



**SPAMHAUS**

THE **SPAMHAUS** PROJECT

**ICANN 38 BRUSSELS**



# About The Spamhaus Project

- .....> Since 1998, non-profit
- .....> Headquartered in the UK
- .....> 30+ specialists around the world
- .....> DNSBLs: SBL, XBL, PBL and DBL
- .....> DROP
- .....> ROKSO



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Over

**1,500,000,000**

mailboxes protected using our data



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# Fast flux

15 new locations. Every few minutes.



# Traditional bullet-proof hosting

- .....➤ Located in poorly regulated jurisdictions (China, Brazil, Russia)
- .....➤ ISP is slow when complaints are received
- .....➤ Site resolves to a single IP address



# Fast flux bullet-proof hosting

- .....➤ Multiple IP addresses act as a proxy for a concealed website
- .....➤ Hosted globally
- .....➤ They change *fast*



# Fast flux bullet-proof hosting

- .....➤ Multiple IP addresses can also answer for the hidden nameservers of a domain
- .....➤ This means that abuse mitigation has been moved from the hosting company to the registrar - registrars were never intended to handle this scenario
- .....➤ Most are not prepared to handle this!



# Hosting the worst of the worst

- .....➤ Counterfeit medicines
- .....➤ Phishing websites  
(Zeus/Avalanche specifically)
- .....➤ Mule scams
- .....➤ Malware downloads



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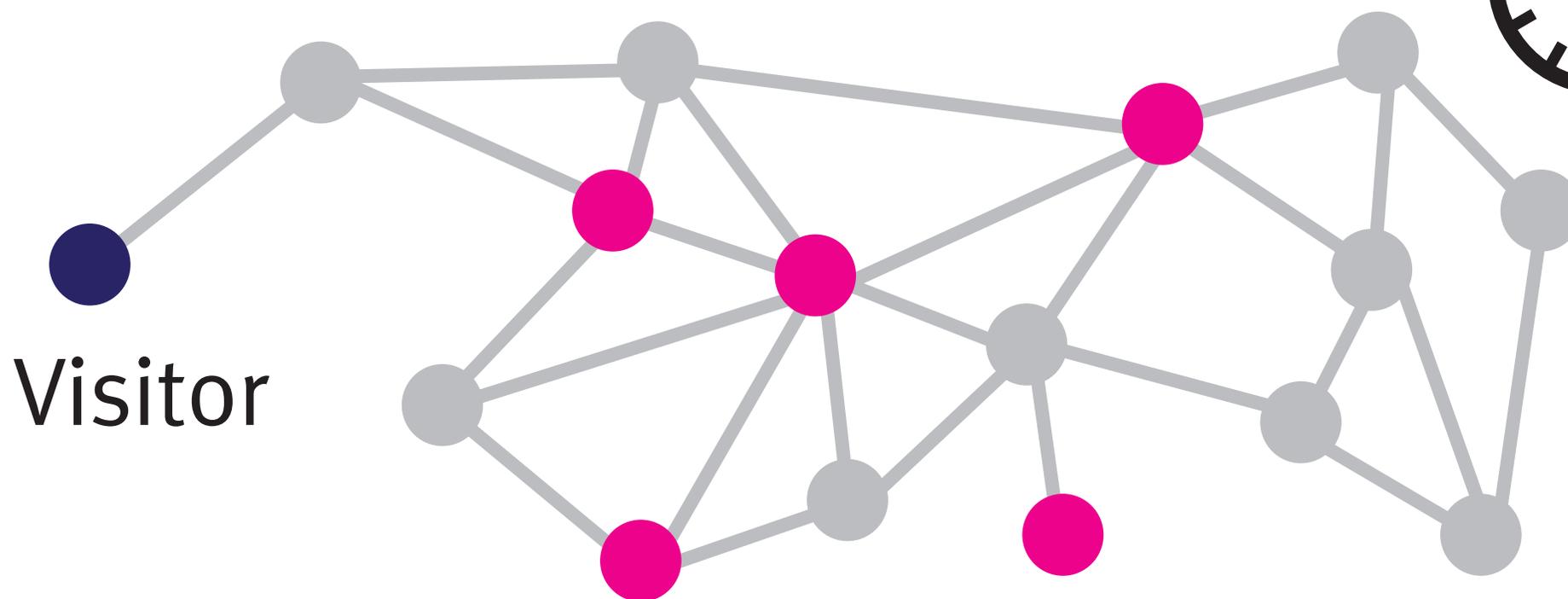
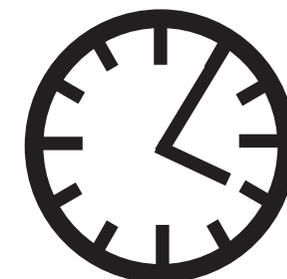
# Fast flux hosting





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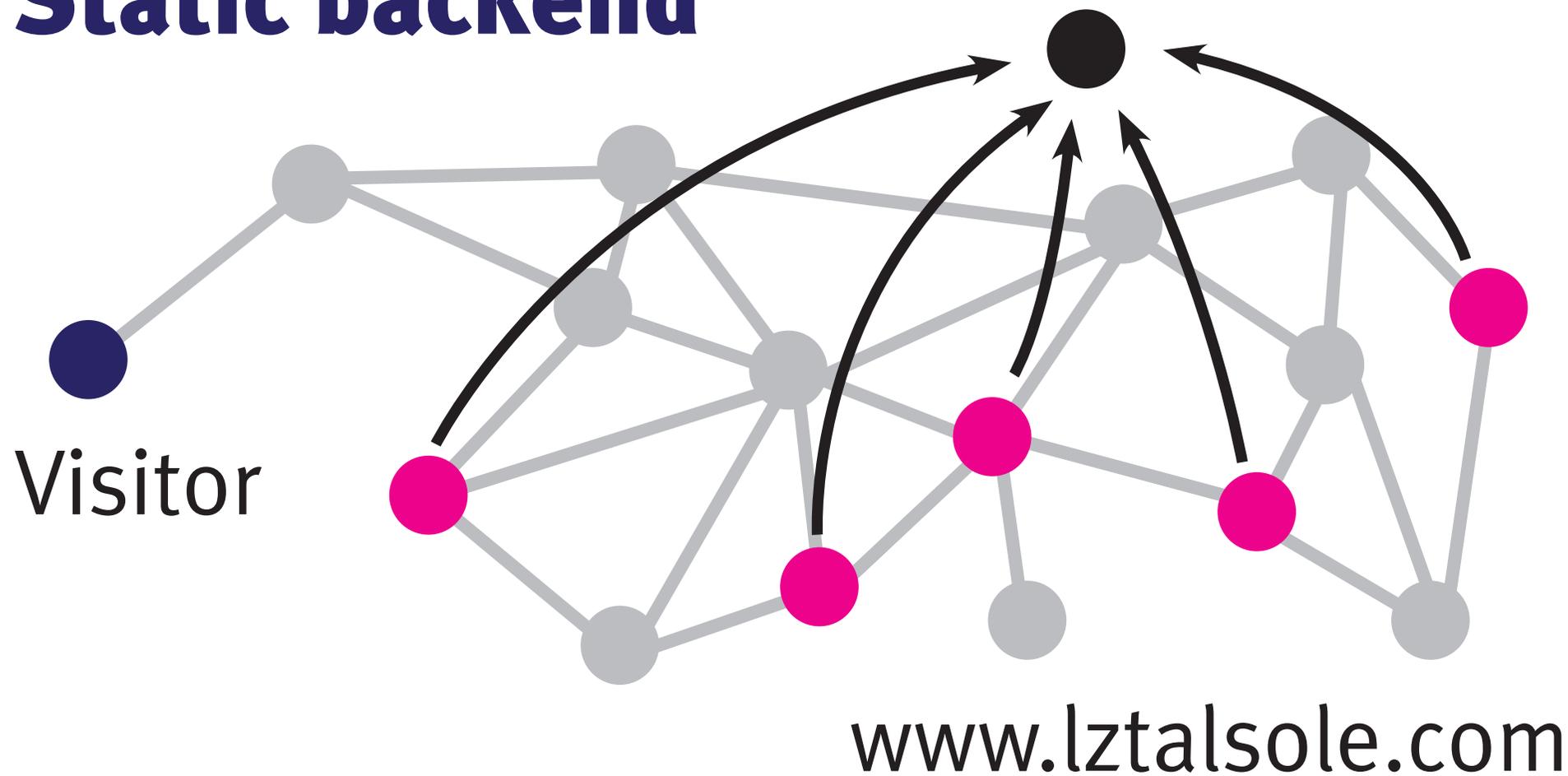
# Fast flux hosting



[www.lztalsole.com](http://www.lztalsole.com)



# Static backend





# Domain Block List

- .....➤ New since March 2010
- .....➤ Standard in latest SpamAssassin
- .....➤ Usable in any content filter that can check domains against a DNSBL



# Main goals

- .....➤ Provide additional protection against spam that passes IP-based DNSBLs
- .....➤ Shorten the usable lifespan of spammer controlled domains
- .....➤ Help registrars and registries protect their investment in the reputation of their brand
- .....➤ Zero false positives



# What is the input for the DBL?

- .....➤ Domains, domains, domains
- .....➤ And some IP addresses as well
- .....➤ Not only bad domains!



# And then?

- .....➤ DBL engine processes each domain to calculate reputation
- .....➤ Bad domains are put into the DBL zone
- .....➤ New zone is built and distributed to worldwide users ***every minute***



# What ends up in the zone?

- .....➤ Domains fully under the control of cybercriminals and spammers
- .....➤ Used for spam, phishing or malware distribution
- .....➤ These domains will have either been used in spamvertized URLs or as nameservers, redirectors, reverse DNS, etc.



# Usage in mail filtering

- .....➤ Extract domain from mailbody or headers
- .....➤ Lookup on DBL via DNS query
- .....➤ If listed: discard/score/move email



## Some lessons learned (1)

- .....➤ The big 'Ruskranian' spam operations use new domains every few minutes
- .....➤ So, they consider domains a throw-away resource!
- .....➤ Makes them very different from regular customers, who tend to be in it for the long run



## Some lessons learned (2)

- .....➤ Some spammers ‘age’ domains: domains are not always used directly after registration
- .....➤ Aging can be weeks or months, periods of over a year have been seen in the wild



# Some lessons learned (3)

- .....➤ Who considers rogoxxywtrcwph.info to be a legit domain?
- .....➤ Apparently there is no need to hide



## Some lessons learned (4)

- .....➤ Speaking of hiding... whois privacy protection is still strongly associated with badness
- .....➤ 1 in 5 privacy protected domains is used for spam (in any shape or form), phishing or malware distribution.



## Some lessons learned (5)

- .....➤ Some registrars have over 90% of their sponsored domains listed
- .....➤ We doubt the legitimacy of these kind of ‘registrars’



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# Thank you!

Our team is happy to answer questions  
either now or after the event!