Internet Corporation for Assigned Names & Numbers - Internet Assigned Numbers Authority Update



Save Vocea Regional Liaison -Australasia/Pacific 17 June 2007

PacNOG 3, Rarotonga

ICANN Mission



- To coordinate, at the overall level, the global Internet's systems of unique identifiers, and in particular to ensure the stable and secure operation of the Internet's unique identifier systems. In particular ICANN coordinates:
 - the allocation and assignment of the three sets of unique identifiers for the Internet, which are:
 - Domain names (forming a system referred to as DNS)
 - Internet protocol (IP) addresses and autonomous system (AS) numbers, and
 - Protocol port and parameter numbers
 - the operation and evolution of the DNS root name server system
 - policy development reasonably and appropriately related to these technical functions

Principles of operation



- 1. Contribute to stability and security of the unique identifiers system and root management
- 2. Promote competition and choice for registrants and other users
- 3. Forum for multi-stakeholder bottom-up development of related policy
- 4. Ensuring on a global basis an opportunity for participation by all interested parties

ICANN's community





Competition in the Domain Name space (gTLD)



- Introduced by ICANN
- Registrars now have a market and a business
- Consumers have greater choice in price and services
- Domain name marketplace is even driving how we search contextually as well as topically – and the scale of sites that can be searched
- Total registrars: 880+ and counting



Snapshot of the Domain Name marketplace



More than **120 million** domain names registered globally



Domain Names trends



- Based on model and policies adopted by the gTLD or ccTLD registry
 - Useful regional ref.: http://www.aptld.org
- Registries/ Registrars and resellers to boost portfolio

Other trends



- Domain secondary markets to be primary
 - Registered, expired, resale, portfolio sales, parking
 - See http://www.sedo.com
- Registry's and registrar relations to expand into new markets
 - Looking abroad for potential partnerships
 - New "opportunities /challenges" for emerging ccTLD registry markets
- IPv6 and DNSSEC
- Whois issues
- Internationalized Domain Names (IDNs)

Policies and your input matter

- http://www.icann.org/topics/
- http://www.icann.org/processes/

- ccTLD operators invited to join the ccNSO
- Govt representatives to participate in GAC
- Invitation open to end user org to consider joining as At-Large Structure and APRALO

Internet Assigned Numbers Authority (IANA) Functions



Resource management

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- IPv4, IPv6 and ASN Registries (in cooperation with the RIRs)
- Protocol parameter registries (in cooperation with IETF/IESG/IAB)
 - Internet Drafts and RFC standards process
 - Identifier registry creation and maintenance
 - Ports and Personal Enterprise Numbers (PENs) assignments
- Maintain .ARPA and .INT domain registrations and registries
- Root zone management
 - Maintain Top Level Domain registration and zone delegation information
 - Validate and process TLD change requests
 - Verify minimal proper DNS server requirements
 - Maintain public "Whois" and internal delegation process/procedure information for TLDs.

Current Projects



- Registries
 - IPv4 Address Allocation Registry Data Review
 - RFC inventory check all registries have been created
 - Converting all registries to an XML data structure
 - Whois service for IP address registries
- Administrative
 - Documentation Management
 - IANA web redesign
 - Automated Report Generation
 - IANA Process Improvements
 - Reverse Delegation for in-addr.arpa and ip6.arpa
 - DNSSEC for all IANA managed zones
 - DNS checking tool
 - "elANA" self-service for ccTLDs
 - PEN allocation automation

Growing demand for IPv4







IPv4 Free Pool - shrinking



Near-Term Future Activities



- Signing .ARPA
 - Talking with IAB about how to move forward
- IANA Process Automation
 - DNSSEC
 - Port allocation
- "Customer Satisfaction Survey"

On the Horizon Activities



- "IANA Certificate Authority"
- Improved authentication mechanisms
- Root Zone Management via EPP
- Registry availability programmatically via...
 - BEEP? XML-RPC? SOAP?
 - What is useful to network operators?
- IANA Infrastructure improvements

Invitation to participate



Welcome to the ICANN San Juan Meeting

Pre-Registration is NOW OPEN!!!

Reservation Group Code: ICNA07

ICANN's 29th International Public Meeting

25-29 June 2007



Get involved - be heard!!



- Remote participation on public participation site http://public.icann.org/
- Blog on http://blog.icann.org/
- Full fellowships to attend meetings
 Next meeting in Los Angeles
 29 Oct 2 Nov 2007



Thank you...

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