



Business

Congrats from 123-Reg! You can now pay us an extra £6 or £12 a year for basically nothing

We'll just tack that on your .uk domain bill. You're welcome!

By [Kieren McCarthy](#) in [San Francisco](#) 25 Oct 2018 at 06:04 109 [SHARE](#) ▼



Analysis UK domain name holders are furious with registrar 123-Reg for

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Google flings \$25m at Social Good AI contest, Baidu's whips up neural-net camera to treat eye diseases, and more



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Cyber-crooks think small biz is easy prey. Here's a simple checklist to avoid becoming an easy victim



Intel peddles latest Xeon CPUs – Cascade Lake AP and E-series – to



DATA CENTRE

SOFTWARE

SECURITY

DEVOPS

BUSINESS

PERSONAL TECH

SCIENCE

EMERGENT TECH


BOOTNOTES

LECTURES

**Business** ▶ **Policy**

Amazon tried to entice Latin American officials with \$5m in Kindles, AWS credits for .amazon

Brazil, Peru snub cheap gifts, refuse to unblock dot-word

By [Kieren McCarthy](#) in [San Francisco](#) 25 Oct 2018 at 19:29 32  **SHARE** ▼

Amazon offered the governments of Brazil and Peru millions of dollars' worth of Kindles and AWS hosting if they would stop blocking its effort to get hold of the .amazon top-level domain.

The governments turned the offer down.

This is the latest twist in the long-running saga between one of the world's most powerful companies and two South American governments irritated with US government spying.

Meeting at a conference run by DNS overseer ICANN this week, Amazon again pushed to be allowed to set up and run the .amazon top-level domain having won an independent appeal process that said the decision to block it had been arbitrary.

ICANN has been stuck in the middle of the dispute since 2012 when it

Most read



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Intel peddles latest Xeon CPUs – Cascade Lake AP and E-series – to head off envyc AMD

We still have a major problem

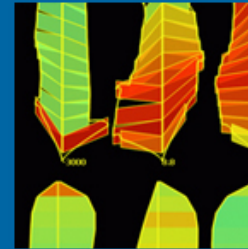
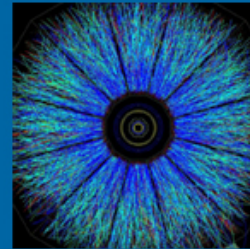
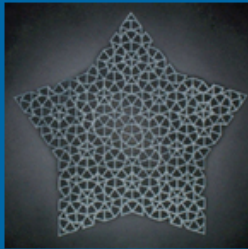
Public Key Encryption is the
foundation of the modern Internet but
how do you know the owner of a
Public Key is who they claim to be?



Swansea University
Prifysgol Abertawe

CS-130

Governance of The Internet – Between law and technology



Learning goals

Going forward we still want to look at two more major security issues but before we can do that, we need to understand the legal structure and the protocols behind the Internet so the next hour is something of a detour as we start to ask.....

Where did the Internet come from?

Who decides who owns a given web domain?

Who are the major stakeholders when it comes to decision making about how the online world works?

What do you understand by “Governance of The Internet”?

What is Governance?

Amazon.co.uk and Amazon.com – both exist and point to different servers but who decides that?

Can the US President order the shutdown of the Internet?

How do we solve the identity problem we discussed previously when it comes to Public Key ownership?

A Brief History of The Internet

1960s

ARPANET is the US Department of Defence's robust communication network in the event of nuclear war

- Node-to-node structure for resilience to conventional attack

Request For Comments (RFCs) are the policy document of the Internet

- Called RFCs rather than rules because everyone so argumentative about their use

Steve Cocker, Vint Cerf, Jon Postel are leading figures in this developing area

A Brief History of The Internet

1973 – 1981

Many different transmission protocols in operation on different networks but one eventual winner: **Transmission Control Protocol / Internet Protocol (TCP/IP)**

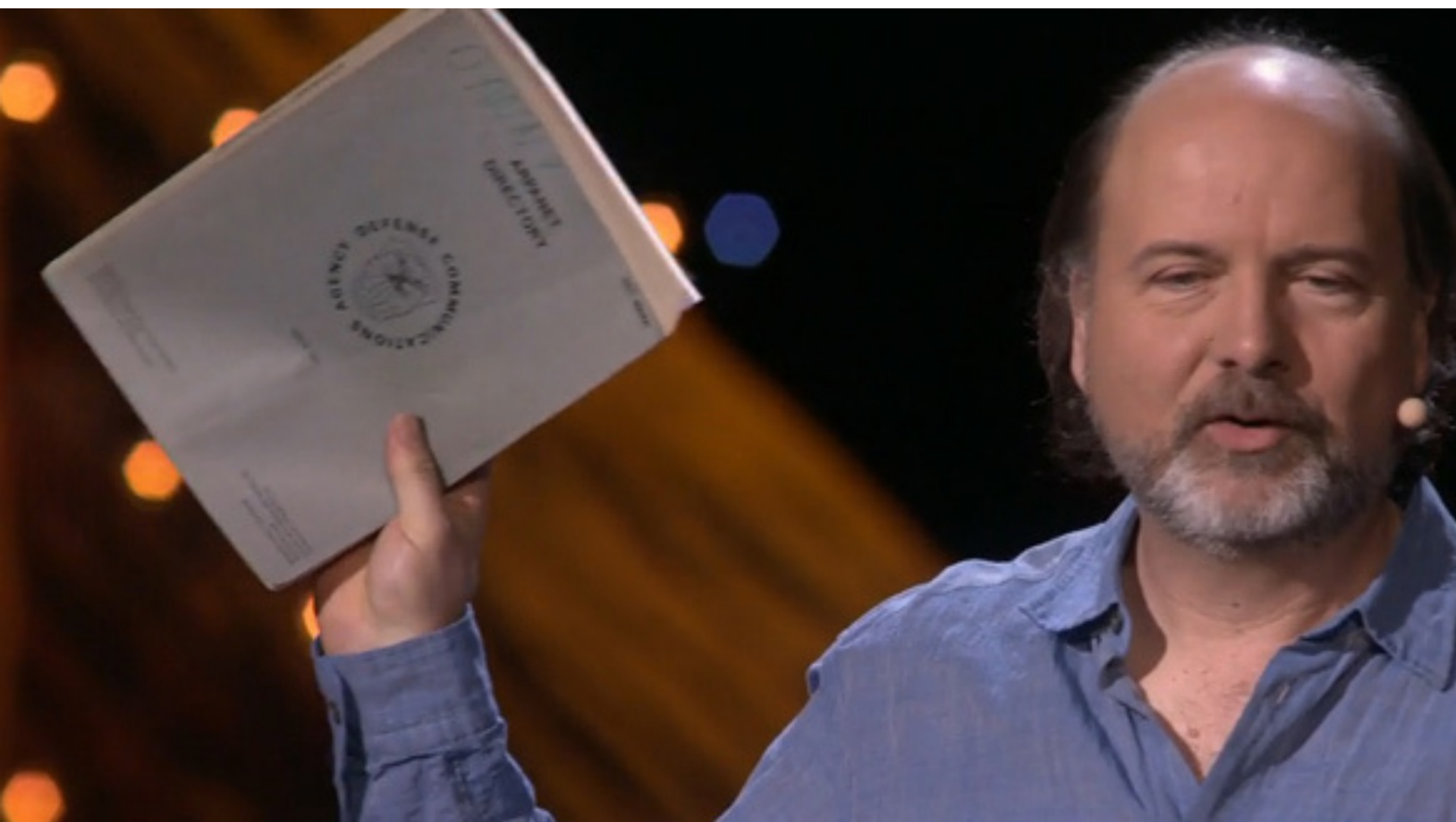
TCP/IP is not the best/only protocol

- European OSI is a competitor but eventually becomes relatively ignored
- Leads to a host of poor quality solutions like Voice Over Internet Protocol

1982

Twenty five networks joined using TCP/IP, Jon Postel personally responsible for assigning new address blocks and updating ***hosts.txt***





How does the Internet work now?

How do we turn <http://www.google.com> into something that we can find through our web browser

Internet Protocol (IP) addresses <http://www.google.co.uk>



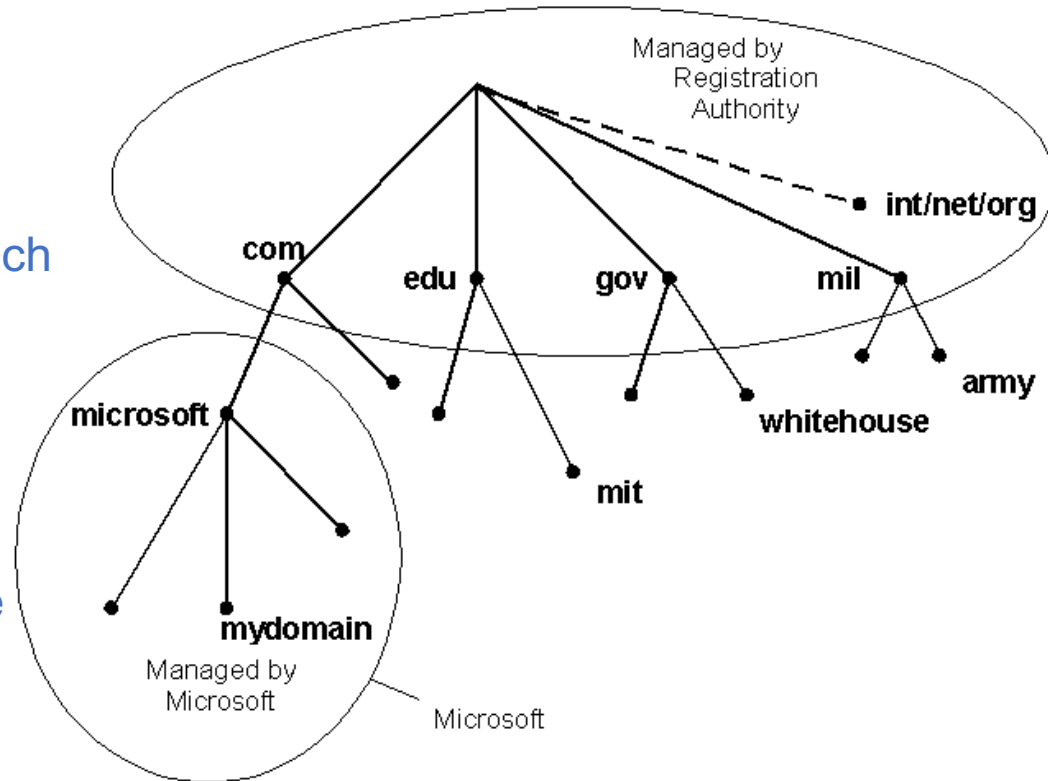
<http://74.125.224.72/>

How does the IP conversion happen?

Document requests use a known
Domain Name Server (DNS)

- But each DNS doesn't know *all* address pairings
- *Hierarchical lookup* eventually reach the root DNS server
- Caching frequently visited sites at each tier

DNS resolution is an example of an *open standard* meaning anyone can implement DNS and interoperate with the existing system



A Brief History of The Internet (continued)

1983

- First (and “temporary”) top-level DNS = dot-arpa
- Jon Postel’s suggestion to **distinguish by *type*** dot-edu, dot-gov, dot-mil
- Others wanted to **distinguish by *geography*** dot-uk etc. and this approach is adopted in October 1984
 - ISO-3166 dictates Country Code Top Level Domains (ccTLD) such as .uk, .au, .us, etc.

Both approaches are still in use at the moment

A History of The Internet (continued)

1991

Decentralisation of naming to **Regional Internet Registries (RIR)**

- The **Internet Society (ISOC)** formed to formalise governance process but key decisions still made without their input and the US Government holds a major level of control over the system

1991

Tim Berners-Lee invents the world wide web or at least it's foundations, Hyper Text Mark-up Language (HTML) and Hyperlinking

1995

- Commercial ISPs had emerged as front runners to control naming
- **Network Solutions (NSI)** charges a fee for registration of sub-domains and controlled (existing) top-level domains .com, .net, .org, .edu

Can you register
cocacola.com as a
domain?

A History of The Internet (continued)

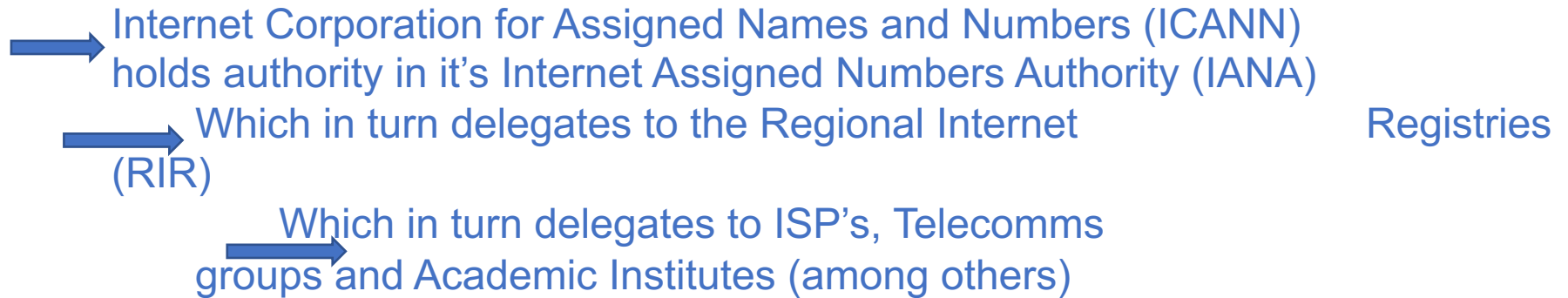
1995

- www.shitakemushrooms.com registration attempt highlights censorship of the system for registering names as it fails repeatedly

1996

- Trade-mark names in URLs starts becoming an issue
- The UN **World Intellectual Property Organisation (WIPO)** formed to arbitrate Trade Marks in 1960s control URLs
 - Uniform Dispute Resolution Policy is widely considered a flawed document though as it heavily favors the larger player in any market

So who decides what domains get how many numbers and which names?



The three main top level players in contention to control how this works

- US Department of Commerce until 2016
- ISOC (Internet Society) – large companies
- Council of Registrars (CORE) – ISPs and Telecomms groups that sell domain names

22 Oct
2018

Battle lines drawn, skirmishes commence: ICANN community debates future of WHOIS access

- ICANN 63 taking place in Barcelona this week, with WHOIS a key focus
- CEO responds to accusations of siding with interest groups over unified access model
- Registrars slam AppDetex over claims on Facebook data requests

This week, the ICANN community is gathered in Barcelona for its latest official meeting. High on the agenda are efforts to develop permanent policy on the treatment of WHOIS data in light of the EU General Data Protection Regulation (GDPR). However, even before the community stakeholders arrived in Spain, the battle lines were being drawn, with pushback over ICANN's perceived bias towards IP interests and fierce criticism of data access



TRENDING

1

Clarivate Analytics snaps up TrademarkVision as new research offerings eyed

2

Nepal drafting new IP law, Burberry settles Target dispute, and China working to eradicate trademark hoarding: news round-up

3

Amazon green light, WHOIS access, URS proposals: six key



Business ▶ Policy

The internet's very own Muslim ban continues: DNS overlord insists it can freeze dot-words

ICANN holds .islam, .halal in limbo despite losing case

By [Kieren McCarthy](#) in San Francisco 30 Jul 2018 at 21:44 80 [SHARE](#) ▼



Internet overseer ICANN has insisted it has the authority to maintain a six-year online Muslim ban, despite being told otherwise by its own independent oversight panel.

In a letter sent to the Turkish organization that applied for the rights to operate the .islam and .halal generic top-level domain names back in 2012, ICANN's lawyers claimed that, despite ICANN being formally told it had repeatedly broke its own bylaws by refusing to green-light the gTLDs, it is not under any obligation to actually do anything.

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ICANN URL Controls and Problems

Artificial scarcity is used to drive prices up - by 2000 there were still only 5 generic TLDs.

- ICANN added a few: .info .museum .aero

Rejection of the dot-xxx domain name

- Was found to be wrong in court and Happened because of US influence

US **Department of Commerce (DoC)** was supposed to cede control over the main part of ICANN but retained authority though didn't use it

- Eventually relinquished control but still has a lot of influence

Creation of the .islam and .halal domains are persistently refused despite ICANN losing court cases on this matter

Learning goals

Where did the Internet come from?

ARPA NET and US military research

Who decides who owns a given web domain?

It's complicated, ICANN, WIPO

Who are the major stakeholders when it comes to decision making about how the online world works?

ISOC – Large companies