



ARIN at a Glance

First Timers' Orientation



- Brief introductions
- ARIN and the Regional Internet Registry (RIR) system - John Curran
- ARIN Tools and Services - Mark Kosters
- Life After IPv4 - Richard Jimmerson
- Policy Development Process (PDP) at a glance – Dan Alexander
- What's ahead and Q&A

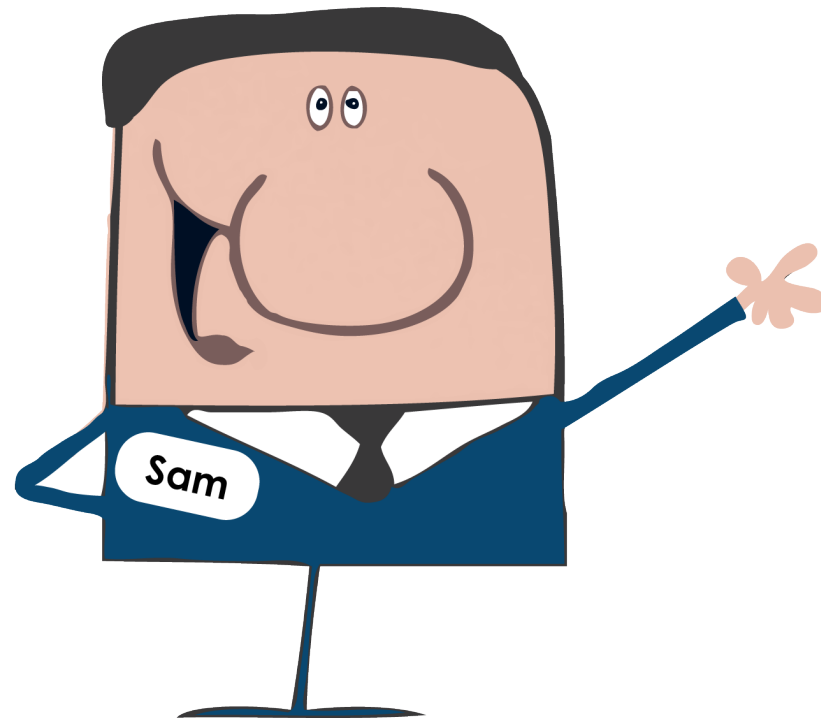
Follow the Acronym Guide



There are a lot of ARIN-related acronyms, and we know it can be a lot to take in. Follow along with the acronym guide on the back of your handout or by visiting:

www.arin.net/knowledge/acronyms.html

Introductions





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ARIN and the RIR System: Mission, Role, and Services

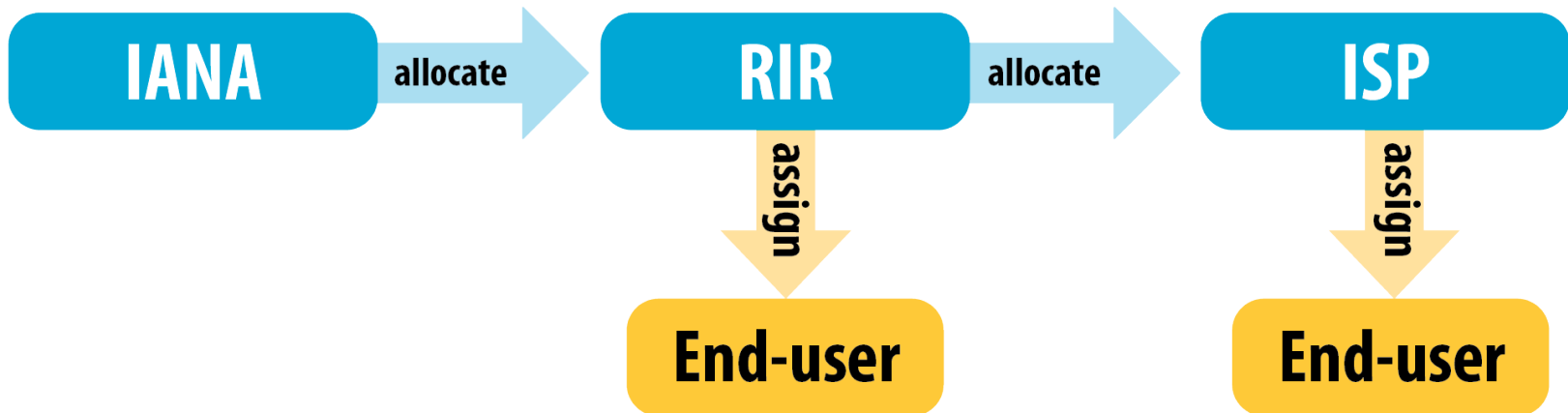
John Curran, President and CEO

What is an RIR?

A Regional Internet Registry (RIR) manages the allocation and registration of Internet number resources in a particular region of the world.*

***Internet number resources include IP addresses and autonomous system (AS) numbers.**

IP Address and Autonomous System Number Provisioning Process



Regional Internet Registries



ARIN
American Registry for Internet Numbers
est. 1997

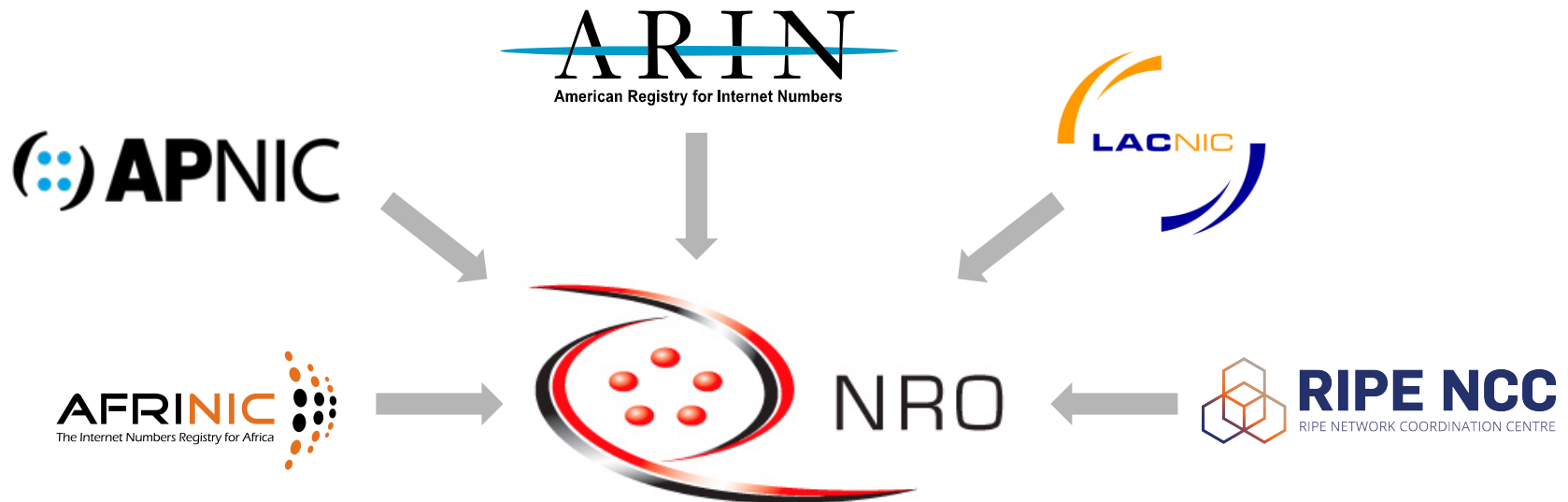
**RIPE NCC**
RIPE NETWORK COORDINATION CENTRE
est. 1992

**APNIC**
est. 1993

lacnic
est. 2002

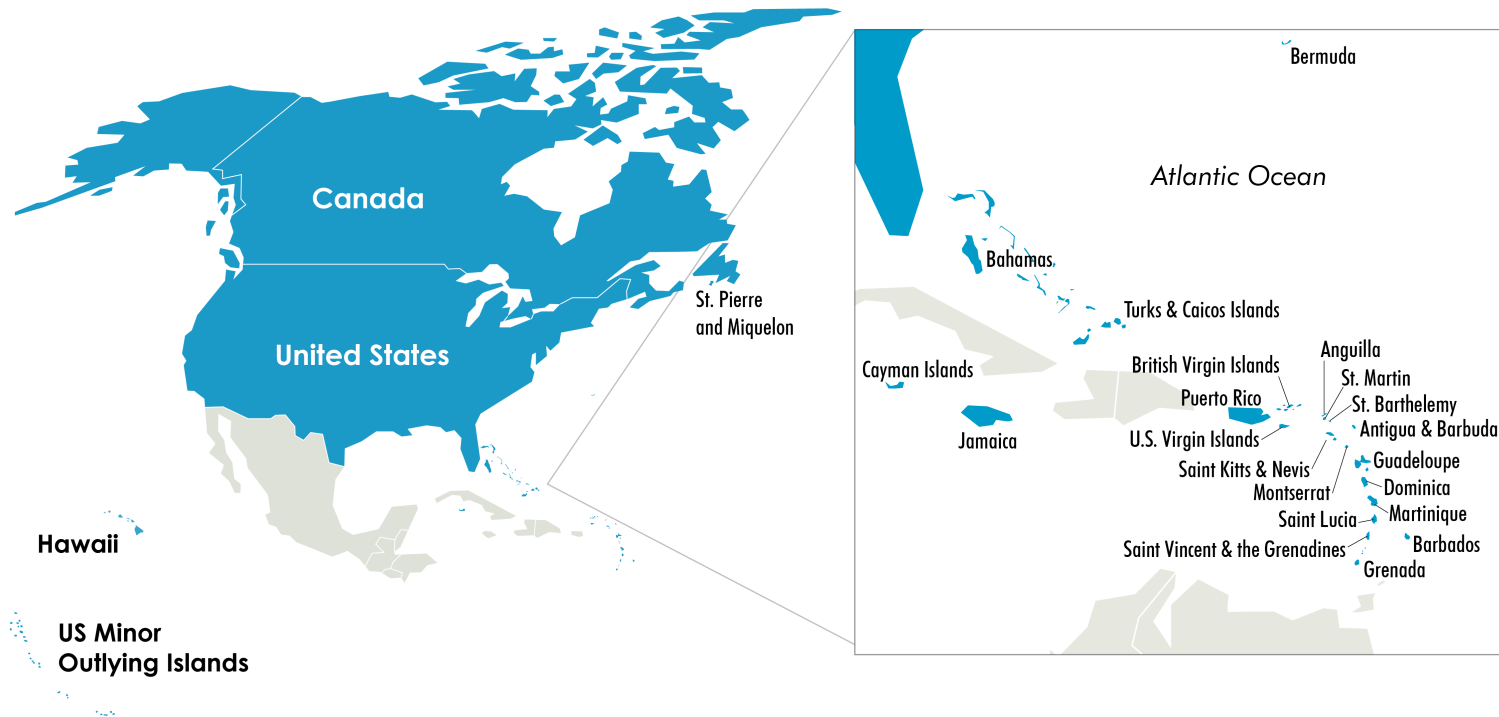
AFRINIC
The Internet Numbers Registry for Africa
est. 2005

The Number Resource Organization (NRO)



The NRO exists to protect the unallocated number resource pool, to promote and protect the bottom-up policy development process, and to act as a focal point for Internet community input into the RIR system.

The ARIN Service Region



The ARIN Region includes many Caribbean and North Atlantic islands, Canada, the United States and outlying areas.

ARIN's Mission



ARIN, a nonprofit member-based organization, supports the operation of the Internet by:

- **managing Internet number resources throughout its service region;**
- **coordinating the development of policies by the community for the management of Internet Protocol number resources; and**
- **advancing the Internet through informational outreach.**

Who is the ARIN community?



Anyone with an interest in Internet number resource management in the ARIN region can be part of the ARIN community.

The ARIN community includes...

- 20,000+ customers
- 5,320+ members
- 80+ professional staff
- 7-member Board of Trustees
 - 6 elected by the membership + the President & CEO who is elected by the Board
- 15-member Advisory Council
 - Elected by the membership
- 3-person Number Resource Organization Number Council
 - 2 elected by the ARIN Community/1 appointed by ARIN Board



ARIN Board of Trustees

- Paul Andersen, *Vice Chair*
- Vinton G. Cerf, *Chair*
- John Curran, *President and CEO*
- Timothy Denton, *Secretary*
- Aaron Hughes
- Bill Sandiford, *Treasurer*
- Bill Woodcock



ARIN Advisory Council

- Dan Alexander, *Chair*
- Cathy Aronson
- Kevin Blumberg, *Vice Chair*
- Owen DeLong
- Andrew Dul
- David Farmer
- David Huberman
- Scott Leibrand
- Tina Morris
- Milton Mueller
- Amy Potter
- Leif Sawyer
- Robert Seastrom
- John Springer
- Chris Tacit

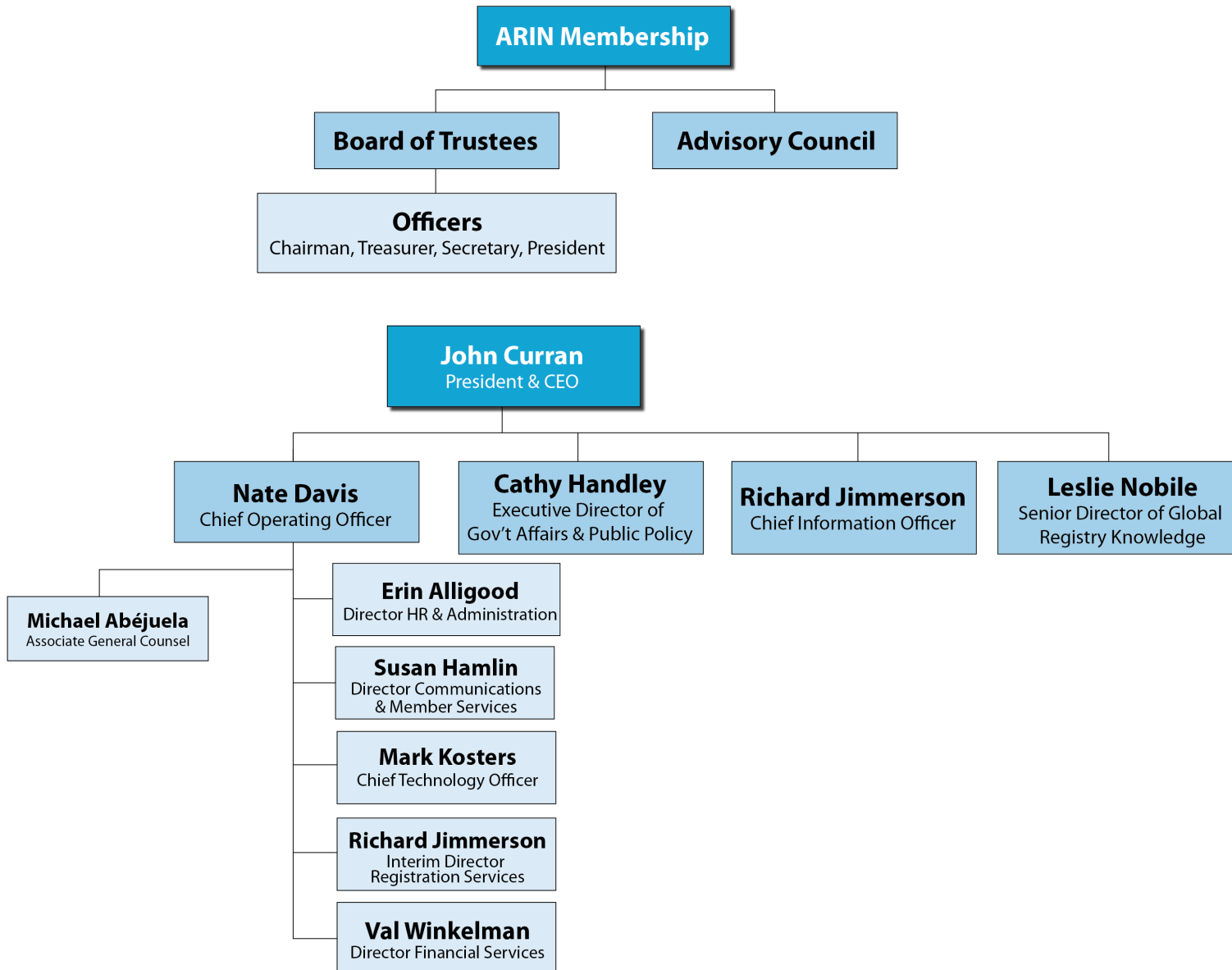
Number Resource Organization Number Council



Representatives serving from the ARIN region:

- Louis Lee, *Chair*
- Jason Schiller
- John Sweeting

ARIN Organizational Chart





ARIN Services and Products

ARIN manages:

- IP address allocations & assignments
- ASN assignment
- Transfers
- Reverse DNS
- Record Maintenance
- Directory service
 - Whois
 - Routing Information (Internet Routing Registry)
 - WhoWas



ARIN Services and Products

ARIN coordinates and administers:

- Policy development
 - Community meetings
 - Discussion
 - Publication
- Elections
- Information publication and dissemination
 - Public relations
- Community outreach
 - ARIN on the Roads, Get6 Campaign
- Education and training

ARIN Services and Products



ARIN develops technologies for managing Internet number resources:

- ARIN Online
- DNS Security (DNSSEC)
- Resource Certification (RPKI)
- Whois-RWS
- Reg-RWS
- Registry Data Access Protocol (RDAP)
- Community Software Project Repository

2016 Operational Focus

- IPv4 to IPv6 Transition Awareness
- Continued enhancements to ARIN Online
 - User interface improvements based on user feedback
- Focus on community suggested high impact software development projects
- Continued participation in Internet Governance forums
- Participation in IANA stewardship transition discussions
- Customer service improvements based on feedback and repeat customer satisfaction survey



Participate in ARIN

Contribute your opinions and ideas!

- Public Policy Mailing List
- Contribute to IPv6 Wiki
- Be a Get6 Forward Thinker
- Attend Public Policy and Members Meetings and Public Policy Consultations (**remote participation**)
- Submit a suggestion
- Participate in community consultations
- Write a Guest Blog – teamarin.net
- Member Organizations – Vote in annual elections

ARIN Mailing Lists



https://www.arin.net/participate/mailing_lists/index.html

- **ARIN Announce:** Read-only, news about ARIN elections, outreach, meetings, policy updates, training opportunities...
- **ARIN Discussion:** (members only) Discuss ARIN-specific issues such as fee structures and internal policies
- **ARIN Public Policy:** Raise and discuss policy-related ideas and issues surrounding existing and proposed ARIN policies
- **IANA Transition:** Discuss the developing IANA Stewardship Transition planning process
- **ARIN Consultation:** Voice your opinion on open consultations
- **ARIN Issued:** Read-only, daily report of IPv4, IPv6, and ASNS issued directly by ARIN, and resources returned to ARIN's free pool.
- **ARIN Technical Discussions:** Provide feedback on use of ARIN technical services
- **Suggestions:** Read-only, notice of new suggestions from the community and ARIN responses

Stay Connected on Social Media



www.TeamARIN.net



www.facebook.com/TeamARIN



@TeamARIN *(use #ARIN37 to tweet during this meeting!)*



www.google.com/+TeamARIN



www.linkedin.com/company/ARIN



www.youtube.com/TeamARIN





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ARIN Technical Services

Mark Kosters

Major Services

- ARIN Online
- Email (including templates)
- Directory Services
 - **Whois**
 - **Whois-RWS**
 - **Registration Data Access Protocol (RDAP)**
- Domain Name System (DNS)
 - **Reverse DNS**
 - **DNS Security (DNSSEC)**
- Internet Routing Registry (IRR)
- Resource Public Key Infrastructure (RPKI)
- Operational Test & Evaluation environment (OT&E)

Terms



- Resources
 - **IP Addresses (Networks)**
 - **Autonomous System Numbers (ASNs)**
- Organization
 - **The legal entity holding resources**
 - **Shows up in Whois/RDAP**
- Point of Contact (POC)
 - **Associated with Organizations**
 - **Show up in Whois/RDAP**
 - **Tech, Admin, NOC, Abuse**
- SWiP
 - **“Shared Whois Project”**
 - **Registration of reassigned or reallocated networks in the ARIN registry**


ARIN Online (www.arin.net)

ARIN ONLINE

Username and password are case sensitive.

username: [new user?](#)

password: [assistance](#)

[log in](#) 

[About ARIN Online](#)



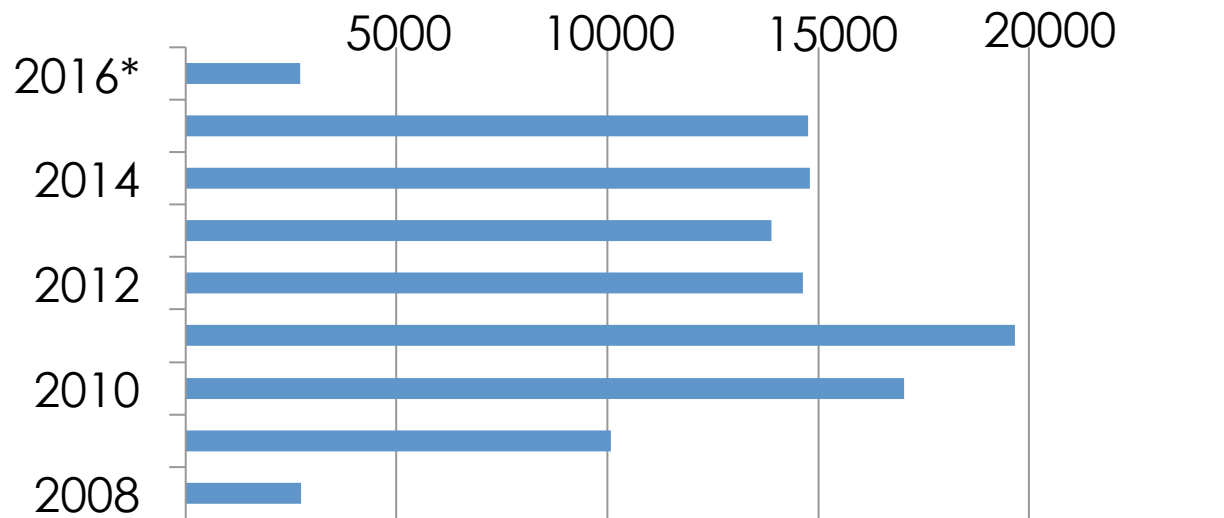
What Can I Do in ARIN Online?

- Resource management (IPs/ASNs)
 - **Requests and Transfers**
 - **Technical services (Reverse DNS/RPKI)**
- Record management (POCs/Org IDs)
- Downloadable reports
 - **Associations/reassignments/bulk Whois/WhoWas**
- Billing & Payments
- Voting (Board, Advisory Council, Number Resource Organization Number Council)

ARIN Online Usage

- **110290 accounts activated since inception through Q1 of 2016**

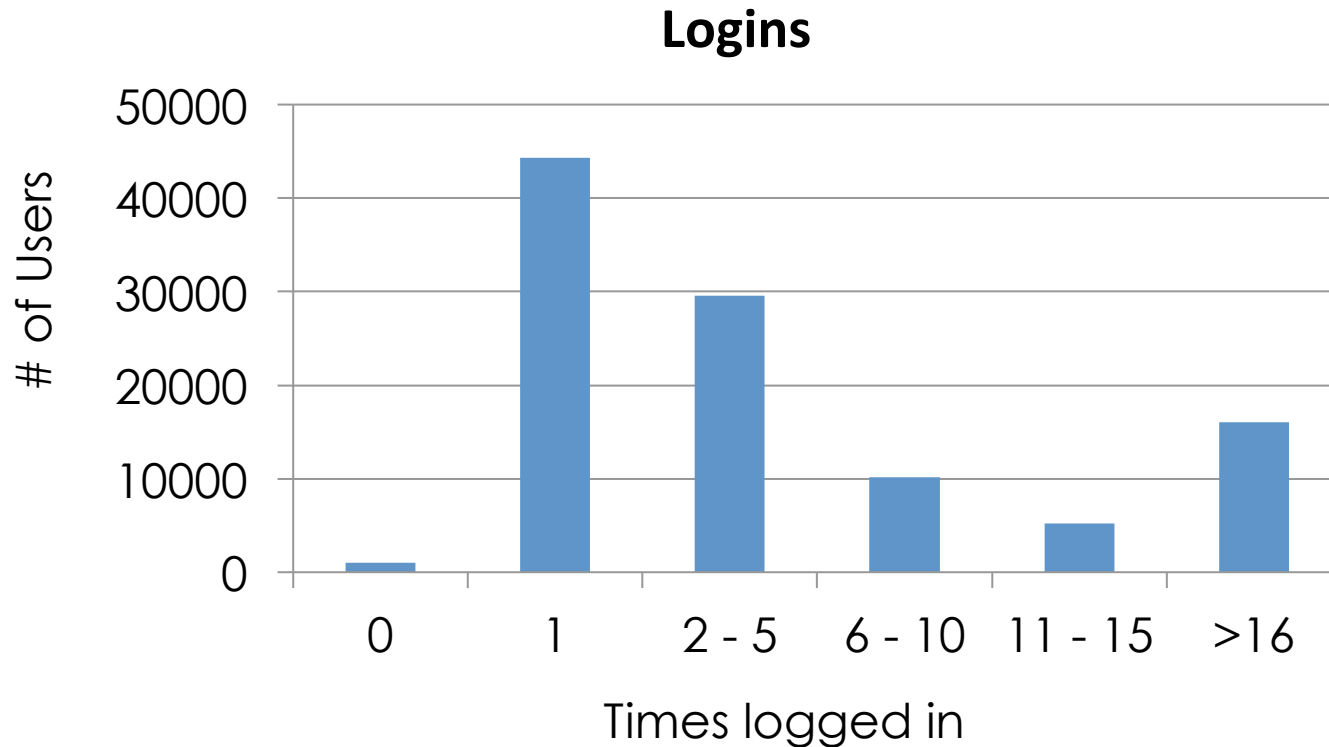
Number of Accounts Activated



* Through Q1 of 2016

Active Usage of ARIN Online

- Logins from inception through Q1 of 2016
- One user logged in 1,205,887 times!



Linking?



- Way of managing resources put into place before ARIN Online was unveiled
- A good set of videos at
 - <https://www.youtube.com/user/teamarin>
 - **Teaches you how to:**
 - Create an ARIN Online account
 - Create and manage POCs and Org IDs
 - Request transfers



Ask ARIN and Message Center

- Ask ARIN
A way to ask ARIN staff a question on the web
- Message Center
 - **Tracks ticketed requests**
 - **Ticketed requests are things like resource requests and correspondence, RPKI notifications, reports**

Reports



- Associations Report
 - POCs linked to your ARIN Online account, including roles served by these POCs for any associated Organization (Admin, Tech, Abuse, etc.)
 - Organization associated with your ARIN Online account
 - Network records (NETs) and Autonomous System Number records (ASNs) associated with your linked POCs, directly or via an associated Organization

Reports (Cont)

- User Reassignment Report
 - Reassignments/reallocations associated with your ARIN Online account via associated Organization
 - "Holes" in all Network records (NETs) associated with your ARIN Online account, where no reassignment or reallocation has been made
- Whowas
 - **History of a resource**
- Bulk Whois
 - **Directory services information placed in files**
- Reports are ticketed and delivered into your Message Center

Billing



- Pay bills
- Calculate fees
- View current and past-due invoices

REST Services



- Reg-RWS (Provisioning)
 - SWIP
 - Reports
 - Manage DNS / RPKI
- Whois (Directory Services)
 - RDAP (the new Whois)
 - Whois-RWS

What is REST?

- Representational State Transfer
- As applied to web services
 - **defines a pattern of usage with HTTP to create, read, update, and delete (CRUD) data**
 - **“Resources” are addressable in URLs**
- Very popular protocol model
 - **Amazon S3, Yahoo & Google services, ...**

The BIG Advantage of REST

- Easily understood
 - **Any modern programmer can incorporate it**
 - **Can look like web pages**
- Re-uses HTTP in a simple manner
 - **Many, many clients**
 - **Other HTTP advantages**
- This is why it is very, very popular with Google, Amazon, Yahoo, Twitter, Facebook, YouTube, Flickr, ...

What does it look like? Who can use it?

Where the data is.

What type of data it is.

The ID of the data.

<http://whois.arin.net/rest/poc/KOSTE-ARIN>

*It is a standard URL. Anyone can use it.
Go ahead, put it into your browser.*

Where can more information on REST be found?



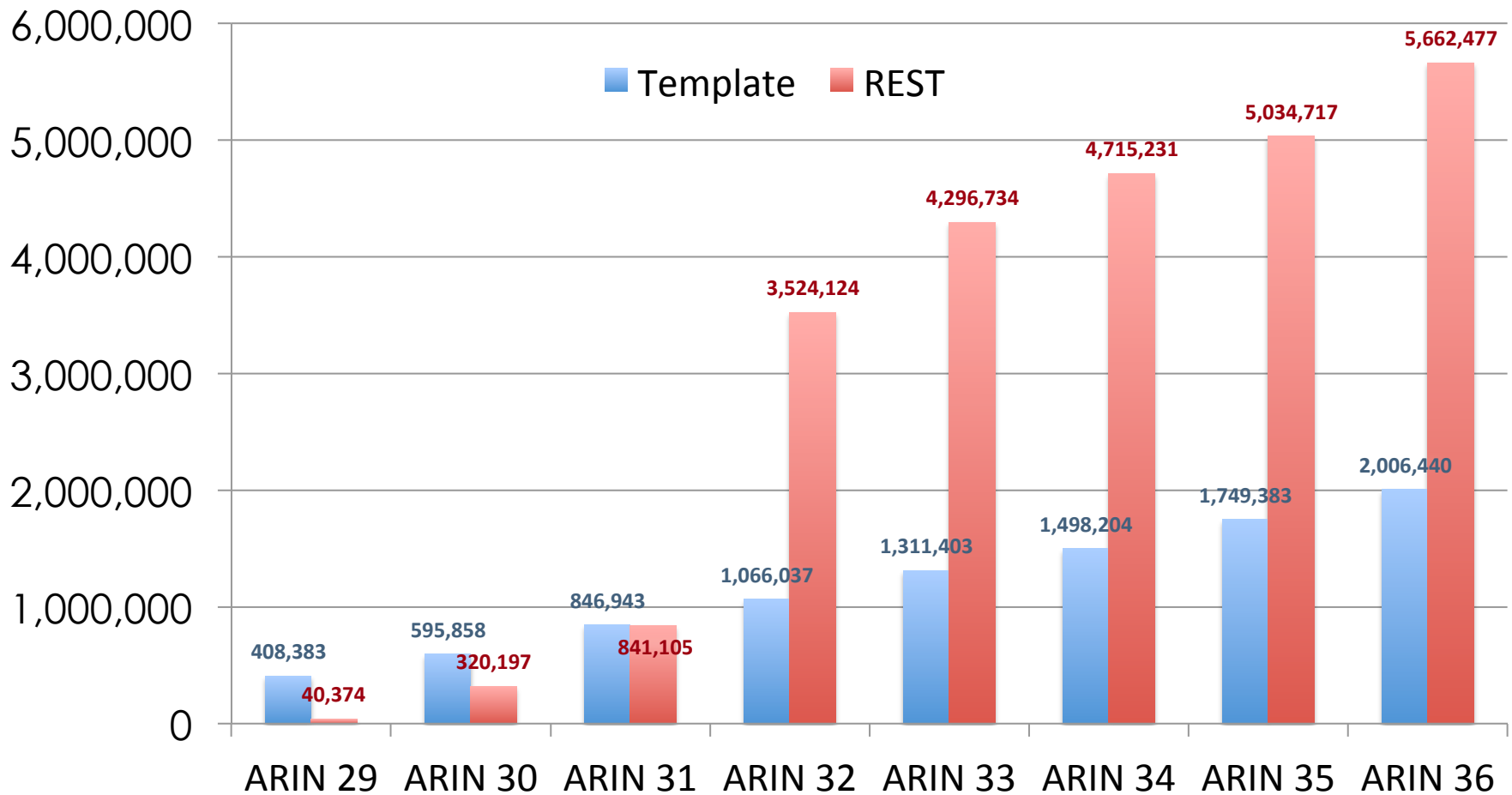
- *RESTful Web Services*
 - O' Reilly Media
 - Leonard Richardson
 - Sam Ruby

Email/Templates

- Before ARIN Online, only way of communicating with ARIN
- Now only
 - **Reassignment information**
 - **Inter-RIR Transfers**
 - **Email Questions**
- Lots of Spam



Reg-RWS Transactions (cumulative)



Directory Services

- Whois
 - **Resource Information as per RFC812**
- RDAP (the new Whois)
 - **Resource Information as per RFCs 7480-7484**
- Whois-RWS
 - **RESTful Implementation of ARIN Whois**
 - **XML-based, proprietary**

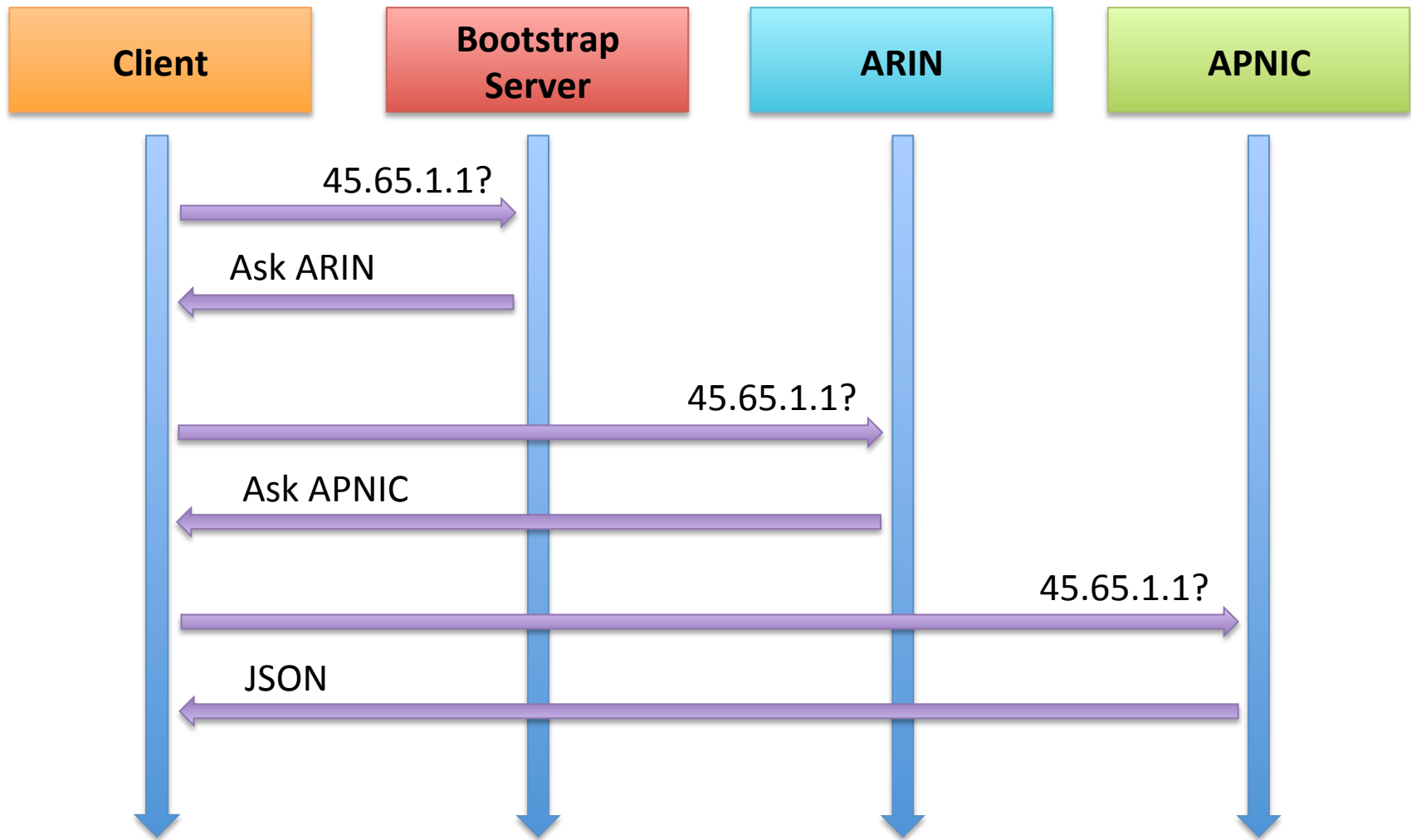
Registration Data Access Protocol (RDAP)

- Long, fancy, official-sounding name for a simple idea:
 - ***All the RIRs will now have a common query interface***
 - **Also will be used by many domain registries**

Bootstrapping (RFC 7484)

- IANA will publish a set of JSON files containing IP Address, Autonomous System Number, and Domain Name allocations with URLs to authoritative servers.
 - **Clients will be able to pre-determine where to initiate queries.**

Bootstrapping In the Real World



Domain Name System (DNS)

- Provide Reverse DNS delegation management for IPv4 and IPv6
- This includes DNS Security (DNSSEC)

DNSSEC – What is it?

- DNS Security
- Standard DNS (forward or reverse) responses are not secure
 - **Easy to spoof**
 - **Notable malicious attacks**
- DNSSEC attaches signatures
 - **Validates responses**
 - **Can not spoof**

Internet Routing Registry (IRR)

- Provides coarse routing information for routing filters
- Processed through templates sent via email
- Has a Whois interface using RPSL (RFC 2622)
- ARIN will be upgrading this service starting Q3 of 2016
- Documented at
 - <https://www.arin.net/resources/routing/>

OT&E

(Operational Test & Evaluation)

- **Lots of people test in production**
 - Is not the best place to test
 - Things do get stuck – may impact others
 - Operational Test & Evaluation
- **Goodness of OT&E**
 - Place to test code
 - Place to test process
 - All services now under ote.arin.net except email
 - Need to register to participate
 - <https://www.arin.net/resources/ote.html>

RPKI?



- **Resource Public Key Infrastructure**
- Attaches digital certificates to network resources
 - **AS Numbers**
 - **IP Addresses**
- Allows ISPs to associate the two
 - **Route Origin Authorizations (ROAs)**
 - **Can follow the address allocation chain to the top**

What does RPKI accomplish?

- Allows routers or other processes to validate route origins
- Uses cryptography for validation
- Distributes trusted information
 - **Through repositories**
- Trusted information used by routers to help access the viability of the route

Feedback



- Users can notify us of Internet Number Resource Fraud and Whois Inaccuracy
- Can provide feedback on the application via the feedback button
- Suggestions through “ARIN Consultation and Suggestion Process” (ACSP)

Tools



- Lots of APIs
- You can build your own tools
- Some have shared their tools with others
- Repository for these tools
 - <https://github.com/arineng>
 - <http://projects.arin.net>





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Life after IPv4, Transfers, IPv6

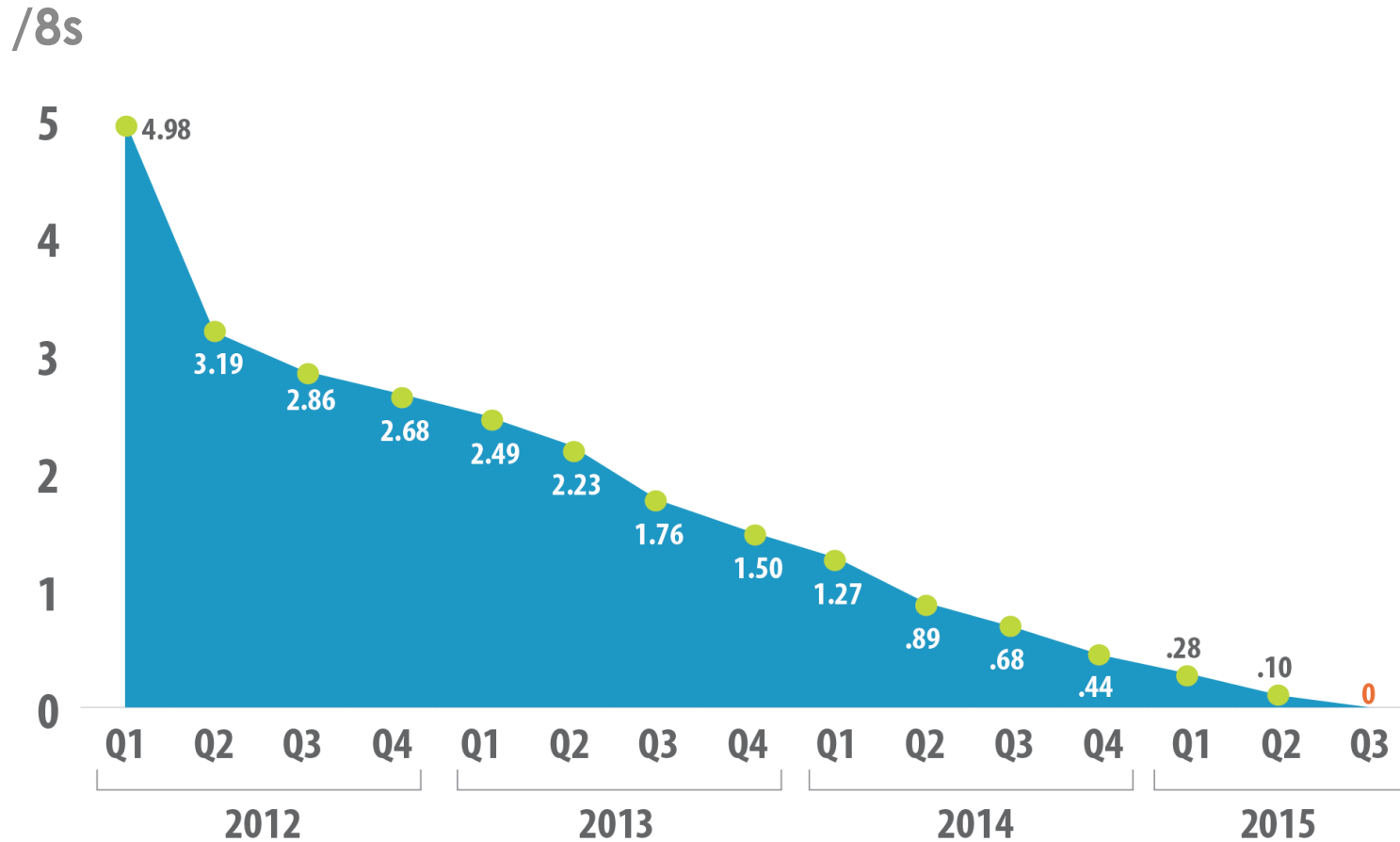
Richard Jimmerson

Overview



- IPv4 depletion recap
- Post-depletion observations
- Post-depletion IPv4 options
 - IPv4 Waiting List
 - IPv4 Transfers
 - Dedicated IPv4 block to facilitate IPv6 deployment
- IPv6 deployment

IPv4 Address Space in ARIN Free Pool

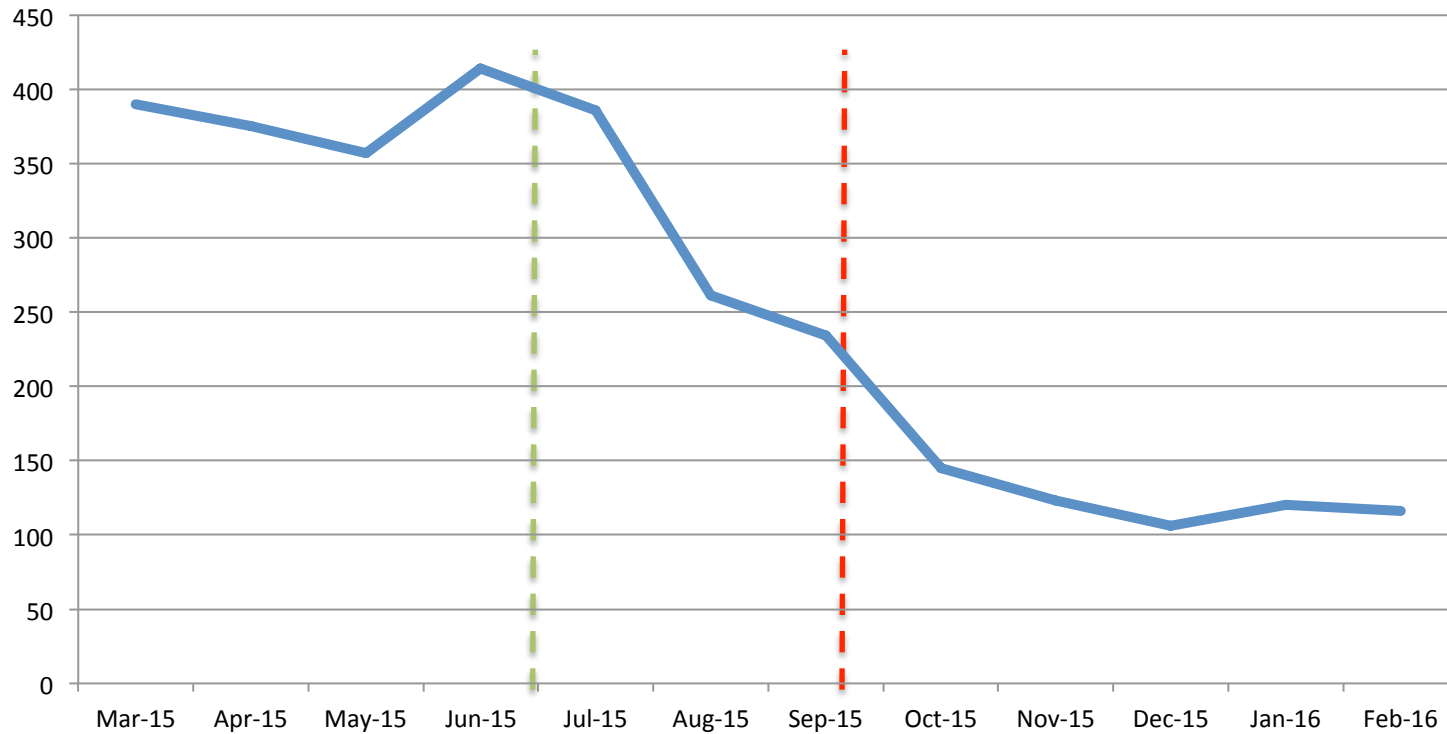


IPv4 Depletion Recap



- June 2015: IPv4 requests reach peak volume
 - **414 total requests**
 - **A mad rush for the last IPv4 blocks**
- July 1st, 2015: First unmet IPv4 request
 - **An org qualified for a block size that was no longer available**
 - **Within a few weeks, only single /24s remained in the free pool**
- September 24th, 2015: Full IPv4 depletion
 - **No IPv4 blocks available other than those reserved for specific policies**
 - **Significant drop in monthly # of IPv4 requests**

IPv4 Requests – Past Year



----- = waiting list initiated

----- = IPv4 depletion

Reserved IPv4 Space



- /10 reserved to facilitate IPv6 deployment
- 2 /16s reserved for critical Internet infrastructure
 - **Public exchange points**
 - **Core DNS service providers (excluding new gTLDs)**
 - **Regional Internet Registries**
 - **IANA**

Post-IPv4 Depletion Observations



- IPv4 demand remains strong
- Lots of questions from customers
 - **Not all aware we've reach full IPv4 depletion**
 - **Education needed on post-depletion options**
- Keeping registration info current is essential
 - **Increase in # of blocks targeted for hijacking**
 - **Blocks with bad org/contact info, especially legacy ones, are the biggest target**

Post-IPv4 Depletion Options



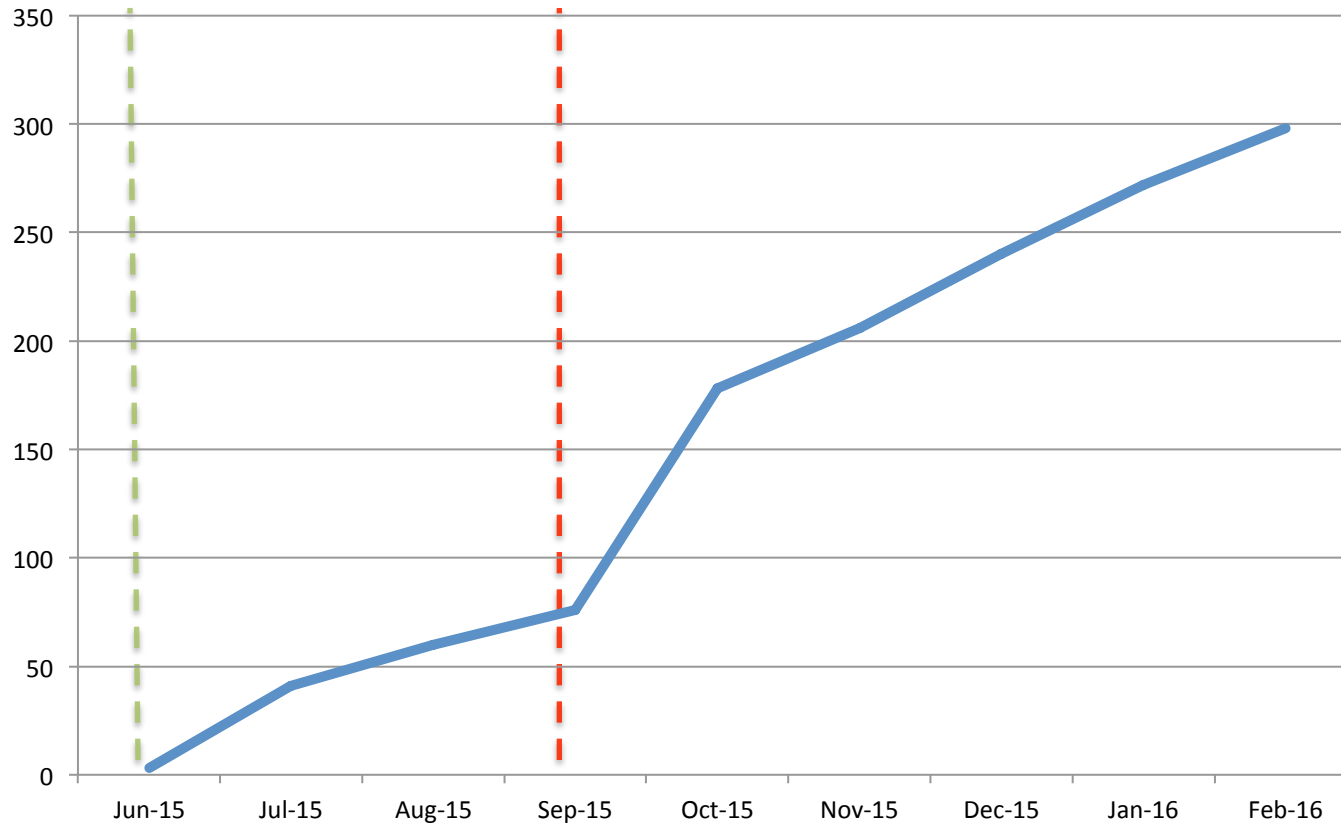
- IPv4 Waiting List
- IPv4 Transfers
- Dedicated IPv4 block to facilitate IPv6 deployment
- IPv6 Adoption

IPv4 Waiting List



- Policy enacted first time ARIN did not have a contiguous block of addresses of sufficient size to fulfill a qualified request
 - **Must qualify under current ARIN policy and request to be added to the list**
 - **Maximum approved size determined by ARIN**
 - **Minimum acceptable size specified by requester**
 - **One request per org on the list at a time**
 - **Limit of one allocation or assignment every 3 months**
- Waiting List published on ARIN's web site
 - **Approximately /12 needed to fill all pending requests**
 - **https://www.arin.net/resources/request/waiting_list.html**

IPv4 Waiting List Growth



----- = waiting list initiated

----- = IPv4 depletion

Transfers of IPv4 Addresses



3 ARIN Transfer Policies Available:

– Mergers and Acquisitions (NRPM 8.2)

- Traditional transfer resulting from a merger, acquisition, or reorganization supported by legal documentation

– Transfers to Specified Recipients (NRPM 8.3)

- IPv4 transfer from one organization to another that it specifies, supported by justified need (within region)

– Inter-RIR transfers to Specified Recipients (NRPM 8.4)

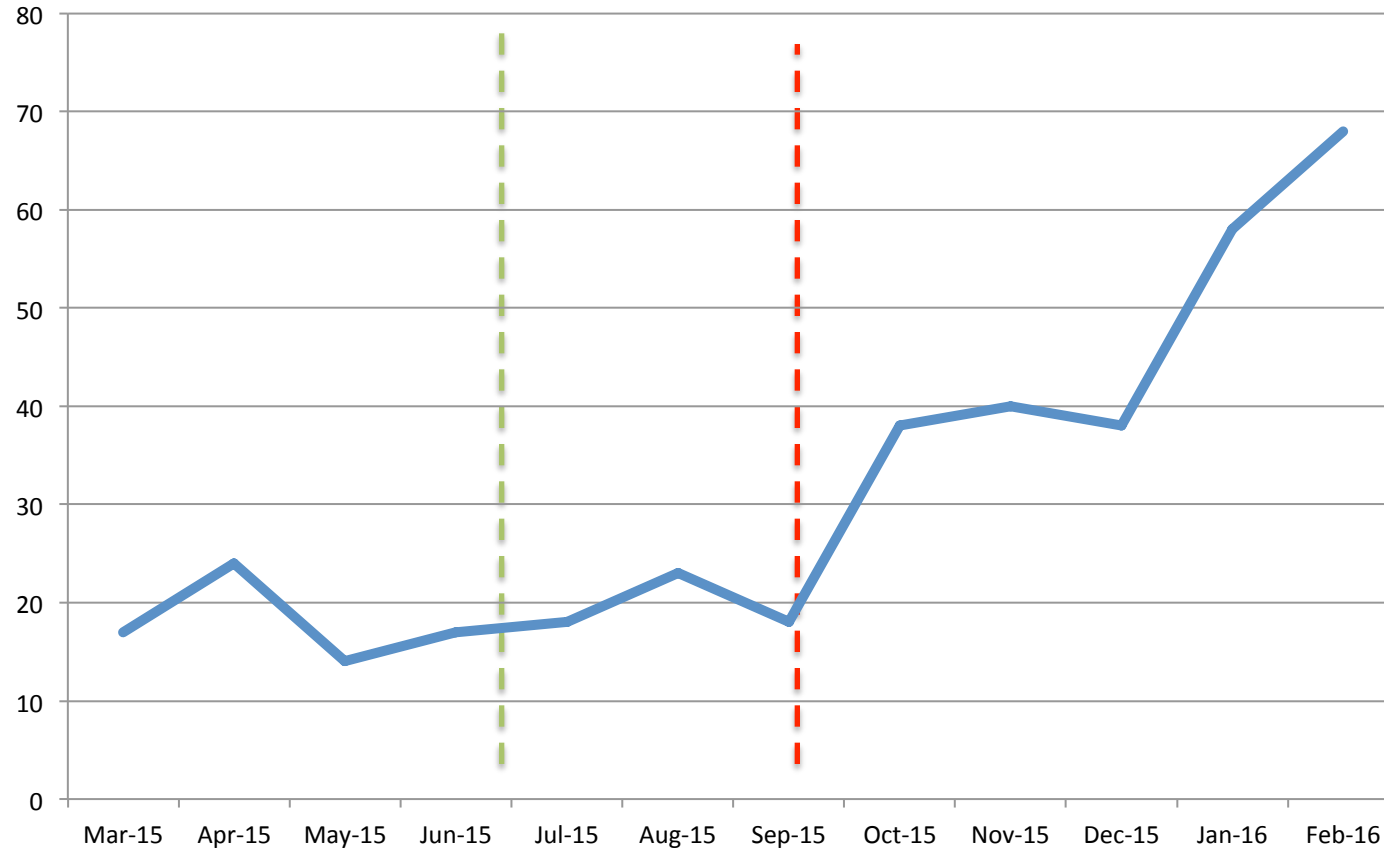
- IPv4 market transfer from one organization to another that it specifies, supported by justified need (between regions)

Transfers to Specified Recipients (NRPM 8.3)



- Allows orgs with unused IPv4 resources to transfer them to orgs in need of IPv4 resources
- **Source**
 - **Must be current registrant, no disputes**
 - **Not have received addresses from ARIN for 12 months prior**
- **Recipient**
 - **Must demonstrate need for 24-month supply under current ARIN policy**

8.3 Transfers Completed



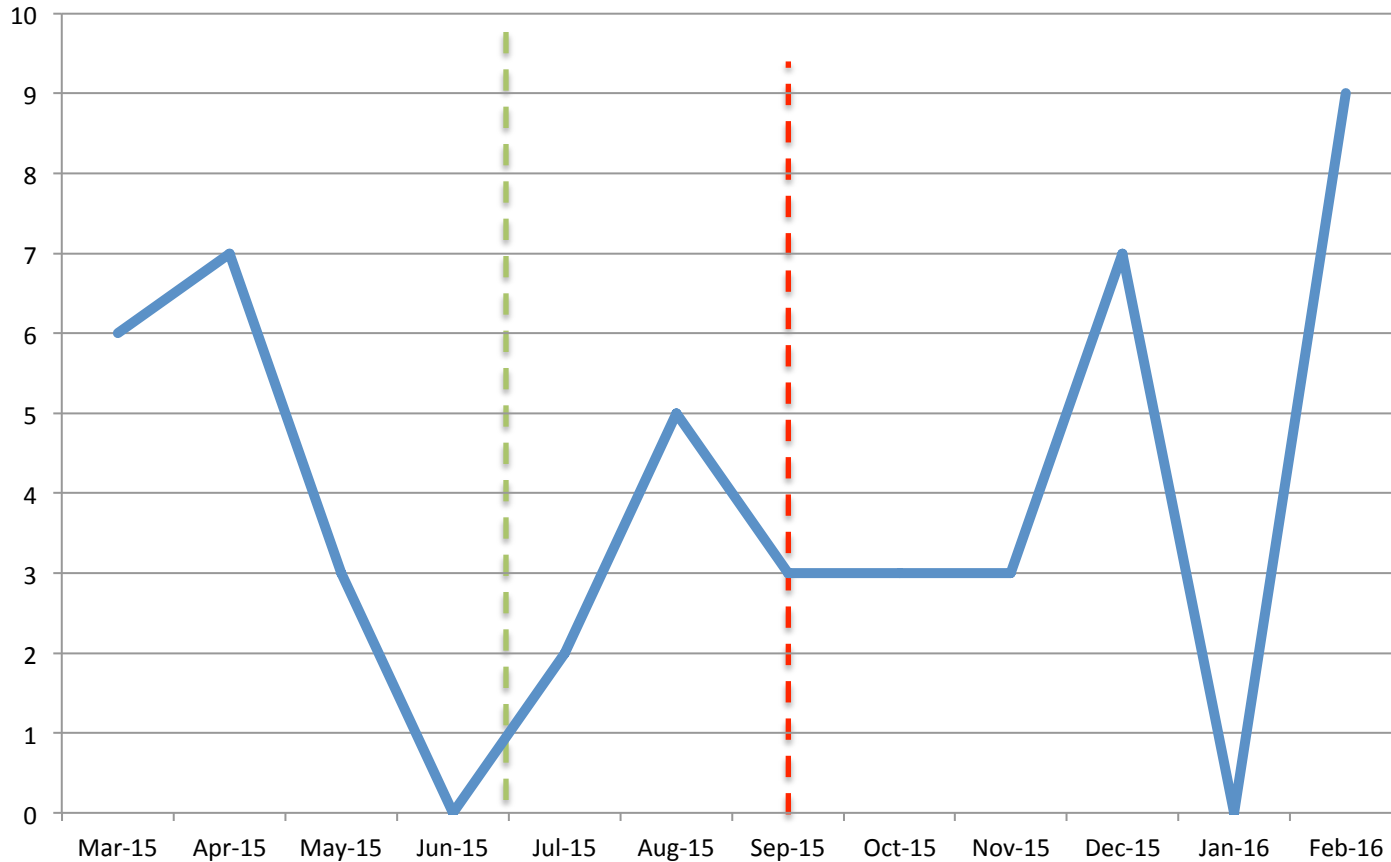
- = waiting list initiated
- = IPv4 depletion

Inter-RIR Transfers (NRPM 8.4)



- RIR must have reciprocal, compatible needs-based policies
 - **Currently APNIC and RIPE NCC**
- **Transfers from ARIN**
 - **Source cannot have received IPv4 from ARIN 12 months prior to transfer**
 - **Must be current registrant, no disputes**
 - **Recipient meets destination RIR policies**
- **Transfers to ARIN**
 - **Must demonstrate need for 24-month supply under current ARIN policy**

Inter-RIR Transfers Completed



----- = waiting list initiated
----- = IPv4 depletion

Documentation Required for IPv4 Source



- Verification current registrant is active and in good standing within the ARIN region
 - **If there was a merger or acquisition, an M&A transfer may be required before you can release your IPv4 addresses**
- Notarized officer acknowledgement
- Additional items may be needed

IPv4 Recipient Documentation



- **Utilization data for ARIN-issued IPv4 space**
- **Data to support 24 month projected need**
 - Historical IPv4 utilization rate
 - New services/markets to be deployed
 - Customer growth projections
- **Signed officer attestation certifying data is accurate**

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’re on the IPv4 waiting list, you’ll be removed if/when you receive IPv4 addresses via transfer

Pre-Approval for Recipients



- Optional free service to confirm your 24 month projected need for IPv4 addresses
 - **Same documentation requirements as transfers**
- Used to receive IPv4 addresses via specified or Inter-RIR transfers up to the pre-approved amount
 - **Eliminates the need to re-justify need on each transfer**
 - **Good for 24 months from the pre-approval date**

Specified Transfer Listing Service (STLS)



- 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**
 - **# of source ORGs and approved block sizes**
 - **List of facilitators with contact information**

Tips for Faster Transfer Processing



- Ensure all registration information is current
 - **If not, we can help you get it up to date**
 - **Allows for faster processing when acting as a transfer source**
- Request pre-approval
 - **Ensures you know your approved block size when seeking a source for your IPv4 addresses**
 - **Allows for faster transfer process when you submit your transfer recipient ticket**
- Provide detailed information to support 24-month need when submitting transfer/pre-approval

Reserved IPv4 Block for IPv6 Deployment Requirements



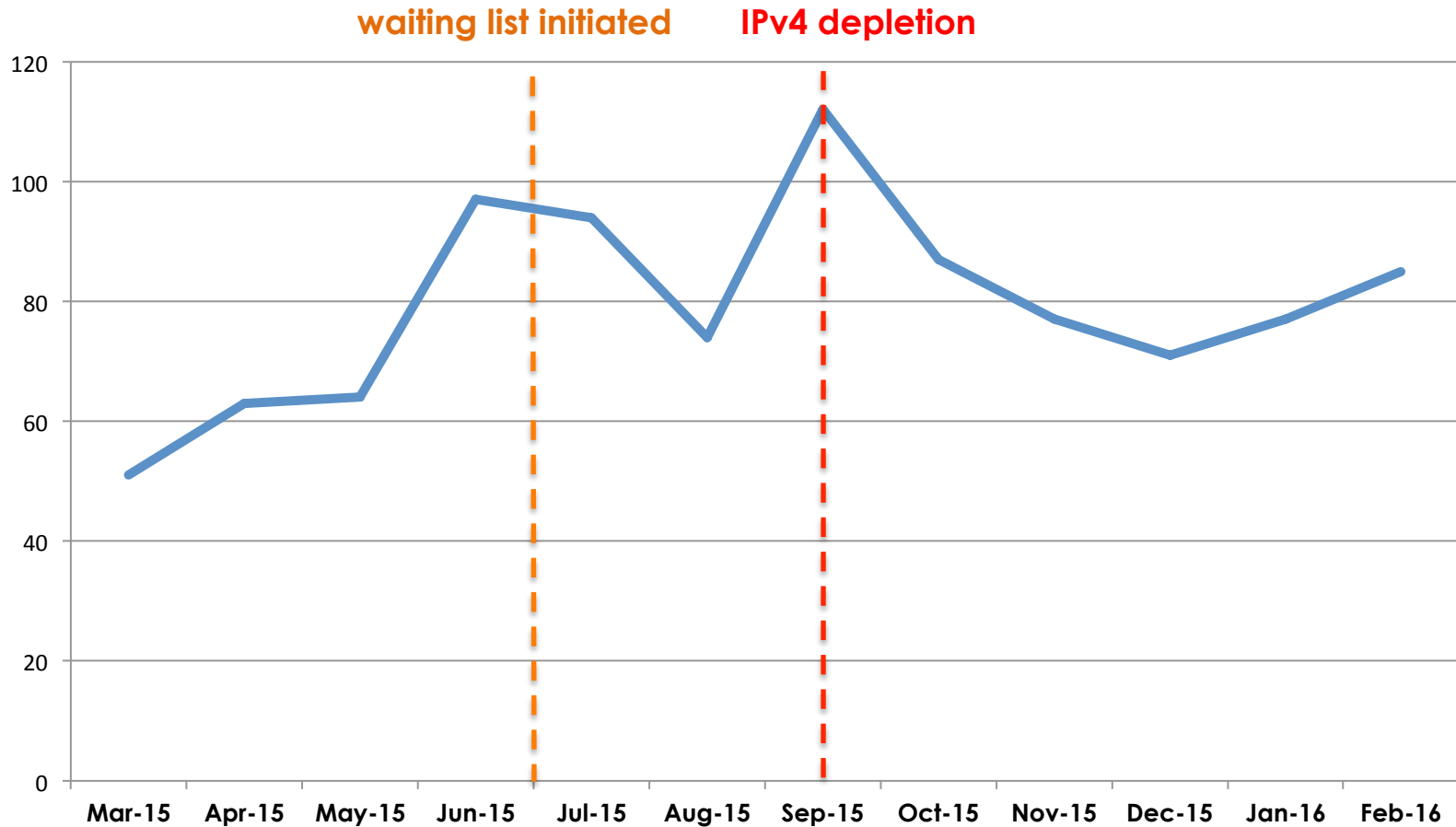
- Used to facilitate IPv6 deployment
- Need cannot be met from your existing ARIN IPv4 space
- Have an IPv6 block registered
- One /24 per organization every six months



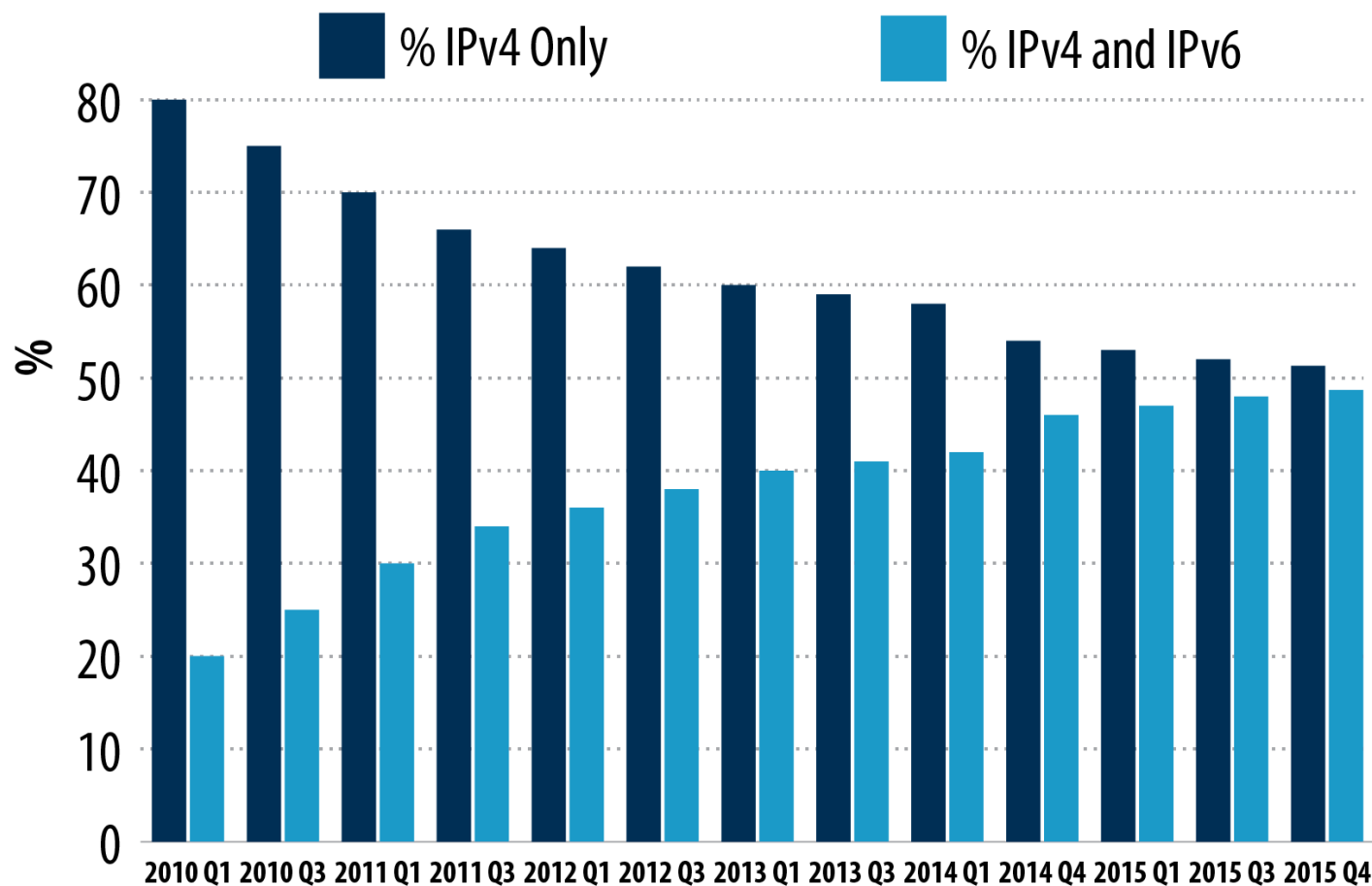
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IPv6 Deployment

IPv6 Requests – Past Year



ARIN ISP Members with IPv4 and IPv6



5,268 total members as of 31 January 2016

Requesting IPv6 - ISPs



- Have a previous v4 allocation from ARIN or predecessor registry

OR

- Intend to IPv6 multi-home

OR

- Provide a technical justification which details at least 50 assignments made within 5 years

Data ARIN Will Typically Ask From - ISPs



- If requesting more than a /32, a spreadsheet/text file with
 - **# of serving sites (PoPs, datacenters)**
 - **# of customers served by largest serving site**
 - **Block size to be assigned to each customer (/48 typical)**

Requesting IPv6 – End Users



- Have a v4 assignment from ARIN or predecessor registry
OR
- Intend to IPv6 multi-home
OR
- Use 2000 IPv6 addresses or 200 IPv6 subnets within a year
OR
- Have a contiguous network that has a minimum of 13 active sites within 12 months
OR
- Technical justification as to why provider-assigned IPs are unsuitable

Data ARIN Will Typically Ask From End users



- **If requesting more than a /48, a spreadsheet/text file with**
 - **List of sites in your network**
 - Site = distinct geographic location
 - Street address for each
 - **Campus may count as multiple sites**
 - Technical justification showing how they're configured like geographically separate sites



IPv6 Info Center

www.arin.net/knowledge/ipv6_info_center.html



www.GetIPv6.info



www.TeamARIN.net





Policy Development

Dan Alexander, ARIN Advisory Council Chair

Overview

ARIN Advisory Council Members

Basic steps

Major policy changes (examples)

A current proposal

How to get involved

The ARIN Advisory Council



- Dan Alexander, Chair
- Cathy Aronson
- Kevin Blumberg, Vice Chair
- Owen DeLong
- Andrew Dul
- David Farmer
- David Huberman
- Scott Leibrand
- Tina Morris
- Milton Mueller
- Amy Potter
- Leif Sawyer
- Robert Seastrom
- John Springer
- Chris Tacit

PDP Basic Steps

1. Community member submits a Proposal
2. Advisory Council (AC) works with submitter to ensure clear problem statement and suggested policy change
3. AC puts Draft Policy on PPML for community discussion/feedback (possibly presented at Public Policy Consultation (PPC) or Public Policy Meeting (PPM))
4. AC decides: continue work or abandon
5. AC recommends fully developed Draft Policy (fair, sound and supported by community) for adoption
6. Recommended Draft Policy presented at PPC/PPM
7. If AC still recommends adoption, then Last Call and review of last call
8. Petition process available throughout at AC actions
9. Board review
10. Staff implements



Past Policy Changes: IPv6 Policy

Circa 2001: Initial IPv6 policy aligned with IPv4 at that time, conservation was important, small amounts issued for short periods, hierarchical distribution from upstreams, and, no end user policy at all

2003-2016 Dozens of proposals to improve IPv6 policy

Changes included: Minimum allocation size increased (/35 to /32), larger allocations from IANA, policy for end users, community networks (mesh networks), assignment sizes from ISPs to customers (/56s), larger amounts for ISPs and easier criteria, larger amounts for end users and easier criteria, bit boundary assignments and allocations, etc.

Past Policy Changes: Transfers

1997 thru 2007: Policy for Mergers and Acquisitions existed, everything else should go back to ARIN

2007 thru 2016: Many proposals to improve transfers.

Changes included: Allow needs-based transfers of unused or underutilized address space between organizations via ARIN, increase supply period from one year to two, allow ASN transfers, allow Inter-RIR transfers, etc.

Still seeing proposals to make transfers easier, there are some who are trying to reduce the needs requirement, some want ARIN to simply record the transfers.

Policy Currently Under Discussion

- ARIN-2015-5: Out of Region Use
Would allow an organization to receive Internet number resources from ARIN for use out of region as long as the applicant is currently using at least the equivalent of a /22 of IPv4 space, /44 of IPv6, or 1 ASN within the ARIN service region.
- Earlier Abandoned Proposals
 - ARIN-2014-1: Out of Region Use
 - ARIN-2013-6: Allocation of IPv4 and IPv6 Address Space to Out-of-region Requestors
 - ARIN-2011-13: IPv4 Number Resources for Use Within Region
(continued on next slide)

2015-5 continued

- ARIN-2015-5 presented at ARIN 36 in Oct 2015
- AC found draft to be fair, technically sound and supported and promoted to recommended state (late Oct 2015)
- Presented as Recommended Draft Policy at NANOG 66
- Last Call was 24 February thru 9 March 2016
- AC recommended Board adopt on 17 March
- Next steps:
 - **Board Review**
 - **Implementation by Staff**



How Can You Get Involved?

Two ways to learn and be heard

1. **Public Policy Mailing List (PPML)**

<http://lists.arin.net/mailman/listinfo/arin-ppml>

2. **Public Policy Consultations/Meetings**

ARIN meetings (April and October)

ARIN Public Policy Consultations at NANOG
(twice a year, usually February and June)

Remote participation supported

Takeaways

- 1) ARIN doesn't create number policy, you do.
- 2) Well documented policy development process includes assistance from ARIN AC and staff throughout the process.
- 3) Stay informed. Join the policy list and/or attend meetings (in person or remotely).

References

Policy Development Process (PDP)

<http://www.arin.net/policy/pdp.html>

Draft Policies and Proposals

<http://www.arin.net/policy/proposals/index.html>

Number Resource Policy Manual
(NRPM)

<http://www.arin.net/policy/nrpm.html>



What's Ahead This Week



Tonight:

Happy Hour 5:00 – 7:00 PM, Royal Pavilion

Monday:

Public Policy Meeting 9:00 AM – 4:00 PM

Social 6:30 – 10:30 PM, Sunset Beach

Tuesday:

Public Policy Meeting 9:00 AM – 4:30 PM

Happy Hour 5:00 – 6:00 PM, Royal Pavilion

Wednesday:

Members Meeting (open to all) 9:00 AM – 12:00 PM

Ways to Participate This Week (Membership Not Required!)



- Meet your fellow attendees at meals and during breaks
- Join a lunch table topic discussion led by an Advisory Council member
- ARIN Board, Advisory Council, NRO Number Council and Staff all have ribbons on our name tags – seek us out and ask questions
- Go the floor microphones in the meeting room, be sure to state name and organization upfront
- Raise your hand to voice your opinion when votes are taken during policy discussions



- In this same room starting this afternoon at 2:00 PM through Friday at 4:30 PM
- Register at: www.caribnog.org/meetings/caribnog11

Your Survey



Please complete the survey form and drop it in the bowl.

Drawing tomorrow AM during opening announcements - \$100 Think Geek Gift Certificate. Be there to win !

Questions?