Observations on the (Mostly) Inadvertent Effect of Data Management on International Cybercrime Investigations

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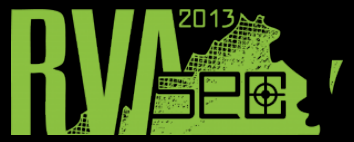
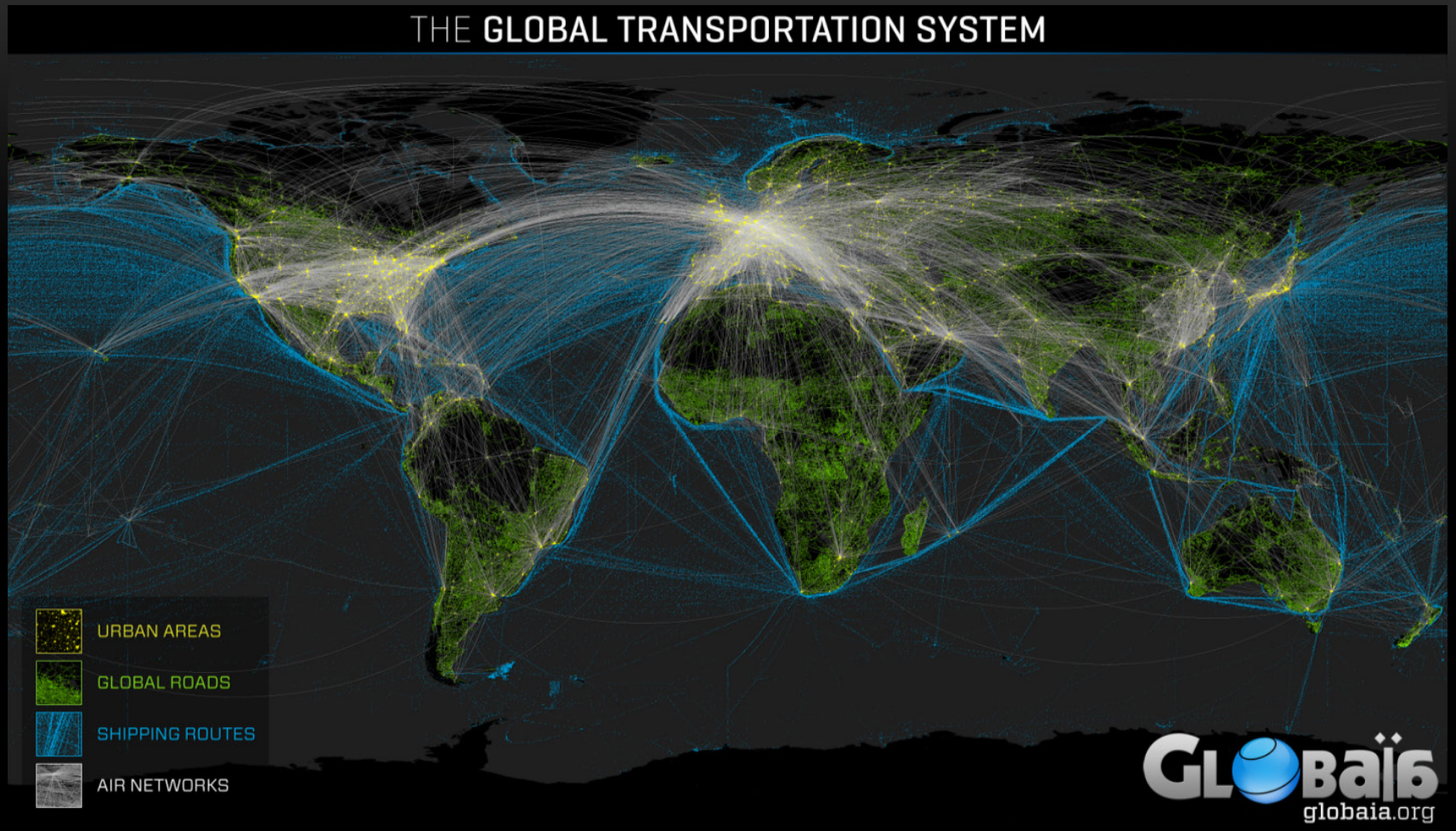
The Internet's Transnational Laws





http://globaia.org/en/anthropocene/gts.jpg

Transportation Routes

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Major City Interconnects

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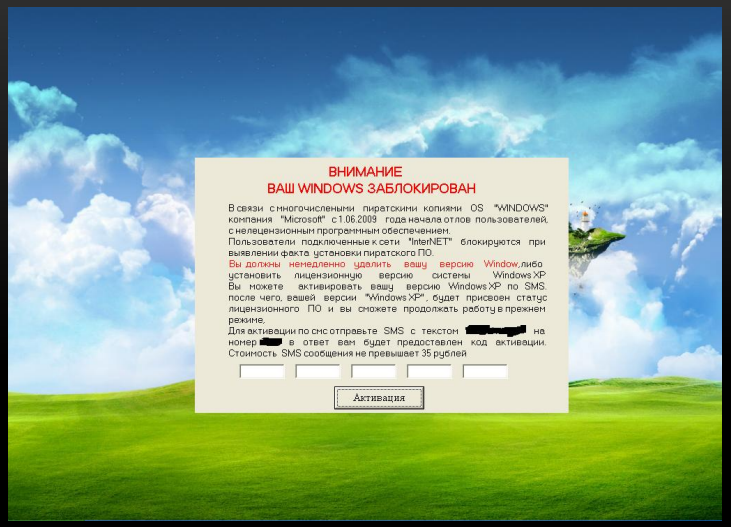

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Geographically Aware Malware

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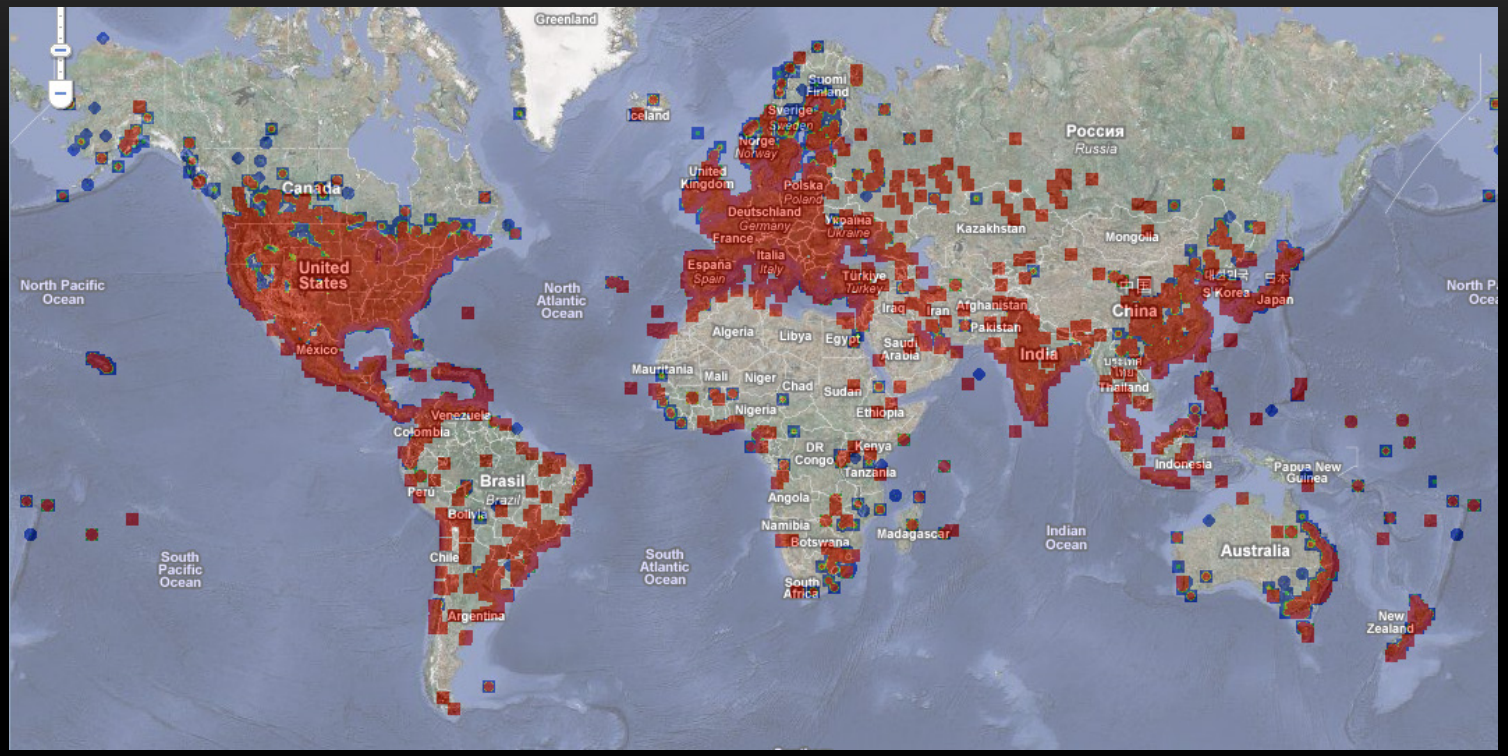

Conficker

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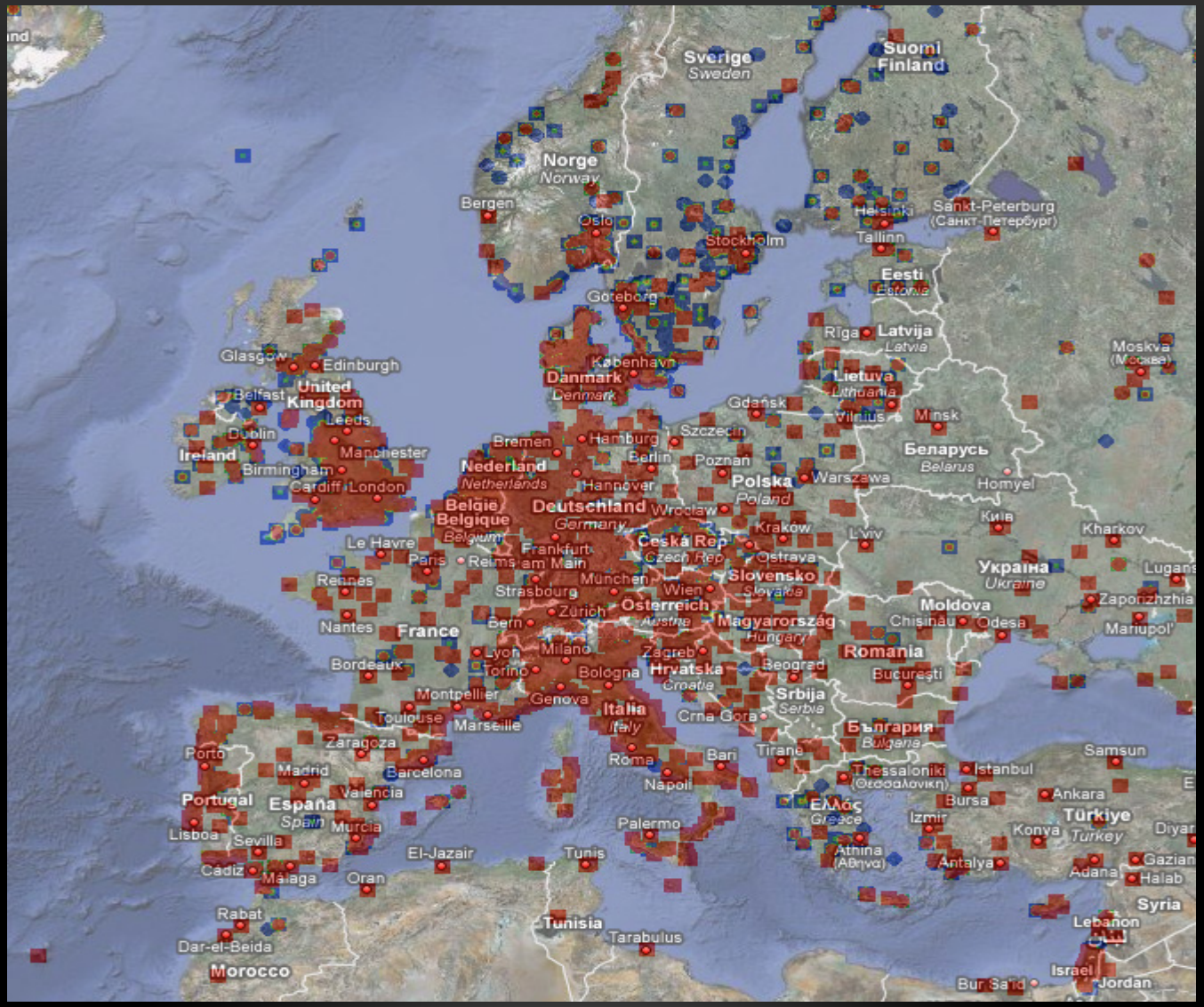
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Syria
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Tunisia
Lebanon
Tarabulus
Dar-el-Beida
Morocco
Israel
Jordan
Bur Said

Conficker

If it ends in .com, .net, .cc, .tv and .name
it's seizable

http://www.ntia.doc.gov/legacy/ntiahome/domainname/agreements/summary-factsheet.htm

Identify the geographic location of the systems that support, process, store, and backup your data

Use of subcontractors and their management of your data (including cloud providers)

Encryption transmission standards (Import - export requirements)

Data breach liability including notification procedures, data security standards, and other technical security measures for each jurisdiction

Litigation hold procedures for each jurisdiction

E-discovery procedures for each jurisdiction

Business continuity/disaster recovery procedures

Provisions in case of dispute (data held hostage)

Onward transfer agreements if 3rd party/cloud providers are changed

Data destruction agreements

Points of contact - including jurisdictional aware counsel

Privacy laws

Blocking statutes

Native language speakers

rackspace 2004 indymedia

Data Concerns

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The Cloud

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The geographical locations of the cloud provider's servers

The cloud provider's use of subcontractors

Encryption and transmission standards

Data breach liability, including notification procedures

Data security standards, and other technical security measures

Backups, confidentiality provisions, auditing rights, logs, and other related responsibilities

Procedures in the event of a litigation hold and/or discovery request

The cloud company's business continuity plan/disaster recovery procedures

Provisions in the event of a dispute with the cloud company (so that data cannot be held hostage)

Onward transfer agreements (in the event that the business migrates cloud providers)

If the topic of APTs gets information security to be addressed at the highest levels of an organization it may still be a useful topic.

There are many other threats that are out there and the APT is not the only threat that spends a fair amount of time in your computer systems and takes your data.

You are more likely to encounter losses from internal and legal problems than to lose significant data to an APT.

What you call hacking may be a legitimate business in its jurisdiction

Despite some wonderful minds and great products, there still is no promise of data security on the Internet.

The OFF button is the only technology answer to date; however, it seems to have a few unwanted limitations

One solution is available to help protect a company's data and impact an investigation

Data Management

Change your mindset and change your culture

Security is a process - not a technology

You are in an all out business war for your data - accept it

Must identify the truly important data - everything else is cat videos

Get help with legal requirements for retention and other concerns

Plan storage and backup space accordingly

Make non-essential data and systems resilient - be willing to lose non-essential data

Get control of your data – it is not where you think it is

Classify it

Plan and map out where each level of classified data should reside – use jurisdictions to your advantage

Define who should have access to each level of data - monitor those people (especially C-level and domain admin)

Tie security to individual responsibility - have consequences for incidents

CLASSIFICATION

OWNERSHIP

Attribution

Critical Data

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Data Management in an Investigation

- Questions?
- Comments?
- Tell the Geek to go home?
- You may cross examine the witness…