



IPv4 Depletion

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Changing Dynamics



- IPv4 Depletion
 - ***Changes due to Depletion plan/Team Review***
 - ***Increased IPv4 request traffic, particularly in last few weeks***
- New Customer Profile
 - ***ISPs directing downstream customers to ARIN for IPv4 addresses***
 - *More education required for newcomers*
- Expected Workload Increase
 - ***Will see more legacy holders become active in 8.3 transfers post-depletion***
 - *Increase in vetting and chain of custody workload*
 - ***Many 8.3 transfers will be preceded by 8.2 transfers to bring registrations current***

Current IPv4 Inventory



Available inventory:
.15 /8 equivalent



Other inventory:

- **Quarantined space (60 day hold)**
 - ~15 /16 equivalents held in “quarantine” to clear filters (returned and revoked space)
- **Reserved space**
 - 64 /16s (1 /10) for NRPM 4.10 “Dedicated IPv4 block to facilitate IPv6 Deployment”
 - 218 /24s remaining in the /16 for NRPM 4.4 “Micro-allocation”
 - ~8 /16 equivalents needing further research (reclaimed space that needs further chain of custody research)



REMAINING IPV4 INVENTORY	
Discrete Block Size (CIDR)	Number of Blocks Available
/11	1
/15	1
/16	1
/17	1
/21	6
/22	3
/23	138
/24	505

Block Size Distribution of ARIN's Remaining IPv4 Inventory

*https://www.arin.net/resources/request/ipv4_countdown.html

Current IP Resource Inventory - Extended FTP Stats



- Joint project, provided by all 5 RIRs
 - **Accountability and Transparency**
 - Shows which RIR is responsible for which resources
 - Identifies inconsistencies and overlaps
- Daily snapshot of all ARIN **issued resources**; **available resources**; and **reserved resources**
 - All “other inventory” from previous slide shows up as reserved
 - Note that 8.3 transfers show up as issued, but 8.2 transfers do not as they retain their original issue date
- <https://www.arin.net/knowledge/statistics/rir.html>

Can ARIN's IPv4 Free Pool Increase?



- 4 ways that IPv4 addresses get back into ARIN's free pool
 - **Return** = voluntary
 - **Revoke** = for cause (usually non-payment)
 - **Reclaim** = fraud or business dissolution
 - **IANA issued** – per global policy for “post exhaustion IPv4 allocation mechanisms by IANA”
 - **/11** (issued 5/14), **/12** (issued 9/14) and **/13** (issued in 3/15) by IANA to each RIR
- 3.54 total /8s recovered by ARIN since 2005



Questions?

