IANA Addressing & DNS Update

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IANA

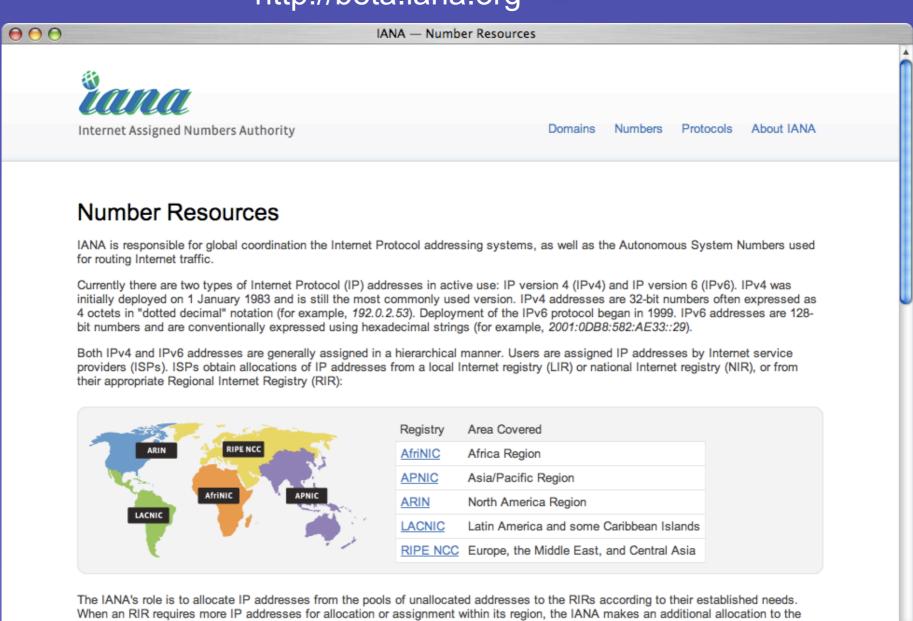*leo.vegoda@icann.org*

Overview

- Our New Web Site

- Recent Number Allocations
  - Allocations to RIRs
  - Returned to IANA

- DNS Work
  - In-addr.arpa
  - DNSSEC

- New IPv4 Registry Format

- 14.0.0.0/8 coming home

I C A N N

New Web Site

http://beta.iana.org

3

IPv4 so far in 2007

- Coming home...

   2

   1

   1 (almost)

- Leaving home...

   5

   4

DNS Services

- IANA will take administrative and technical control of in-addr.arpa from ARIN

- IANA will take administrative and technical control of the new mcast.arpa zone

- Will be managed in house

- Will be DNSSEC signed

ICANN

DNSSEC

- DNSSEC deployment is continuing

- Richard Lamb has developed our systems

- Details available in his recent IEPG presentation
    - http://www.iepg.org/2007-07-ietf69/DNSSEC_at_IANA_IETF.pdf

New IPv4 Registry Format

- No more "Various Registries"

- RIR listed for every unicast assignment

- Whois server for every unicast assignment

What was 14.0.0.0/8 used for?

An X–25 Gyrocopter

What is/was 14.0.0.0/8 used for?

- 14.0.0.0/8 — "One of the Internet Class A Networks is the international system of Public Data Networks. This section lists the mapping between the Internet Addresses and the Public Data Network Addresses (X.121)"

- "X.121 is the ITU-T address format of the X.25 protocol suite used as part of call setup to establish a switched virtual circuit between Public Data Networks (PDNs), connecting two network user addresses (NUAs). It consists of a maximum of fourteen binary-coded decimal digits and is sent over the Packet Layer Protocol (PLP) after the packet type identifier (PTI)."

About these addresses

- Mostly one or two addresses assigned

- Mostly not in use

- Low value to keep

- Low cost to return

How much work was there?

Count von Count

How many registrations were there?

- ## 984 addresses

- ## 29 contacts
  - ### 19 with e-mail addresses
  - ### 6 without e-mail addresses
  - ### 3 mystery contacts

So how long did it take?

A candle clock

How long did it take me?

- About 100 hours
  - Research
  - E-mail
  - IM
  - Phone
  - Face-to-face meetings

How long did it take the registrants?

- It varied from network to network

- But they...
  - Audited their networks
  - Scheduled maintenance slots
  - Renumbered devices
  - Had meetings and helped me investigate

- 5 minutes to 5 days work

How long did it take 3rd parties?

- 5 minutes to a few hours spread over a few days

Summary

- Registry cost was about 6 mins per address

- 3½ hours per registration

- Low value addresses
  - Prefixes longer than /24
  - Not aggregated
  - Former Class A space

DOES NOT SCALE

Questions