IANA IPv4 Registry

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Overview

‣ How did we get here?
‣ Where are we?
‣ Did we tidy up?
‣ A spoonful of sugar
How did we get here?
In the beginning...

There were just 256 networks

- There would be a very few networks and they would be very large. Or so it was thought.
- It turns out this was wrong and more networks were needed
Small, Medium & Large

- Classes were introduced
- Many more networks were now possible
- Addresses were distributed and configured
- These are the “legacy assignments”
CIDR was introduced to provide finer granularity.

- Sizes now ranged from XXXS to XXXL.
- Address blocks fit networks more closely.
- Legacy assignments could now be used more efficiently.
Where are we?
IPv4 Status - June 2008

182 /8s ALLOCATED
Did we tidy up?
Actively reviewed the legacy /8 assignments

- 1 relatively easy target: 14.0.0.0/8
- All other blocks actively used
- 14.0.0.0/8 reclaimed in January after a year’s
- work
- Extended the free pool lifetime by about a month
The unallocated space

Some of this space is used despite not being allocated. This could cause problems when it is allocated.

We have tried to measure its use

- Which /8s are used?
- Distribution within those /8s?
Duane Wessels analysed the DITL 2008

Using the results

- Coordinate with the RIRs to ensure distribution of the final few /8s is done in an open and transparent way.
- No decisions taken yet
A spoonful of sugar
IPv4 registry improvements

- Improved text format
  - Status clearly delineated
  - Whois servers clearly identified for legacy “B”
Now available in XML and XHTML, too

- Easy for computers to parse
- Will allow us to provide update subscription services

All IANA registries to follow in July
Thank you

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