Mapping RIR Resources

RSM Meeting
26 June 2012
The EXTENDED Stats Report

• Add two new status to the RIR Stats report:

  reserved - not available for allocation at present
  available – available for allocation or assignment

reserved may include:

  holding pending return to IANA
  holding pending final closure of an LIR’s holdings
  holding for any other reason
The EXTENDED Stats Report

• Additional column:
  – LIR identifier
    • Allocations to the same LIR share a common LIR identifier
    • The LIR identifier may be obscured
    • The LIR identifier may be null
The EXTENDED Stats Report

• Semantics:
  – The DATE field is the date this resource was allocated, assigned or most recently transferred by the RIR to its current holder
  • If an LIR is allocated a /20 on one date and the adjacent /20 at a later date the Extended Stats report should list two /20s, with dates that reflect the respective dates of allocation. The LIR identifier may be used to indicate that the two allocations were made to the same LIR

APNIC please change!
The EXTENDED Stats Report

• Contents
  – All resources directly administered by this RIR should be listed in the extended stats file.
  – Resources returned to the IANA, or administered by another RIR should NOT be listed in the RIR’s extended stats file.
The EXTENDED Stats Report

• Syntax
  – Records should be ordered by resource type, (asn, ipv4, ipv6) then by numerical value of the start AS or address.
Combining Stats Files

• Step 1 – Synthesise a IANA extended stats file
  – Take the IANA ASN, IPv4 and IPv6 registries
  – Add the footnotes of the IPv4 registry
  – Add the inter-RIR transfers of the legacy-holes
  – Add the returns to IANA (RIPE NCC & ARIN)
Combining Stats Files

• Step 1 (cont)
  – Generate an extended stats file
    • Status values:
      reserved: reserved by the ietf, or a special allocation by the ietf
      allocated: allocated to an RIR
      available: neither allocated nor reserved
    • LIR identifiers:
      ietf
      afrinic
      apnic
      arin
      ripencc
      lacnic
      iana
Combining Stats Files

• Take the RIPE NCC and APNIC extended stats files
• Take the AFRINIC, ARIN and LACNIC stats files
• Create a consistent set of allocation dates
  – Amend the dates of the ARIN stats file
  – Use the APNIC transfer registry to find the original allocation dates of transferred resources
• Join these files
  – And list any clashes
• List all “holes”
  – And assign each hole to a holding RIR, based on the LIR value of the IANA extended stats file
Reports

• IANA:
  – http://www.potaroo.net/bgp/stats/iana/delegated-iana-extended

• RIRs
  – http://www.potaroo.net/bgp/stats/nro/delegated-nro-extended

• Recommend daily production of extended stats files to the NRO EC as a matter of urgency (i.e. available by 1 September 2012)

• Circulate production material to RSM list