

Obtaining and Managing your Internet Number Resources

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Agenda

- ARIN Update
- What you **NEED** to do
 - Get IPv6
 - Validate POCs
- What you should **THINK ABOUT**
 - Make unused IPv4 resource available
 - Legacy RSA
- ARIN Online

What you **NEED** to do

- Get IPv6
 - Why IPv6
 - Where to get IPv6 Resources
 - Sources for additional IPv6 Information
- Validate POCs
 - What is it
 - Why is ARIN doing this?
 - But, how do I fix POCs

Why IPv6

- We are running out of IPv4
 - IANA is out
 - APNIC is essentially out (in last /8 policy)
 - ARIN (at 5.15 /8s as of 4/18/2011o) out in a year or less
 - RIPE out in a year or less
- We still have Billions of users to add to the Internet world wide
- Each users has or will have multiple devices

Where to Get IPv6 Resources

- From Internet2
 - Not currently recommended, but still possible
- From your GigaPOP
 - A good option if you get all connectivity from your GigaPOP
- From your ISP
 - Not a good option if you are multi-homed
 - And, if you are connected to Internet2 and an ISP, you are multi-homed

Where to Get IPv6 Resources

- Directly From ARIN
 - Best recommendation for most campuses
 - End User Assignment /48 or larger
 - For your organization only
 - How to; https://www.arin.net/resources/request/ipv6_initial_assign.html
 - Policy; <https://www.arin.net/policy/nrpm.html#six58>
 - ISP or LIR Allocation /32 or larger
 - If you will be making assignments to other organizations
 - How to; https://www.arin.net/resources/request/ipv6_initial_alloc.html
 - Policy; <https://www.arin.net/policy/nrpm.html#six51>


Sources for additional IPv6 Information

- Internet2 IPv6 working group
 - See: <http://ipv6.internet2.edu/>
- Internet2 IPv6 workshops
 - See: <http://www.internet2.edu/workshops/ipv6/>
- ARIN IPv6 Wiki
 - See: <http://www.getipv6.info/>

ARIN POC Validation – What is it

- Annual Email to verify Point of Contact (POC) information
- Policy; <https://www.arin.net/policy/nrpm.html#three6>
- Nonresponsive POCs designated in Whois
- Resource with nonresponsive POCs can not be updated or changed in anyway until all associated POCs are validated

ARIN POC Validation



American Registry for Internet Numbers

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WHOIS-RWS

Point of Contact

Note	ARIN has attempted to validate the data for this POC, but has received no response from the POC since 2011-01-14
Name	[REDACTED]
Handle	[REDACTED]
Company	[REDACTED] College
Street	[REDACTED]
City	Saint Paul
State/Province	MN
Postal Code	55105
Country	US
Registration Date	1999-09-16
Last Updated	2010-01-14
Comments	
Phone	[REDACTED] (Fax) [REDACTED] (Office)
Email	[REDACTED]
RESTful Link	http://whois.arin.net/rest/poc/[REDACTED]
See Also	Related organizations.

RELEVANT LINKS

- > [ARIN Whois/Whois-RWS Terms of Service](#)
- > [Whois-RWS API documentation](#)
- > [ARIN Technical Discussion Mailing List](#)
- > [Sample stylesheet \(xsl\)](#)

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Why is ARIN doing this?

- The ARIN Community Requested it
- Help ensure accurate POC Information
- A starting point to find abandoned legacy resources
 - Especially IPv4 resources for defunct organizations
- Help prevent fraudulent use and/or transfer of IPv4 resources

How do I fix POCs

- An Admin POC can change or delete all other POCs for an Organization
- There is also a POC Recovery Process
 - See: <https://www.arin.net/resources/request/poc.html#recover>
- But, None of our POCs work here anymore!
You want the Organization Recovery Process
 - See: <https://www.arin.net/resources/request/org.html#recover>

What you should **THINK ABOUT**

- Make unused IPv4 resource available
 - Return them to ARIN
 - Transfer them to another organization that needs them
- Legacy RSA
 - Why should I sign an LRSA

Make unused IPv4 resource available

- The world is running out of available IPv4 addresses, even with the transition to IPv6 the need for IPv4 will not immediately go away
- If you have unused resource **PLEASE** consider making those resources available to other organizations that need them

Options to Make IPv4 Resources Available

- Return them to ARIN
- Make them available on the transfer market
 - One way to do this would be to list them on the ARIN Specified Transfer Listing Service (STLS)
see: <https://www.arin.net/resources/request/stls.html>

Options to Make IPv4 Resources Available

- Transfer them to other R&E user with justified need
 - Maybe to your GigaPOP for reuse in your area if justified
 - Should Internet2 help coordinate R&E organizations with unused resources find other R&E organizations that need resources?

Legacy RSA

- Can you provide any evidence of your Legacy IPv4 assignments, other than ARIN Whois?
- If not you may want to consider the Legacy RSA
- Also, provides legal proof for your Legacy IPv4 and ASN assignments, in the form of a modern contract*

* I'm not a lawyer, I'm an Engineer, your should talk to your organizations' lawyers for legal advise

Legacy RSA

- You will need to sign ARIN's regular RSA to obtain IPv6 resources from ARIN
 - Kill two birds with one stone do both the LRSA and RSA at the same time

ARIN Online

- ARIN Online is the new web based service portal that allow you to request and manage Internet Number Resources from ARIN
 - Much more user friendly then the old E-Mail templates
- See: <https://www.arin.net/public/aboutARINonline.xhtml>

Questions?