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The History of Internet Governance

presented by

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Q:What Is Internet Governance?

Governance \neq Government

Governance = Rules + Rules about the Rules

- Administrative processes
- Guidelines
- (and for the Internet) Programmes (eg DRM)

What is at Stake?

Why is it important?

Internet Governance in 1998: A Dotcom Boom Time

- In 1998 IFWP (International Forum on the White Paper) meeting in Singapore to establish a new domain name authority
- Coincidentally, idea of World Summit of the Information Society first mooted at ITU (International Telecommunication Union) Plenipotentiary in Minnesota
 - Unspoken concerns about US dominance over information “resource”
 - Arab world was concerned that information was the “new oil” but that they were being left behind

WSIS 2003: A Near Failure

- Clash of visions of governance
- Traditional inter-governmental arrangement vs Modern multistakeholder arrangement that includes private sector and civil society
- Simplistically: US vs Rest of the World
 - Clash inevitable with imperialistic view of Bush administration

What is at Stake?

1. Control over Internet “resources”
 - Limited IP addresses
 - Asia-Pac region first to run out of IP addresses
 - Event to mark the final allocation held on Chinese New Year day
2. Control over national infrastructure placed on the Internet
 - Does the USA have ultimate control if your national infrastructure is on the Internet
3. Vision of how the Internet is to be governed

**Issue #1:
The Root Zone Problem
or
What the Major Fight over
Internet Governance is About**

Root Server:
13 Worldwide



“.COM” Top-
Level Domain
Server
(192.5.6.30)



Google Server
(74.125.131.105)



I need to
add
www.google.com

Google
繁體中文

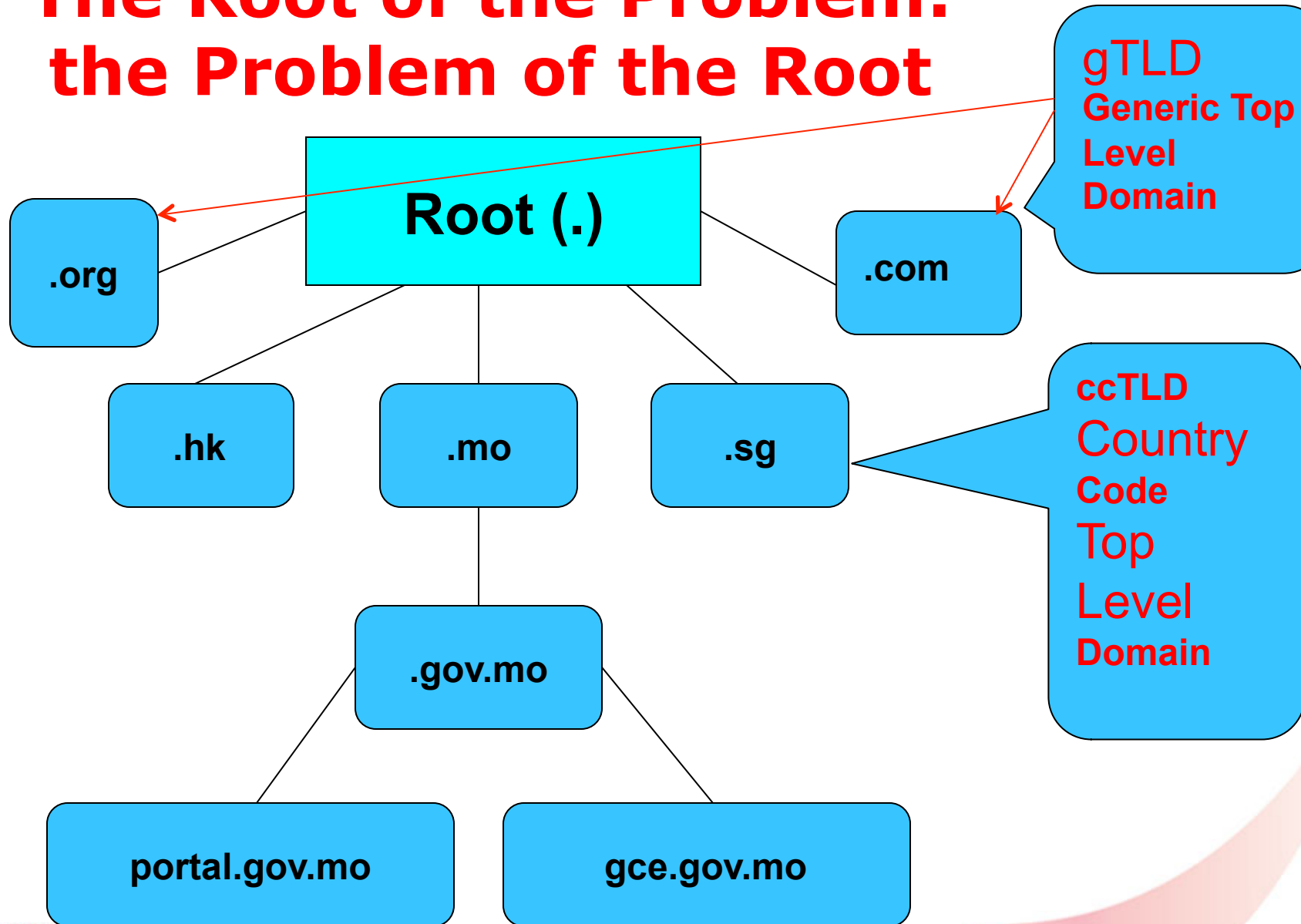


Google 搜尋

好手氣



The Root of the Problem: the Problem of the Root



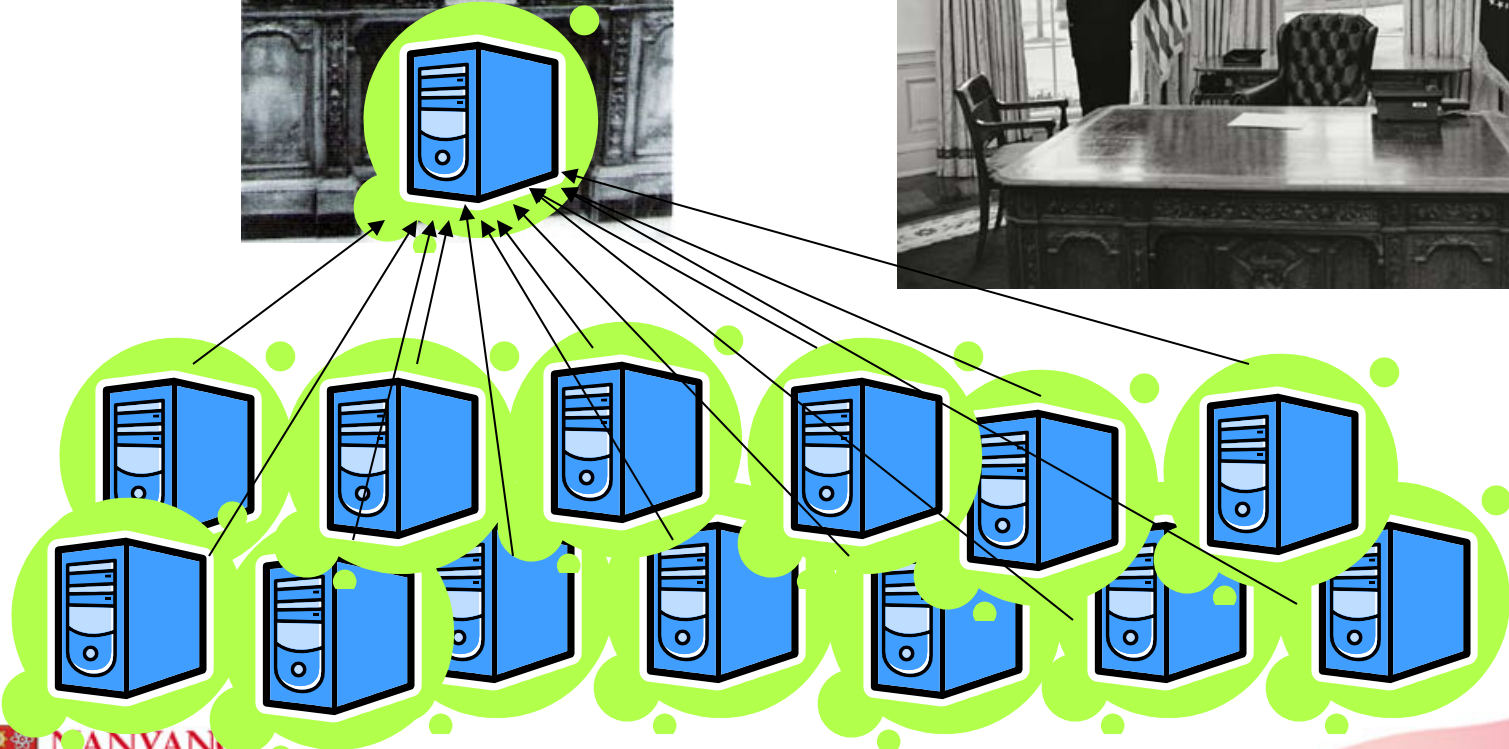
Root Zone Issues

1. The Root Zone problem

- There is 1 “hidden” (from hackers) root server.
- It has the root zone file.
- This server is in the USA.
- If your country does not appear in that file, you do not exist in cyberspace.

2. The major concern is the control of this root zone

Where is the hidden server hiding?



Total of 13 root servers globally

THE Root zone and Root file system are in the hands of the USA

Question:

What happens to a country's Internet if the country is at war with the USA?

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Peace education

Create peace while you create your future.
Maharishi Univ. BA-MA-PhD
MUM.edu

Interfaith Dialog Center

Brings faiths together through diverse interfaith activities
www.idonj.org

Peace Movement

Citizens for Peace Campaign and Links
peacecoup.us

[The Register](#) » [Internet and Law](#) »

Iraq domain owner convicted



Bayan Elashi and his four brothers face 10 years in US jail

By [Kieren McCarthy](#) → [More by this author](#)

Published Friday 9th July 2004 17:05 GMT

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The current owner of Iraq's .iq domain has been found guilty along with his four brothers, of illegally shipping computer parts from the US to Libya and Syria. Bayan, Basman, Ghassan, Hazim and Ihsan Elashi have yet to be sentenced but face 10 years apiece.

On top of this, all five of them will face a further trial in September for allegedly dealing in the property a "specially designated terrorist" - namely Mousa Abu Marzook, the ex-head of Hamas' political bureau and their cousin's husband, for which they could face a further 10-year sentence. With that also comes various counts of money laundering that have a 10 to 20-year sentence.

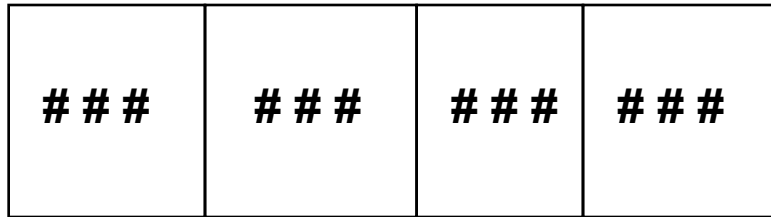
The Story of .IQ

- .IQ taken offline when .IQ domain registry manager in Texas (not Saddam Hussein) was indicted in 2002 for unauthorised sale of computer parts to Libya and Syria; convicted 2004
- Management of .IQ domain given to Iraqi government July 28, 2005
 - After WGIG Report was completed and sent for translation but before it was made public
 - On grounds that only then was there a stable functional Iraqi government

Issue #2. Concern Over “Internet Resources”

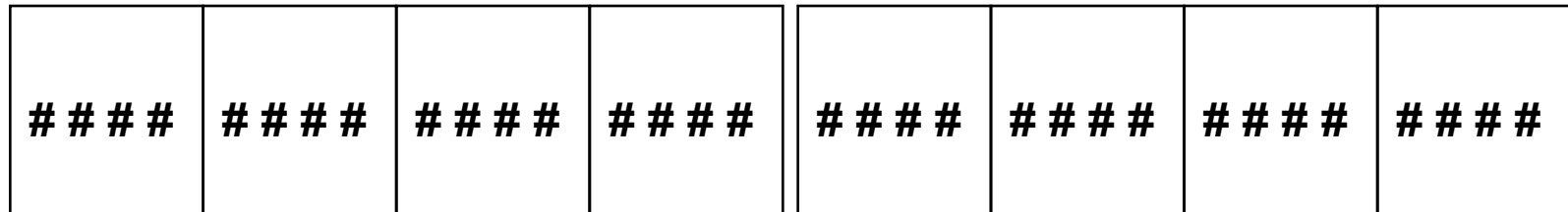
IP Address Exhaustion: Need for IPv6

IPv4 32 bits



4,294,967,296 unique IP addresses

IPv6 128 bits



340,282,366,920,938,463,374,607,432,768,211,456 unique IP addresses

Other Concerns Behind WSIS

- Tunisia and the Arab world
 - Feeling of being left behind, esp. Arab world
 - Information Minister of Tunisia Masmoudi played key role at the time of NWICO (New World Information Communication Order)
- ITU (International Telecom Union)
 - Telcos bet (wrongly) on intelligent network technology (ATM-Asynchronous Transfer Mode), not a dumb network technology, like the Internet
- Also, the case of .IQ

WSIS 2003 Conclusion

- RoTW wanted to discuss Internet Governance
- US view that RoTW included countries only starting to have the Internet and so did not have the capability to understand the issues
- As a compromise, formation of the Working Group on Internet Governance (WGIG) appointed by and reporting to the UN Secretary-General

Role of WGIG: Mandate

- Appointment by UN Secretary-General
- To “investigate and make proposals for action, as appropriate”
- A fact-finding—not negotiating—mandate
- Core:
 - What is internet governance all about
 - What are the issues
 - Who is or should be doing what

Internet leased line costs

APPLICATIONS	
Spain	OECD
	ITU
	IETF
Competition policy, liberalization, privatization, regulations	WTO
Security of network and information systems	ITU
	ITU
	WIPO
	OECD
	ITU



**Nitin Desai,
Chair of
WGIG**

**Markus Kummer,
Head of Secretariat**





The WGIG Report: Overview

Scene: Chateau de-Bossey

Working Definition of Internet Governance

Definition:

The collective rules, procedures, and related programs that affect practices, and interactions concerning Internet infrastructure and transactions and content.

Accepted in Tunis Agreement at WSIS

Source: Final Report of the Working Group on Internet Governance

Significance of Definition

Rejects attempted narrow definition by ITU's Secretary-General

- Includes other significant public policy issues such as
 - Spam, privacy, cybercrime, security and development of the internet.
- Includes private sector and civil society

In WGIG Final Report, ITU is mentioned once, as a footnote



*Yoshio Utsumi,
SG of ITU 1998-2006*

Implications for Internet Governance

Internet governance arrangements should:

1. Be multilateral, transparent, democratic,
2. Involvement public and private sectors, civil society and international organizations, and
3. Be coordinated.

Shows importance of process

WGIG Recommendations

Recommendation 1: Forum Function

Recommends a Forum for dialogue among all stakeholders to address Internet-related issues:

- Light-weight
- No decision-making power
- Talk-shop to share best practice and discuss issues
- Low-cost structure

Result: Internet Governance Forum

The Internet Governance Forum

Annual IGF meeting

1. Athens, Greece, 2006
2. Rio de Janeiro, Brazil, 2007
3. Hyderabad, India, 2008
4. Sharm-el Sheikh, Egypt, 2009
5. Vilnius, Lithuania, 2010
6. Nairobi, Kenya, 2011
7. Baku, Azerbaijan, 2012
8. Bali, Indonesia 2013
9. Istanbul, Turkey, 2014
10. João Pessao, Brazil, 2015

Recommendation 2: Oversight Function

Internationalisation of oversight of Internet

- Based on WSIS principles:
 - Multilateral (many countries),
 - Democratic,
 - Transparent
 - Multi-stakeholder (government, business, civil society).
 - Oversight should not interfere with day-to-day operations.

Translation: USA should give up sole oversight authority over ICANN

Issues with ICANN

- WGIG found it most transparent among international agencies but . . .
 - It's a US company with a sole-sourced contract
 - Under the US Dept of Commerce
- Government Advisory Committee—which allows governments to give inputs—least transparent.

Role of US to Diminish

“No single Government should have a pre-eminent role in relation to international Internet governance.”

Source: WGIG

- All countries equal
but some are more equal than others

Reasons for ICANN to be Under USA

- Stability and security of the Internet
 - Counter: Validity of reason?
- Censorship of the Internet by other countries
 - Counter: US religious groups lobbied to withdraw approval for .XXX gTLD (generic top level domain)

What if the USA behaves as if it owned the Internet?



Example 1 From GPS (Global Positioning Satellite)

Why did Europeans develop parallel system called Galileo?

- Ensure European access to satellite navigation
- Russian GLONASS system and Chinese Beidou, both military but made available to civil users without any guarantee for continuity

CSNC

BeiDou Navigation Satellite System Signal In Space Interface Control Document Open Service Signal (Version 2.0) [Download](#)

BeiDou Navigation Satellite System Open Service Performance Standard (Version 1.0) [Download](#)

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Example 2 : Joint Strike Fighter

- US\$40 billion project
- \$4 billion from partners
- Source code is in the hands of the USA so that UK (\$2.5 billion) could not upgrade plane
- Agreement reached to have countries have “operational’sovereignty” over planes



Recommendation (3): Institutional Coordination

Improve coordination between existing institutions at all levels:

- Intergovernmental organizations such as ITU, WIPO, UNESCO;
- Internet institutions, such as ICANN, ISOC, IETF, W3C, RIRs.

Translation: ITU is one of various agencies involved in Internet Governance

Recommendation (4): Regional and National Coordination

Importance of national policies and coordination among all stakeholders.

- relationship between ccTLDs and governments;
- shaping of “Internet friendly” policies;
- models for national Internet governance arrangements (Internet Steering Committees);
- methods: peer review and best practices.

Summary

- There is much greater awareness of Internet governance issues
- A lot of issues have been resolved and are being resolved—eg IP addresses
- But there are others that are thorny:
 - Distrust of USA after Snowden revelations
 - USA aiming to defuse tension through IANA transition (taking one of the functions of ICANN away from US DoC oversight)