Participating in the IPv4 Transfer Market

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Transfer Basics

Both involve changing registration from one organization to another, but otherwise they’re very different.

Two categories of transfer:

- Merger & Acquisition (M&A)
- Specified Recipient

We’ll help you understand the difference and complete your transfer as quickly as possible.
What is a specified recipient transfer?

- Involves transfer of IPv4 addresses (typically unused) to an organization with demonstrated need
- Includes transfers within the ARIN region plus inter-RIR transfers (currently with APNIC and RIPE)
- Policy details
  - In-region (8.3) implemented June 2009
  - Inter-RIR (8.4) implemented July 2012
Who can participate?

- Organizations that have purchased assets from a current ARIN ASN/IPv4 registrant
- Current ARIN IPv4 holders (as a source of addresses)
  - Either within the region or to RIPE/APNIC
- Organizations in need of IPv4 addresses
  - Source can be in-region or from RIPE/APNIC
Specified Recipient Process & Tips
Specified Recipient Transfer Basics

- Involve both a source and a recipient organization
  - Both organizations are within the ARIN region
  - Both will need to submit a request through ARIN
- Source: organization releasing resources (typically unused)
- Recipient: organization receiving resources based on demonstrated need
- Can be arranged via broker, ARIN’s STLS, or any other method you want to use
Specified Recipient – Source Process

• Source submits Specified Recipient Source request
• $300 fee paid prior to review
  – Waived if source has a Registration Services Plan (RSP)
• Analyst verifies it meets policy requirements
  – No dispute regarding status of the resources
  – Confirm org is active/in good standing
  – Source hasn’t received IPv4 addresses from ARIN or via specified recipient transfer in the past 12 months
  – Addresses are not be from a reserved pool (4.4/4.10)
• Notarized officer acknowledgement
Specified Recipient (Source) Insider Tips

• Verify the org name is active/in good standing
  – If not, allow additional time to complete merger & acquisition transfer
• Consider STLS source approval ($100) to get approval to release block
• Make sure an officer signs a notarized acknowledgement
Specified Recipient Process

• Submit specified recipient request through ARIN
• Provide utilization data for previous ARIN-issued IPv4 address space & ASNs
• Provide data to validate 24 month projected need
  – Historical IPv4 utilization rate
  – New services/markets to be deployed
  – Customer growth projections
• Provide signed officer attestation certifying information provided in the request is accurate
Specified Recipient Insider Tips

- Get pre-approved for 24 month need (free)
- Submit 8.3 recipient request (even if pre-approved)
- Have basic utilization details
  - Util % for previous IPv4 blocks
  - Organization without direct allocations/assignments qualify for a /24
  - For additional blocks or larger than a /24, provide documentation detailing the use of at least 50% of the requested space within 24 months
Specified Recipient Insider Tips

- Do not need to qualify for more addresses at the time of the request
  - Example: You’re using 40% of a /16 but are growing rapidly and need space before you run out
  - We deduct the difference between 40% and 50% and subtract from your 24 month need
Inter-RIR Transfers From ARIN

• Submit inter-RIR transfer request
• Pay $300 fee before review
  – Waived if source has a Registration Services Plan (RSP)
• Analyst verifies:
  – Org is active/in good standing
  – No disputes as to registration
• Provide Signed officer acknowledgement
• Wait for other RIR to complete review
Inter-RIR Transfers To ARIN

- Source organization requests transfer through their RIR
- After RIR approves release of the resources, recipient submits inter-RIR recipient request
- Provide data to validate 24 month projected need
  - Historical IPv4 utilization rate
  - New services/markets to be deployed
  - Customer growth projections
- Provide signed officer attestation certifying information provided in the request is accurate
Inter-RIR Transfers Insider Tips

• If receiving space, submit and obtain pre-approval

• Compile utilization data before you submit your request
Pre-Approval for Recipients

• Optional free service to confirm your 24 month projected need for IPv4 addresses
  – Same documentation requirements as 8.3 recipient side transfers

• Used to receive IPv4 addresses via specified or Inter-RIR transfers up to the pre-approved amount
  – Eliminates the need to re-justify for each transfer
  – Valid for 24 months from the initial date
Specified Transfer Listing Service

- Optional fee-based service to facilitate specified recipient and inter-RIR transfers
  - Sources have IPv4 addresses verified as available
  - Recipients have a verified need for IPv4 addresses
  - Facilitators arrange transfers between parties
- Approved participants can view detailed information for all other participants
- Public summary available on ARIN’s Website
  - Available block sizes
  - Number of source ORGs and approved block sizes
  - List of facilitators with contact information
Other Useful Transfer Information

- ARIN cannot provide detailed information about your source/recipient partner’s status
  - Can provide general status (e.g. “we’re waiting on them to provide additional info”)
  - If you need details on what’s required, ask your source/recipient partner

- If you are on the IPv4 waiting list, you will be removed when you receive IPv4 addresses via specified transfer
Tips for Faster Transfer Processing

• For Source Side: Ensure all registration information is current and up-to-date
  – ARIN can help with updating out of date information
  – Allows for faster processing when acting as a transfer source

• For Recipient Side: Obtain pre-approval
  – Ensures recipient knows their approved block size when seeking a source for IPv4 addresses transfer
  – Allows for faster transfer process when you submit your transfer recipient ticket
Transfer Customer Support

Via phone (RSD Help Desk)
703-227-0660

• Phones staffed 7 AM to 7 PM ET M-F

Ask ARIN via ARIN Online
Transfers Are Increasing

- ~150% year over year growth
- Need-based transfers driving M&A transfers
- No signs of slowdown
Specified Recipient Volume

- Increase in # transfers does not directly translate to # /8 equivalents transferred
- Likely a sign that smaller organizations are entering the market (average # IPs per transfer went from 22k in 2017 to 17k in 2018)
- Appears pattern is +/- 2 /8 equivalents per year
28 IPs transferred from ARIN for every 1 IP transferred to ARIN

Expectation is that this will continue since ARIN has the majority of legacy space
Specified Recipient Prefixes

# Blocks Transferred

1,036

/24  /23  /22  /21  /20  /19  /18  /17  /16  /15  /14  /13  /12  /11  /10

1,036  413  434  288  236  155  105  48  243  37  41  18  17  7  7
Inter-RIR Prefix Breakdown

# Blocks Transferred From ARIN to APNIC/RIPE NCC

- /24: 44
- /23: 26
- /22: 44
- /21: 45
- /20: 54
- /19: 56
- /18: 39
- /17: 17
- /16: 75
- /15: 5
- /14: 2
- /13: 0
- /12: 2
- /11: 0
- /10: 1
Transfers Benefit Everyone

- Overall space managed by ARIN decreased by ~7.5 million IPv4 addresses from 2016 to present due to inter-RIR transfers
- Overall ARIN billed space increased by ~30 million IPv4 addresses due primarily to conversion of legacy space via in-region transfers
- Win-win!
Current ARIN Inventory

- Bulk of transfers are legacy space
- About half of the legacy space is US DoD
- That leaves about 20 /8s available to ARIN, APNIC, and RIPE customers
Summary

Number of transfers growing every year

Overall volume (in- and out-of-region) is about 2.5 /8s per year

ARIN is losing space overall due to inter-RIR transfers, but gaining non-legacy (i.e. billed) space

ARIN has a lot of legacy space

That legacy space is available to ARIN, APNIC, and RIPE NCC customers
Questions?