ICANN Reform and the PSO

PSO General Assembly

19 June, 2002

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Reminder: What ICANN does

Coordinates policies relating to the unique assignment of:

- Internet domain names
- Numerical IP Address
- Protocol Port and Parameter Numbers

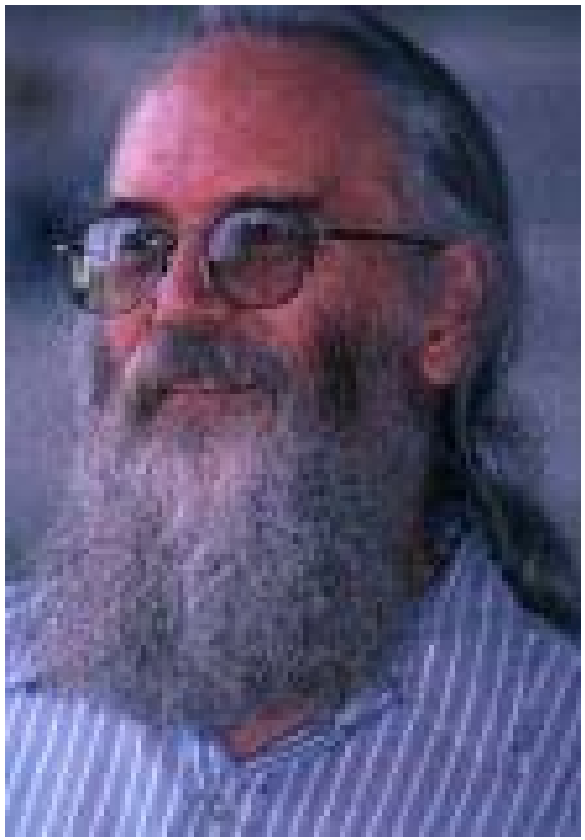
Coordinates the DNS Root Server System

- through Root Server System Advisory Committee

IANA

- “Internet Assigned Numbers Authority”
- A set of technical management functions (root management; IP address bloc allocations) previously performed by the Information Sciences Institute (ISI) at the University of Southern California, under a contract with the U.S. Government
- Includes protocol parameter and port number assignment functions defined by the Internet Engineering Task Force (IETF)
- Since 1998, performed by ICANN

IANA



Jon Postel
1943-1998

What are the IANA functions?

Historically:

- Protocol parameter assignments
  - Under March 1, 2000 IETF/IAB/ICANN MOU
  - Documented through IETF's RFC series
  - Types of numbers range from unique port assignments to the registration of character sets.
  - List of IANA Protocol Numbers and Assignment services: <http://www.iana.org/numbers.html>
- IP Address Allocations
- DNS root zone file management

IANA – Protocols December 2001

User Ports	49
COPS Client Types	1
ifTypes MIBs	2
PPP Numbers	5
IOTP parameters	1
Private Enterprise Numbers	251

IANA – Protocols January 2002

User Ports	3
MIME Media Types	13
Mib-2	2
ifTypes MIBs	3
PPP Numbers	3
Megaco Public Packages	5
Megaco Error Codes	22
SDP Parameters	12
Private Enterprise Numbers	314

IANA – Protocols February 2002

User Ports	70
MIME Media Types	4
Hardware Types	1
PPP Numbers	1
Megaco Public Packages	19
Megaco Error Codes	1
Private Enterprise Numbers	308

IANA – Protocols March 2002

User Ports	37
MIME Media Types	3
Radius Types	3
SLP Extensions	1
Address Family Types	3
SDXF Extensions	1
Private Enterprise Numbers	314

IANA – Protocols April 2002

User Ports	41
MIME Media Types	3
URN Registrations	1
PPP Numbers	4
Megaco Parameters	10
Charsets	4
Private Enterprise Numbers	363
IPv6 Multicast Address	1

IANA – Addresses

(2001/02)	Dec	Jan	Feb	Mar	Apr
Multicast	assigned 35/ reserved 32	0	2	64	0
AS # blocks	0	0	0	1	0
RIR Alloc	0	0	0	0	0

IANA Processing Times

(in working days)

	Current Times (approx)	Goals
Ports (user & sys)	10-15 days*	10 days
Protocol #s	10-15 days*	10 days
MIME	3 days+expert	2 days+expert
MIBs	3 days	2 days
Pr Ent #s	1-2 days	2 days
Multicast	10-15 days*	10 days

IANA Improvements

- Response Time
- Improved application templates
- Actions for approved documents (assignments and new registry set-up)
- Website improvements & FAQs
- Tracking system
- IESG liaison

Top Policy Objectives for Year 2002

- ICANN Reform & Restructuring!
- Progress toward agreements:
  - ccTLD registry agreements
  - IP Address registry agreements
  - Root server operator agreements
- Mechanism(s) for Individual Participation & Representation of Public Interest
- gTLD Policies
  - UDRP Review
  - Whois Requirements
  - Handling of deleted domain names
- Support LACNIC and AfriNIC
- Redelegation of .org registry

Internationalized Domain Names

- Very tough problem
- Goal: make DNS accessible to those who use non-ASCII characters
- Technical issues
  - ASCII (or “LDH”) restriction embedded in Internet protocols
- Policy issues
  - Types of non-ASCII TLDs
  - Registry selection
- Better done other than through DNS?

Reforming ICANN

- Hot topic in recent months
- Launched by CEO Stuart Lynn in February
- Impressive response – many thoughtful contributions (including IAB, ETSI, ITU-T contributions)
- Goal: Effective ICANN, focused on a well-defined mission, representative of the global Internet's diversity
  - ICANN as technical policy coordinating body, not a market regulator or an experiment in global online democracy.

Elements of Reform

- Overall Governance Structure
  - Board composition & selection
  - Nominating committee
- Policy-development process
  - Generic TLD SO & Country-code TLD SO
  - Address Supporting Organization
  - Advisory Committees: Technical, Root Name Server, Governmental, Security
  - “Policy,” “Consensus,” Process, Expert Advice
- Funding
- Accountability, Participation, Openness, Transparency
  - Manager of Public Participation
  - At Large Membership
  - Ombudsman
  - Independent Review (non-binding arbitration of Bylaws claims?)
- Governments & The Public Interest

ICANN's Protocol Tasks

- ICANN creates, maintains, and disseminates over 120 registries of protocol port and parameter numbers and other protocol identifiers.
  - Designated by IETF through MoU to perform this set of IANA functions
  - ICANN staff act as directed by the IETF (in RFC documents), taking guidance from the Internet Engineering Steering Group (IESG).
- In addition, ICANN is responsible for maintaining the DNS implementation of certain Internet infrastructure-related registries, such as .arpa and the legacy technical .int domains.

Reformed ICANN: PSO?

- President's Report (February 2002):
  - Create combined Address & Numbering Policy Council (ASO + IETF)
  - Create Technical Advisory Committee and Security Committee, which could include technical experts from current PSO standards development organizations

Reformed ICANN: PSO?

Evolution & Reform Committee Proposal (May 2002):

- Separate policy-development from selection of Board members
- Don't combine Addressing and Protocol issues
- Leave ASO basically as is
- Replace PSO
  - For protocol numbering, policies determining by IETF< pursuant to IETF-ICANN MoU (after all, nearly all IANA protocol numbering tasks are defined by IETF
  - For technical advice regarding standards, rely on TAC and SAC, which could include technical experts from current PSO standards development organizations
- Board seat for designees of Technical Advisory Committee and Security Advisory Committee
- Create fully distinct IANA unit, so that technical and policy activities are separated

Three Vectors of PSO Reform

- Rationalize advisory channels to match ICANN tasks
- Disaggregate technical advice from protocol numbering
- Disaggregate technical advice from selection of Board members

Technical Advisory Committee

- Key questions:
  - What is proper TAC scope?
    - IAB: Don't include operational oversight
  - Who sits on TAC?
    - How chosen? By whom?
    - Role of PSO SDOs?
- Same questions for Security Advisory Committee
  - Though it already exists, directly appointed by Board with a defined charter and mandate to advise and coordinate
  - No operational role

Other approaches?

- The PSO standards development organizations are important to ICANN: ICANN needs defined channels for their input and advice
  - Particularly about interactions between ICANN activities and the standards the SDO defines
  - Mechanisms for expert technical advice from IETF, W3C, ETSI, ITU-T
- Designated Liaisons? New MoU?
- How to both rationalize and strengthen relations among ICANN and SDOs?

PSO Reform Views

- Paper of Houlin Zhao, Director, TSB, ITU
- IAB Reponse to ICANN Evolution & Reform
- ETSI contributions

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