

# Meta**Tor**

building a **meta web** to prevent  
censorship and data retention



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**Why** do we need to be protected?

Censorship

Data Retention

Electronic Eavesdropping

**Why** do we need to be protected?

Censorship  
**2006**

**Myanmar**

technology by Fortinet  
opposition party blocking  
full data retention

**China**

The Golden Shield Project  
started in 11/2003

**Why** do we need to be protected?

**Censorship  
2006**

**imprisonment for the freedom of opinion  
(2006)**

China: 62

Iran: 132

Syrien: 4

**Why** do we need to be protected?

Data Retention  
**2006/07/08**

**European Union**

EU Directive 2006/24/EG

hold-back time between 6 and 24 months

launch in germany 01.01.2008

# What can Tor do for us?

Tor - “The Onion Router”

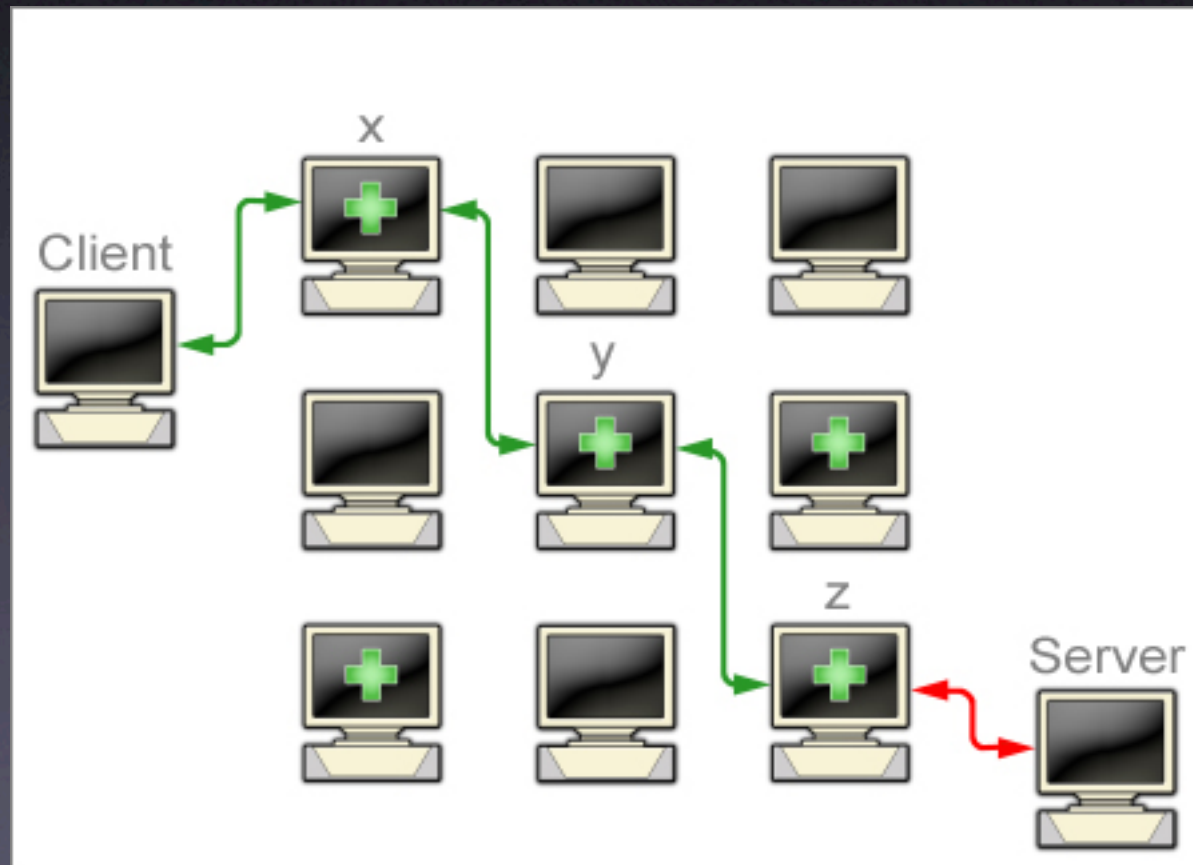
Data is **encrypted** and relayed over other Tor nodes

The Server never knows **who** requested the content

Tor undercuts firewalls and data analysis technologies

# What can Tor do for us?

## Tor - “The Onion Router”



Where is the **catch**?

## **Exit Nodes**

**fully responsible** for all data being sent and requested

**vital** for throughput and anonymity

**very rare**, compared with the number of users participating due to legal reasons

**unencrypted** information leaves the network



Where is the **catch**?

## Exit Nodes

**news** 08.09.2006 12:27

**Anonymisierungsserver bei Razzia beschlagnahmt**

Networld / 08.09.2006 / 15:36

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**Staatsanwaltschaft beschlagnahmt  
Anonymisierungsserver**

**Durch deutsche Tor-Server sollen Kinderpornos  
geschleust worden sein**

the solution: Meta**Tor**

## **HIDDEN SERVICES**

designed to keep information inside the tor cascade

.onion keys are used instead of ip addresses

**neither** client **nor** server know each other  
due the whole communication process,  
so the publisher and the consumer reap  
the benefits of **full anonymity**

**another** catch: usability and feasibility

**.onion keys:**

are hard to remember  
(ever tried to remember nnqtnsoohprzqcke.onion?)

are not suitable for virtual host technologies  
as used by apache (no multihosting is possible)

may change - change your ISP and your .onion  
key will change

# Meta**Tor** and TNS (**Tor** Name Service)

72.5.124.61  
**www.sun.com**



nnqtnsoohprzqcke.onion  
**sun.meta**

## Implement new TLDs

.meta  
.privacy  
...

### **PRO**

low-cost ( ~ 5 USD p.a.)  
needed to maintain TNS  
rest goes into **Tor** Funds

### **CONTRA**

risk of lost anonymity  
through payments

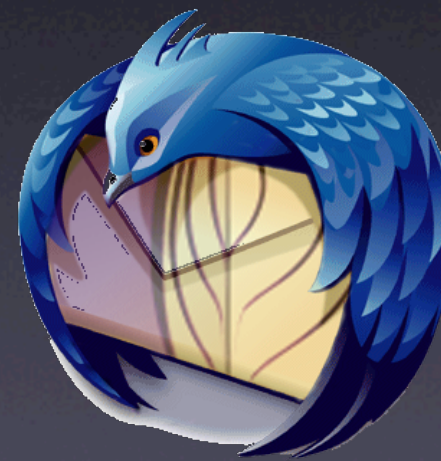
**Increase application usability**



**Increase application usability**



**Fire**Tor****



**Thunder**Tor****

## **Increase application usability**

built-in Tor client and TNS resolver

same usage as the original applications

built-in bypass security to keep data inside Tor



# Thank **You**

Send us your thoughts and ideas to

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or join us at

<https://www.reverse.tk/whocanutrust>

