IANA Update, IPv4 Allocations, etc.

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Work Completed Recently

IPv6 transport enabled for IANA/ICANN web, DNS and mail

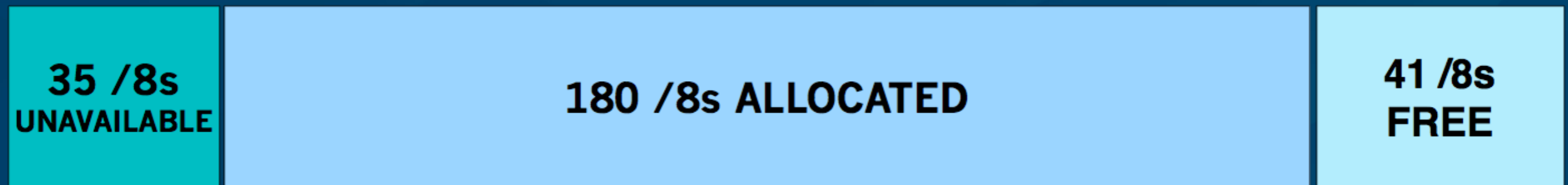IPv4 registry format updated

IPv4 registry XML 'sample' published

AS Number registry to be updated

IPv4 Registry Status

XML 'sample' format

http://www.iana.org/reports/2008/xml-registry-sample.html

IPv4 Free Pool

35 /8s UNAVAILABLE	180 /8s ALLOCATED	41 /8s FREE

Recent allocation changes this to 182 allocated, 39 free
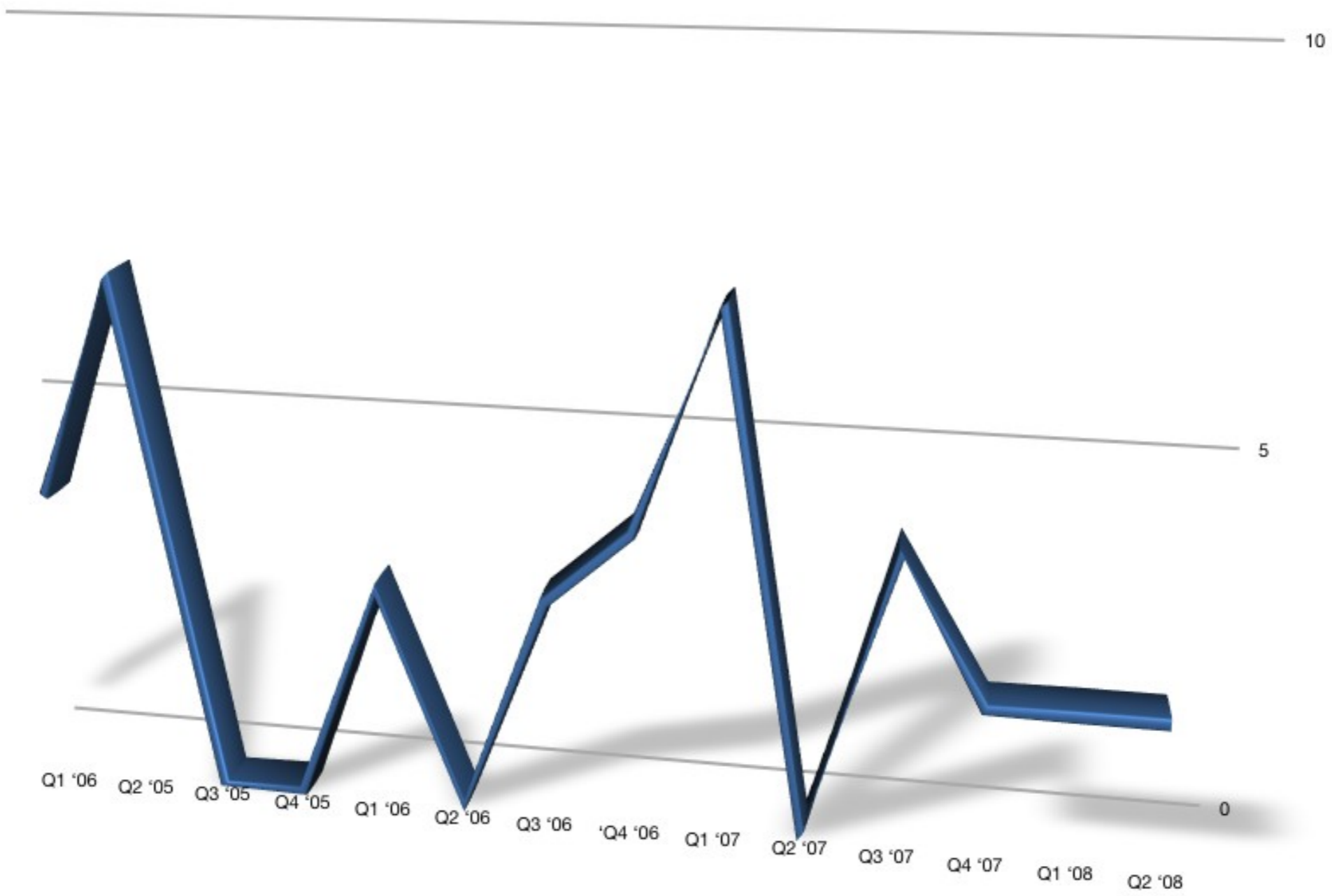
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Recent History of IPv4 Allocations

Extremely uneven, makes it difficult to project runout date

RIRs have agreed amongst themselves to only request 2 /8s per request

All recent requests have qualified for much more than 2 /8s

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/8s Allocated by Quarter

IPv4 Free Pool Depletion Discussions

Discussions about IANA free pool

All RIR communities have active policy discussions

Appear to be converging on a reserve of 5 /8s (one per RIR)

When a request arrives that would bring IANA's free pool to 5 /8s, the remaining /8s would be distributed to the RIRs

Still needs approval in each region

IPv4 Free Pool Depletion Discussions

Discussions about RIR free pools

All RIR communities have active policy discussions

No strong consensus across RIRs about best way to manage last bits

Discussions about markets and after-market registration requirements

rPKI

Possible changes to transfer requirements

Possible changes to allocation requirements per region

Still needs approval in each region

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Other Considerations in Last Allocations

Unallocated but used addresses

- Measurements (and anecdote) show this is a real issue
- Once "difficult" networks are identified, how to distribute to RIRs (equitably)
- Clashes with bogon filters as we get to the last networks

What about future RIRs (or is this a dead issue for IPv4)?

If transfer policies are adopted in the RIRs, who's responsible for tracking the legacy address allocations (pre-RIR allocations)

Additional IANA Projects

Interim Trust Anchor Repository for TLDs
- Same authentication methods used for root zone changes
- Discontinued once the root is signed

rPKI

In conjunction with the RIRs, simply making IANA capable of supporting what's developed

.arpa transition and in-addr.arpa transition
- Transition plan for .ARPA being coordinated with the IAB
- Transition for in-addr.arpa being coordinated with ARIN
- Automation for in-addr updates also being worked on

Thank You!