Getting IPv6 Address Space from ARIN is Easier Than You Think
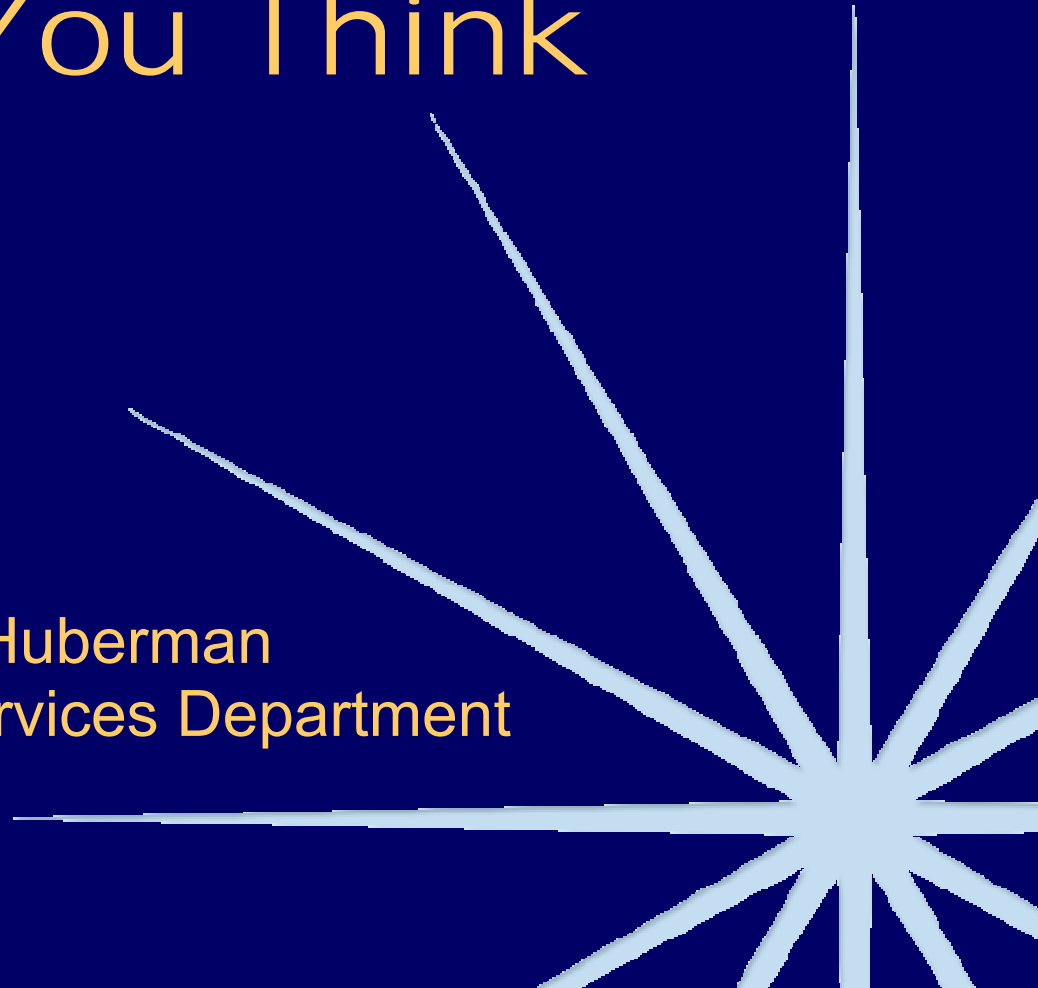
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Overview

✳ Request Process

► Policy

► Org ID

► Submitting a Request

► Post-request

✳ Statistics

✳ Useful Links

Policy: Initial Allocation

* Size
  ► Minimum: /32
  ► Maximum: None
* Criteria
  ► Be an LIR (ISP)
  ► Not an end site
  ► Plan to:
    ► Provide IPv6 connectivity
    ► Either make 200 /48 assignments in 5 years OR be a known ISP in the ARIN region

What is an Org ID?

✳ An entity registered in the ARIN database

✳ An organization is defined by its:
  - ► Organization Name
  - ► Physical Address
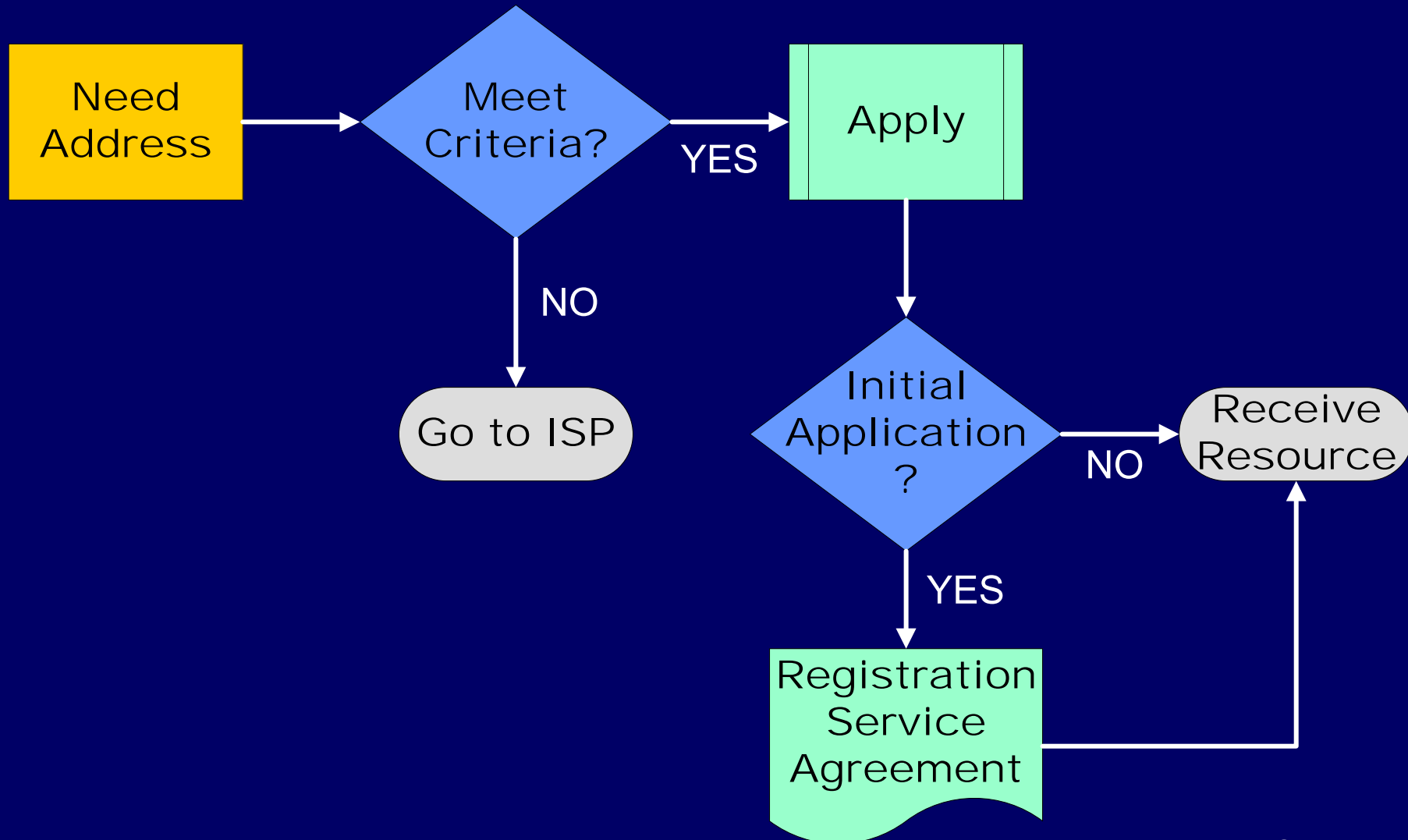 - ► Points of Contact

✳ Uniquely identified by its handle

Before You Start…

✴ Establish a new Org ID or update an existing one

✴ Ensure existing Org ID has up-to-date address and Points of Contact (POCs)

Template: ARIN-NET-IPv6-3.2.1

1. **Expected services:**
2. **Deployment Date:**
3. **Network Topology Plan:**
4. **Initial Prefix Length Requested:**
5. **IPv4 Customers:**
6. **Additional Information:**
7. **Existing IPv6 allocation:**
8. **Assigned**
9. **Internal:**
10. **Unassigned:**
11. **Subsequent Prefix Length Requested:**
12. **Five-year Plan:**
13. **Org ID:**
14. **Org Name:**
15. **Network Name:**
16. **DNS Reverse Mapping Name Server:**
    DNS Reverse Mapping Name Server:
17. **POC Type:**
18. **POC Handle:**
19. **Public Comments:**

Resource Provisioning Process

Need Address → Meet Criteria?

Meet Criteria? —YES→ Apply

Meet Criteria? —NO→ Go to ISP

Apply → Initial Application?

Initial Application? —NO→ Receive Resource

Initial Application? —YES→ Registration Service Agreement → Receive Resource

Approval and Allocation

* Approval
* Billing & contract phase
* Allocation
* WHOIS update

Assignments by ISP (LIR)

* **LIR to end site**
  * ► /48
    * ► Usual assignment size
    * ► 16 bits for subnets
  * ► /64 only one subnet
  * ► /128 only one device connecting
* **ISP infrastructure**
  * ► /48 per POP

RFC 3177 "IAB/IESG Recommendations on IPv6 Address Allocations to Sites"

ARIN Region Stats

Direct IPv6 registrations:

/32 networks: 134

/48 networks: 47
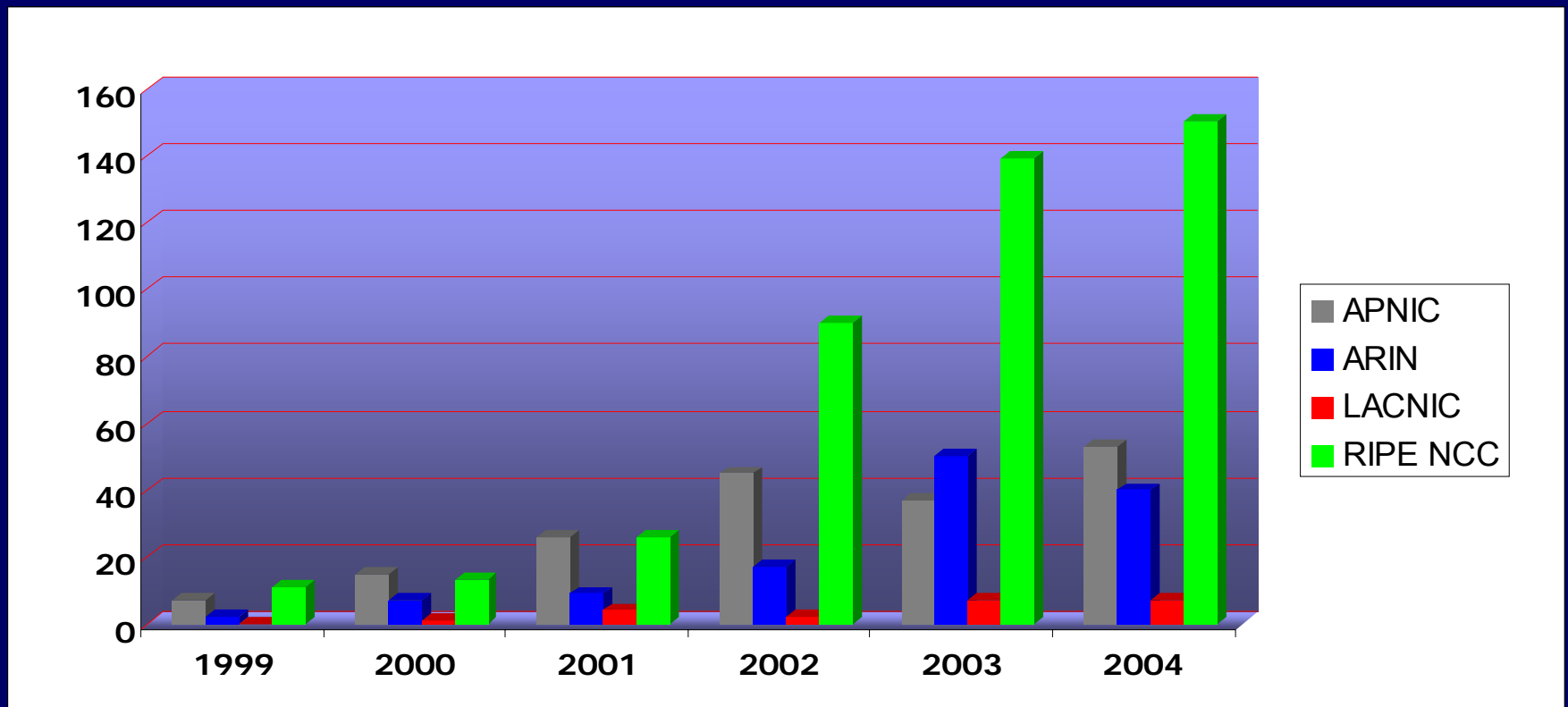
Reassignments registered:

/40 networks: 36

/48 networks: 82

/64 networks: 1

Breakdown by Country (/32s only):

110 USA, 18 CA, 5 ZA, 1 MW

IPv6 Allocations
RIRs to LIRs/ISPs

Useful Links

* http://www.arin.net/registration/templates/v6-request.txt

* http://www.arin.net/policy/index.html#six51

Thank you!