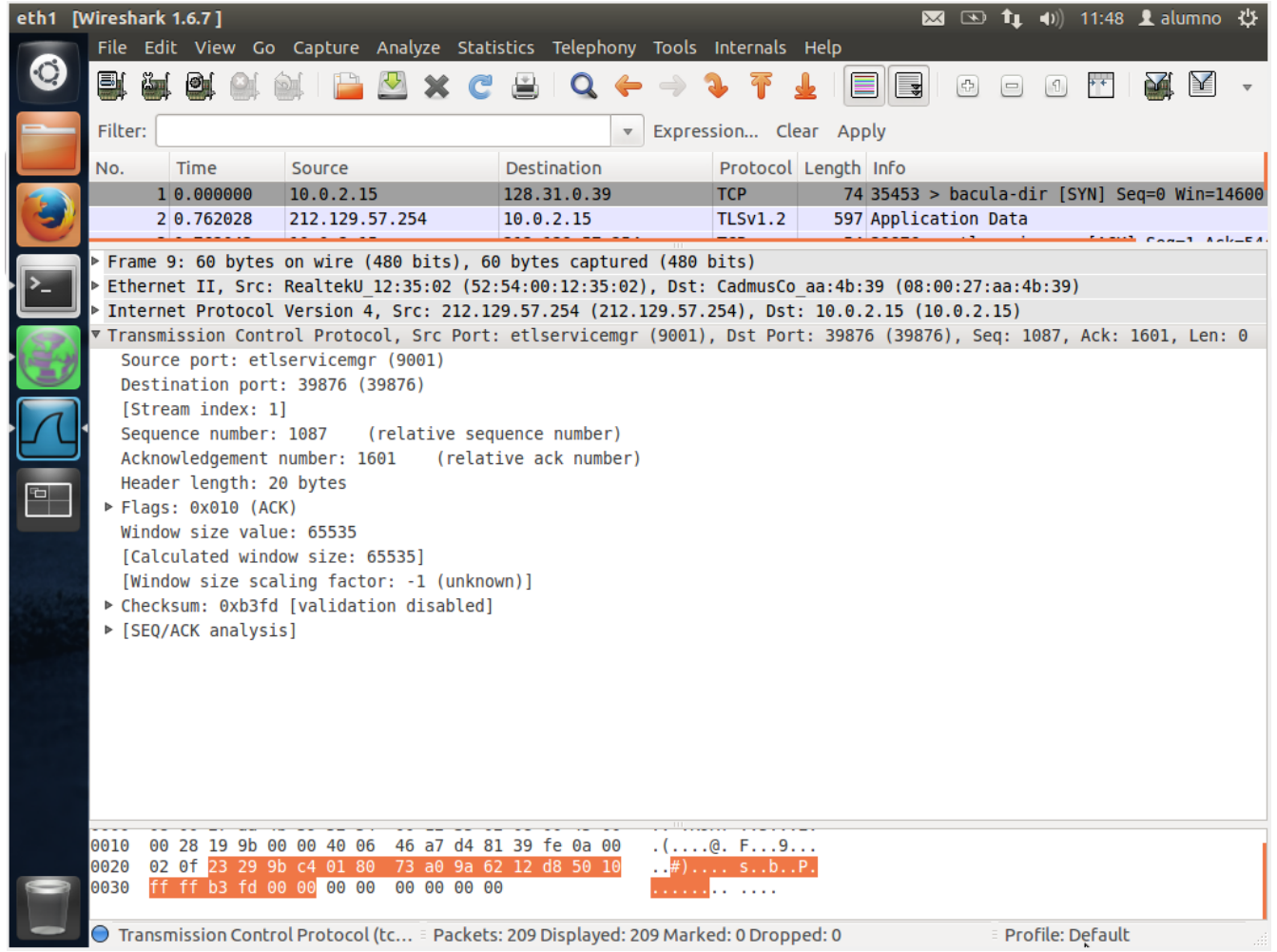

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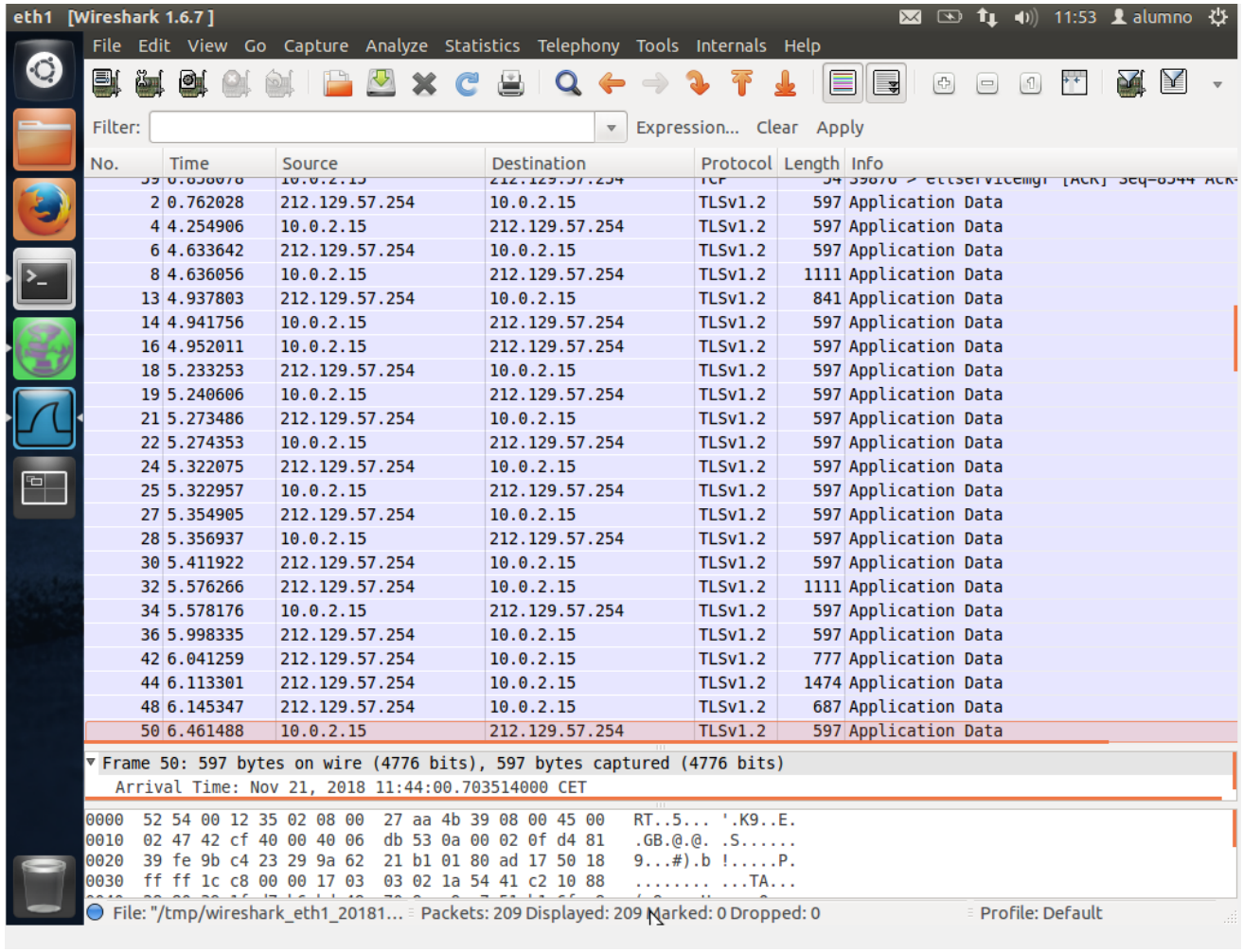

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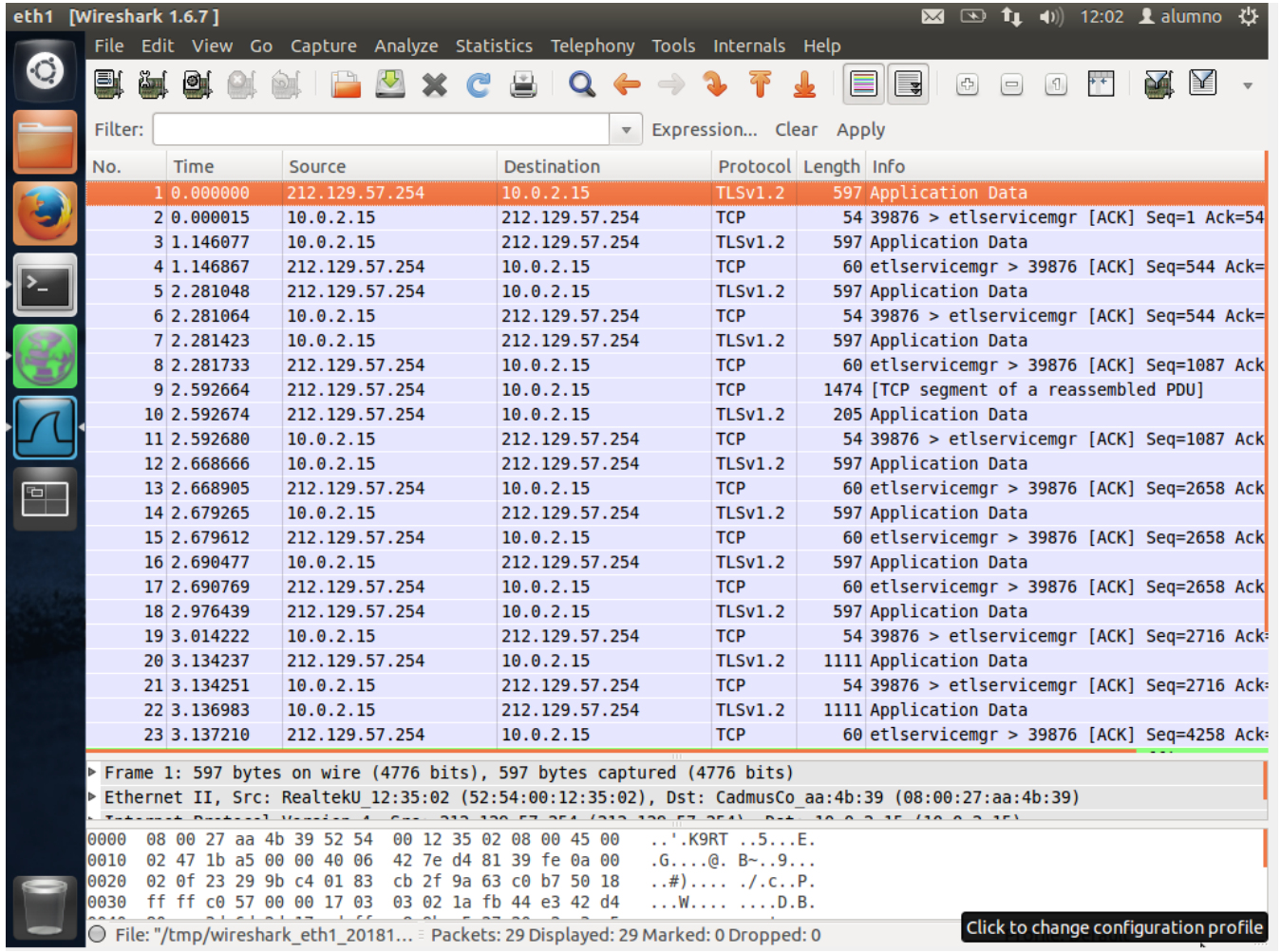

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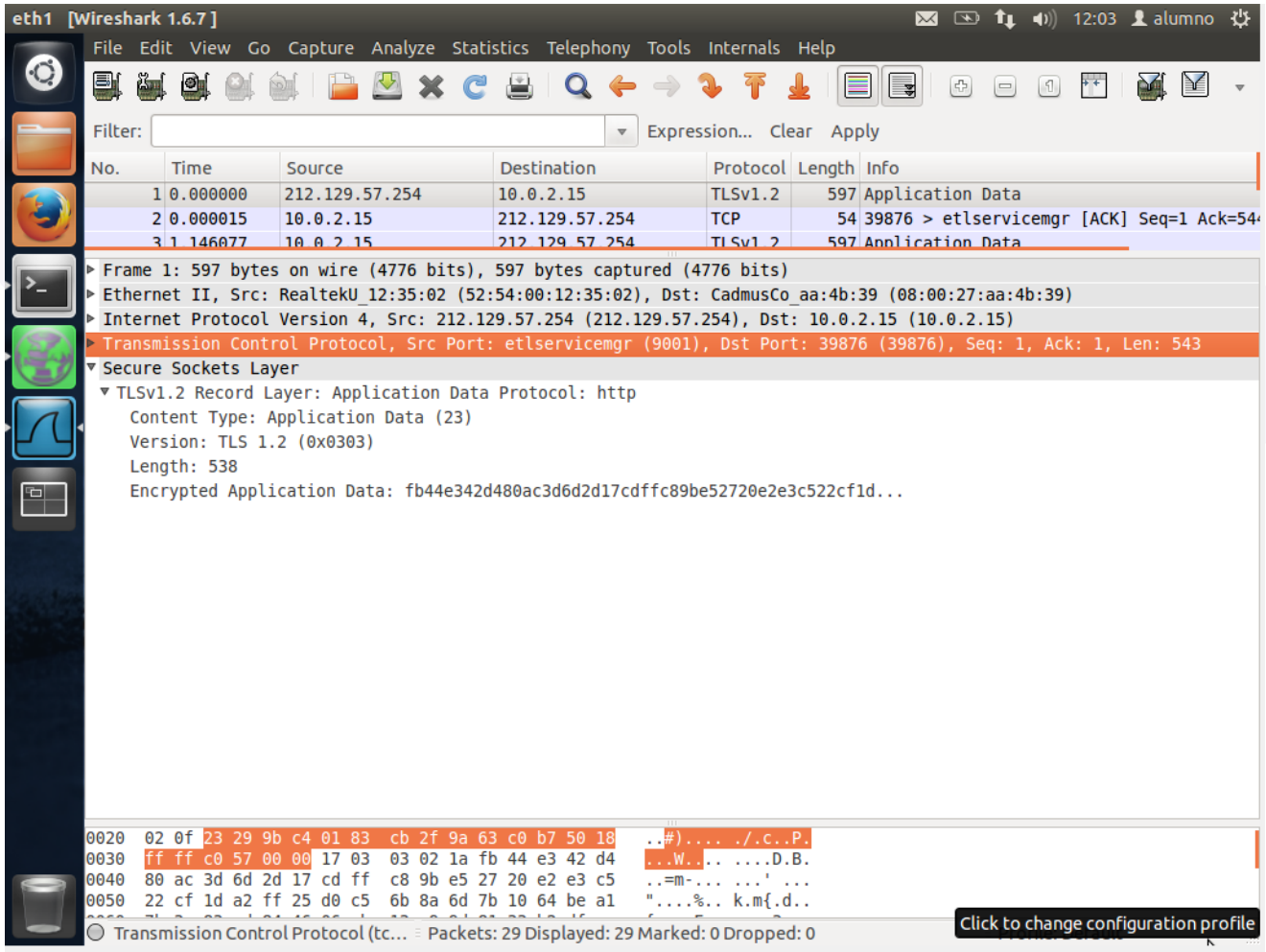

Demostración