

ARIN31



BARBADOS

First Timers' Breakfast

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First Timers' Breakfast

- Brief introductions
- ARIN and the Internet registry system
- Policy development at a glance
- What's ahead and how to participate
- Q&A at your table

Self-introductions



Regional Internet Registries (RIRs)

- The system began in 1992

- There are five RIRs:

- RIPE NCC, APNIC, then ARIN
- LACNIC formed in 2002 out of ARIN region
- AFRINIC formed in 2005 out of ARIN and RIPE NCC regions.



RIR Structure

Nonprofit	Membership Organization	Community-regulated
<ul style="list-style-type: none">• Fee for services, not number resources• 100% community funded	<ul style="list-style-type: none">• Broad-based<ul style="list-style-type: none">- Private sector- Public sector- Civil society	<ul style="list-style-type: none">• Community developed policies• Member-elected executive board• Open and transparent

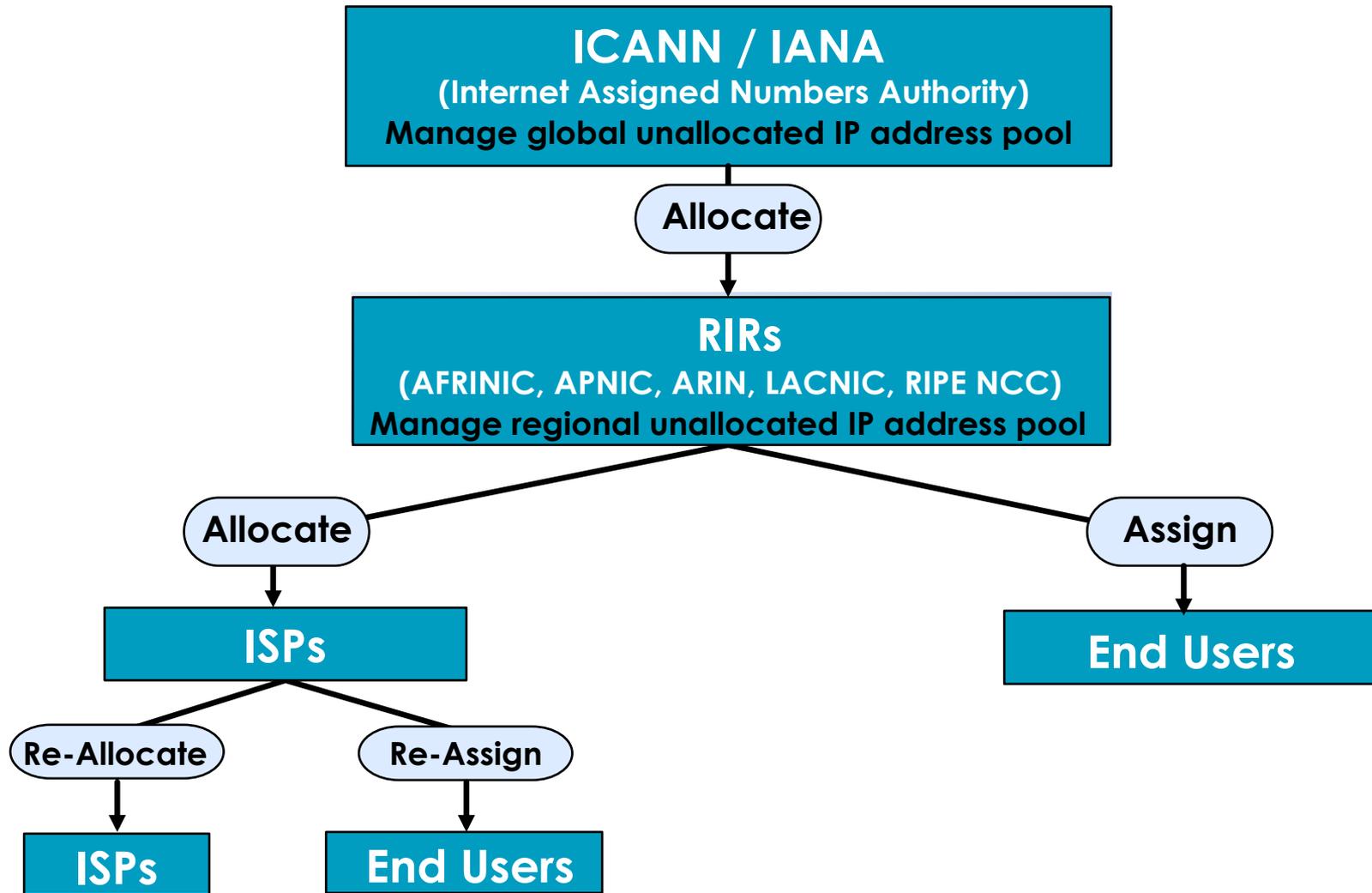
RIR Services

Number Resources	Organization	Policy Development
<ul style="list-style-type: none">• IP address allocation & assignment• ASN assignment• Directory services<ul style="list-style-type: none">• Whois• IRR• Reverse DNS	<ul style="list-style-type: none">• Elections• Meetings• Information dissemination<ul style="list-style-type: none">• Website• Newsletters• Roundtables• Training	<ul style="list-style-type: none">• Facilitate policy development process• Maintain email discussion lists• Conduct public policy meetings• Publish policy documents

Who Provisions IP Addresses and ASNs?

ICANN IANA	<ul style="list-style-type: none">• Top level technical coordination of the Internet Names, Numbers, Root Servers• Manage global unallocated IP address pool<ul style="list-style-type: none">• Allocate number resources to RIRs
RIR	<ul style="list-style-type: none">• Manage regional unallocated IP address pool<ul style="list-style-type: none">• Allocate number resources to ISPs/LIRs• Assign number resources to End-users
ISP/LIR	<ul style="list-style-type: none">• Manage local IP address pool for use by customers and for infrastructure<ul style="list-style-type: none">• Allocate number resources to ISPs• Assign number resources to End-users

Number Resource Provisioning Hierarchy

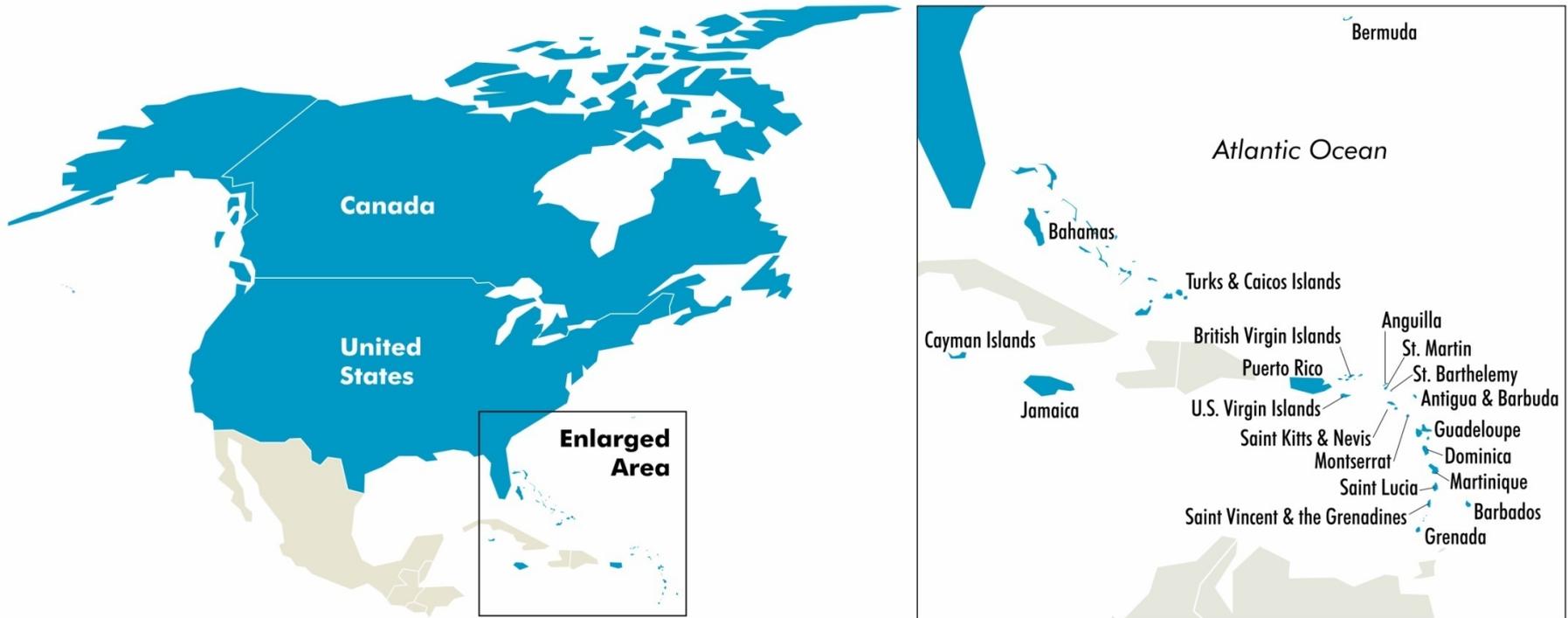


ARIN's Mission

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

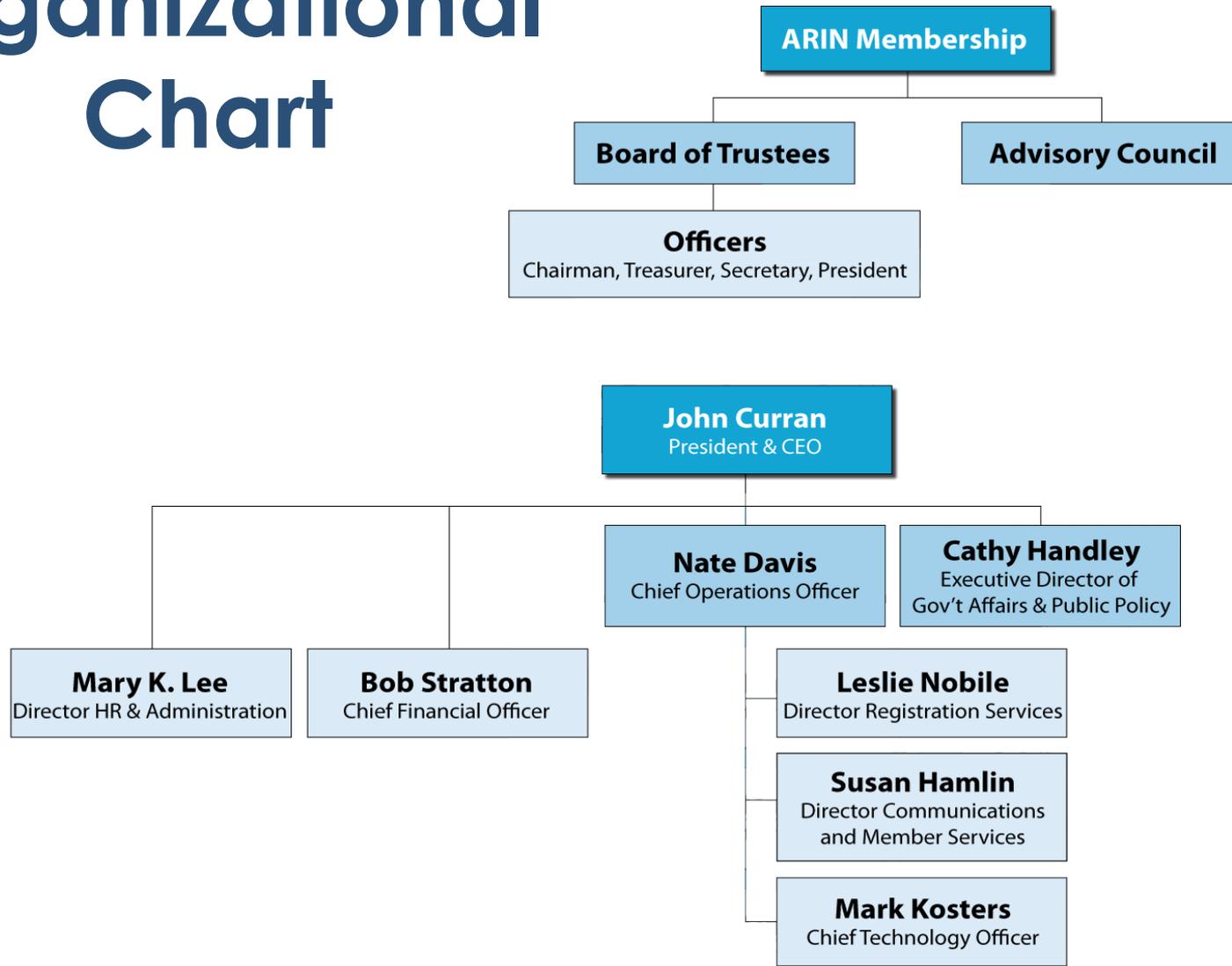
- **the management of Internet number resources throughout its service region;**
- **coordinates the development of policies by the community for the management of Internet Protocol number resources; and**
- **advances the Internet through informational outreach.**

ARIN's Service Region



ARIN's region includes Canada, many Caribbean and North Atlantic islands, US Minor Outlying Islands and the United States.

Organizational Chart



Registration Services



- Coordination & management of Internet number resources
- Internet number resource transfers
- Directory Services
- Registration transaction information (Whois)
- Record maintenance
- Routing information (Internet Routing Registry)

Technical Services



- ARIN Whois/Whois-RWS
- ARIN Online
- Internet Routing Registry
- Reverse DNS Services
- DNSSEC
- RPKI
- IT support for organization

Organization Services

- Information publication and dissemination
- Education & outreach
- Elections (Board, AC, NRO NC)
- Policy development process
- Public Policy and Member Meetings

Policy Development Principles

Open

- **Developed in open forum**
 - Public Policy Mailing List
 - Public Policy Meetings
- **Anyone can participate**

Transparent

- **All aspects documented and available on website**
 - Policy process, meetings, and policies

Bottom-up

- **Policies developed by the community**
- **Staff implements, but does not make policy**

Who Plays a Role in the Policy Process?

Community

- Submits proposals
- Participates in discussions and petitions

Advisory Council (elected volunteers)

- Facilitates the policy process
- Develops policy:
 - Enables fair and impartial resource administration
 - Technically sound
 - Supported by the Community
- **Determines consensus based on community input**

Roles...

ARIN Board of Trustees (elected volunteers)

- Provides corporate fiduciary oversight**
- Ensures the policy process has been followed**
- Ratifies policies**

ARIN Staff

- Provides feedback to community**
 - Staff and legal assessments for all proposals
 - Policy experience reports
- Implements ratified policies**

Basic Steps

1. Community member submits a Proposal
2. 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 PPC/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. Board review
9. Staff implements

Number Resource Policy Manual

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

ARIN
American Registry for Internet Numbers

Your IPv4 address is 192.149.252.11

SEARCH Whois advanced search

NUMBER RESOURCES PARTICIPATE POLICIES FEES & INVOICES KNOWLEDGE ABOUT US

ARIN ONLINE

Username and password are case sensitive.

username: new user?

password: assistance

log in About ARIN Online

ARIN NUMBER RESOURCE POLICY MANUAL

SEARCH THIS SECTION Advanced Search

Version 2012.2 - 10 February 2012

This is ARIN's Number Resource Policy Manual (NRPM). It is available at: <https://www.arin.net/policy/>. This version supersedes all previous versions.

NRPM

- Change Log
- PDF
- Index

CONTENTS

- Introduction
- Definitions
 - Internet Registry (IR)
 - Regional Internet Registry (RIR)
 - [Section Number Retired]
 - Local Internet Registry (LIR)
 - Allocate and Assign
 - End-user
 - Multihomed
 - Utilization (IPv6)
 - HD-Ratio
 - End site
 - Community Network
 - Organizational Information
 - Residential Customer
 - Serving Site (IPv6)
 - Provider Assignment Unit (IPv6)
 - Utilized (IPv6)
- Directory Services
 - Bulk Copies of ARIN's Whois
 - Distributed Information Server Use Requirements
 - Privatizing POC Information
 - Domain Registrar

Policies Covered:

- IPv4 Address Space
- IPv6 Address Space
- Autonomous System Numbers (ASNs)
- Directory Services (WHOIS)
- Reverse DNS (in-addr)
- Transfers
- Experimental Assignments
- Resource Review Policy

Draft policies at this meeting:



- ARIN-2012-2: IPv6 Subsequent Allocations Utilization Requirement
- ARIN-2013-1: Section 8.4 Inter-RIR Transfers of ASNs
- ARIN-2013-2: 3GPP Network IP Resource Policy
- ARIN-2013-3: Tiny IPv6 Allocations for ISPs

How to monitor and not be overwhelmed?

Once a month:

- Front page of the website leads to proposals and draft policies under discussion
 - New proposals need feedback for the AC's initial decision
 - Web site can help you focus on what's important to you and your company

Twice per year:

- Check the ARIN Public Policy Meeting site in the weeks leading up to the meeting
 - Proposals/Draft Policies on Agenda
 - Discussion Guide (summaries, text, staff assessments)
 - Attend in Person/Remote
- AC meeting last day: Watch list for AC's decisions, Last Calls – State your opinion, are you For or Against?

What's Ahead this week

Needhams 1 & 2

Today:

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

ARIN social – Harbor Lights

(Buses leave starting at 6:15)



Tuesday: ARIN Public Policy Meeting, 9:00 AM – 4:00 PM

Wednesday: ARIN Members Meeting (open to all), 9:00 AM – Noon

Ways to participate this week: Membership is not required 😊

- Meet your fellow attendees at meals and during breaks
- Join a lunch table topic discussion led by the AC on Monday or Tuesday
- 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

Don't Forget Your Survey

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

Be present in the meeting room this afternoon for the drawing – you might win a \$100 Think Geek gift certificate.

Questions?

Reference Material

Historical Timeline

Government Oversight

1993 IR function contracted by NSF to NSI; InterNIC formed, DoD oversight ends. APNIC formed.



1992 RFC 1366: Regional IRs established; RIPE NCC formed



1991 RFC 1261: DoD IR function contract moved to Network Solutions, Inc.



1990 Internet Registry (IR) function contracted by DoD to SRI International



1980's NSFNET/ARPANET - Jon Postel managed addressing via DoD contract; this was called the Internet Assigned Numbers Authority (IANA)



Historical Timeline

Community Oversight

2005 Regionalization complete; AfriNIC formed



2002 Regionalization continues; LACNIC formed



1998 ICANN formed by US Gov't (top level technical coordination)



1997 IR regionalization continues; ARIN formed. USG oversight of IR function ends.

