Internet Governance

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San Diego – October 2003
Need for “Governance”

- Shared resources needing administration:
  - IP Addresses (V4 and V6)
  - Domain names (ccTLD, gTLD)
  - AS Numbers (eg, AS3557)
  - Protocol Numbers (TCP=6)

- If we don’t follow universal allocation system, then we cannot interoperate
“Stakeholders” (1)

• If...
  – you hold/use/own/control a resource
  – your business is in allocating resources
  – you are a legislative policy wonk
  – you have too much time on your hands
• …then you too can be a “stakeholder”!
“Stakeholders” (2)

- ICANN
- US DoC
- IETF
- ISOC
- RIR’s
- TLD’s
- EFF
- Ralph Nader
- Lunatic fringe
- Root server operators
- ICANNWatch
- Network owners
Rebels

- ICANN tries to be all things to all “stakeholders”, with predictable results
- Folks who don’t get the recognition or power they want/need/crave can rebel
- If consensus inertia is higher than rebellion inertia, then the rebels become marginal
- Otherwise time drags on until a newer or better consensus is found
Loyals (like kc and vix)

- Some of us just want the system to work and are willing to ignore the stench of it all
- RIR’s and RSO’s are prime examples
- IETF is less coherent but tends to be loyal
- Rebels see us as the empire’s storm troopers, or lapdogs, or dupes
- Some “powers that be” are uneasy about us
Interlude – Global Routeable IP

• Every globally routeable IP address block (IPv4 or IPv6) places a small burden on a large number of Other People’s Routers.
• This scales poorly – demand is for millions, capacity is for a mere tens of thousands.
• A better economic model would apportion the costs to those who benefit from routes.
More on Global Routeable IP

• Economic model is course-grained, so back pressure on global routeable IP felt at RIRs
• ARIN/RIPE/APNIC/LACNIC continuously searches for equilibrium between “routing table size” and “minimum allocation size”.
• If it’s too easy to qualify for minimum-size IP block then there will be too many blocks.
Last Word on Routeable IP

- Technical model leads to “only big networks can qualify” allocation system for global IP.
- This means small ISPs have to use address space from large ISPs. Result: hegemony.
- Alternatives all require vast increase of “state” in routing core, which is an anti-IP approach.
- Got a better idea? Go into research and fix it!
Ex.: VeriSign TypoSquatting

- Washington Post, 15-SEP-2003: “VeriSign Inc. today used its power as the operator of the "dot-com" and "dot-net" Internet domains to redirect a torrent of valuable "junk" Internet traffic away from Microsoft and America Online into its own proprietary search page.”
SiteFinder Motivation?

• Also from that same article:
  – “VeriSign's Site Finder could easily generate more than $100 million a year in profits for the VeriSign, according to Mark Lewyn, the chairman of Reston, Va.-based Paxfire Inc. Formed in 2003, Paxfire designs systems to redirect misspelled Internet queries.”
Weakness in Governance?

• Many see VeriSign as **steward** not **owner**
• Alternative methods (MSIE, AOL) involve:
  – Contracts with eyeball-owners
  – Service and product subsidies
  – Inherent right/ability to avoid
  – Local language/culture fit
SiteFinder Timeline (1)

- 16-SEP-2003: VeriSign turns on redirection
- 18-SEP-2003: ISC releases BIND9 patches
- 19-SEP-2003: ICANN requests suspension
- 21-SEP-2003: VeriSign refuses
- 24-SEP-2003: China (all of it) opts out
- 03-OCT-2003: ICANN demands suspension
- 04-OCT-2003: VeriSign complies
SiteFinder Timeline (2)

- 06-OCT-2003: ICANN provides timeline
- 07-OCT-2003: SECSAC Meeting in WDC
- 15-OCT-2003: SECSAC Meeting in WDC
- 22-OCT-2003: GNSO PDP (by January)
- Before January: updated SECSAC report
- Vixie’s prediction: lawsuits, countersuits
vix’s Challenge to VeriSign

- SiteFinder’s losers are registrars, spam victims, web surfers, registrants, other typosquatters, users of non-web protocols (FTP, SSH, etc), and the Internet governance trust model
- Who, other than VeriSign, wins? (Please provide diverse and specific examples)
- Please stop until/unless you have a good answer, and consensus from the Internet’s governance and technology communities
kc’s Questions for VeriSign

• You couldn’t process this through IETF because of proprietary concerns about “200 competitors”
  – but those are registrars and you’re a registry?
• You’ve promised to give more warning if you turn it back on again…
  – but not to respect current Internet governance bodies that have been 20+ years in the making?
• You’ve clearly staked your flag as the capital of .com and .net country
  – whom do you consider your constituency, and how do you garner their approval?
kc’s plea to community

• listen to both sides: http://secsac.icann.org/
  – all video and transcripts of meetings are online
• icann's secsac committee needs hard data to provide technically sound and equitable guidance
  – send hard data to secsac-comment@icann.org
  – [rather than lists of theoretical breakages, and anecdotal evidence, and predictions]
  – regarding loss of stability in Internet performance or functionality.
• many deployed patch immediately
  – so hard data hard to come by
Governance and SiteFinder

• SiteFinder, ISC’s patches, China’s decision are all instances of cybernetic warlordism
• Governance means those who are affected by a decision get to help make the decision
• IAB, ISOC, ICANN did some fine work on this, but their authority is by no means clear
• And remember, power corrupts!
What Can Each of Us Do?

• Don’t leave governance to the policy wonks
  – Attend those boring ICANN meetings
  – Participate in those boring ICANN mailing lists
  – Find and join your local ISOC chapter
  – Pay attention to ICANNWatch, slashdot, etc

• Be courteous, mature, professional

• Help make the rules, help follow the rules
Resources

• [www.icann.org](http://www.icann.org/)
  – [/tlds/agreements/verisign/](http://www.icann.org/tlds/agreements/verisign/)
  – [/announcements/announcement-17sep03.htm](http://www.icann.org/announcements/announcement-17sep03.htm)
  – [/correspondence/twomey-to-tonkin-20oct03.pdf](http://www.icann.org/correspondence/twomey-to-tonkin-20oct03.pdf)
• [www.icannwatch.org](http://www.icannwatch.org/)
• [www.isoc.org](http://www.isoc.org/)
• [www.ntia.doc.gov](http://www.ntia.doc.gov/)