Database Implementation Working Group

Ginny Listman

Working Group Chair

Agenda

✳ **ERX Status**

✳ **Database Cleanup**

✳ **Authentication**

✳ **Referral Server in WHOIS**

ERX Timeline

START:
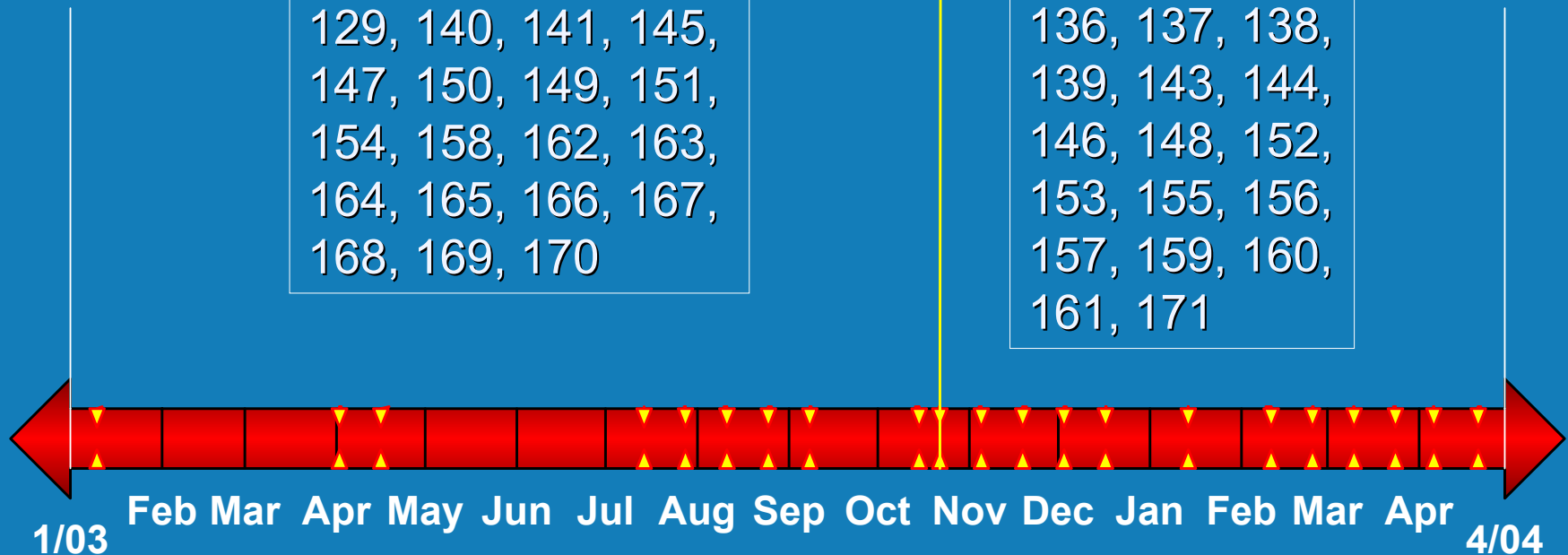Old Class B
IP Network
Transfer

Today

Scheduled:
128, 130, 131,
132, 134, 135,
136, 137, 138,
139, 143, 144,
146, 148, 152,
153, 155, 156,
157, 159, 160,
161, 171

END:
Old Class B
IP Network
Transfer

Completed:
129, 140, 141, 145,
147, 150, 149, 151,
154, 158, 162, 163,
164, 165, 166, 167,
168, 169, 170

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr

1/03   4/04

http://www.arin.net/registration/erx/index.html

ERX Timeline

START:
Old Class B
IP Network
Transfer

Today

END:
Old Class B
IP Network
Transfer

Status	Number of /8s
Completed	19
Scheduled	23
TBD (192, 196, 198)	3

1/03 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr 4/04

http://www.arin.net/registration/erx/index.html
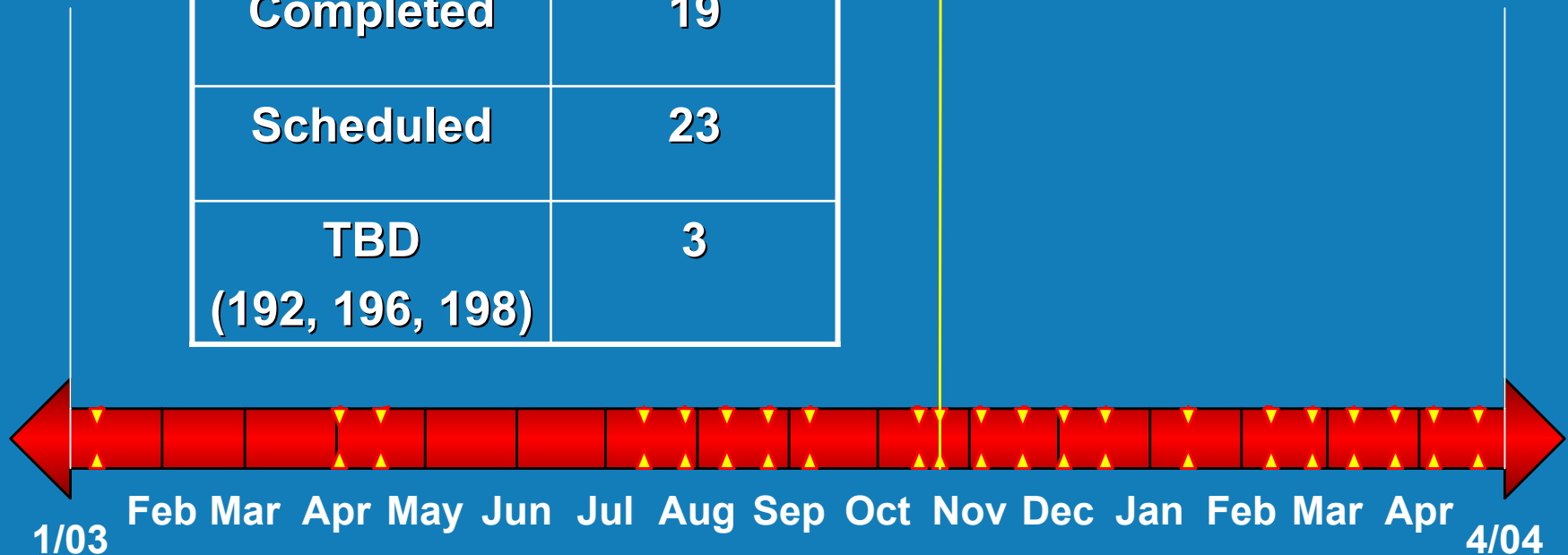
Database Cleanup

✳ **What it should be:**

➤ 100% of orgs should have POCs

➤ Reassignments without in-addr name servers should be simple reassignments

✳ **What it is:**

➤ 79% of orgs have POCs

  ➤ 16% of orgs with direct allocations/assignments have POCs

  ➤ 87% of orgs with reassignments/reallocations only have POCs

➤ 30% of networks are detailed reassignments without in-addr name servers

Orgs without POCs

✳ **ARIN promoting POCs from resources if:**

 ➤ All resources are sub-delegations

 ➤ Resource POC handles are the same

✳ **ARIN will send out notification to directly assigned or allocated resource POC for any org without POCs**

Should It Be a Simple Reassignment?

✴ **Downstream network must:**

➤ Be a reassignment (no reallocations)

➤ Not have distinct name servers from parent

✴ **Requestor must not desire to retain any POC linkage**

✴ **Reassignments with missing and/or invalid information, e.g. nomailbox@nowhere**

# Converting Detailed to Simple

* **Provide one of the following:**
  * ►List of downstream detailed-reassignment Net Handles
  * ►List of upstream allocations for which ALL detailed-reassignment networks would be converted
  * ►Org ID for which all allocations' downstream detailed-reassignment networks would be converted
* **No additional criteria will be accepted**

Ad Hoc Process

* **Upon request, ARIN will provide a list of all "candidate detailed-reassignments"**

* **ISP provides handles to be converted**

* **Customer records will be created without POCs**

* **Org records will be removed**

* **POC records may be orphaned and be retained for 180 days**

Cryptographic Authentication
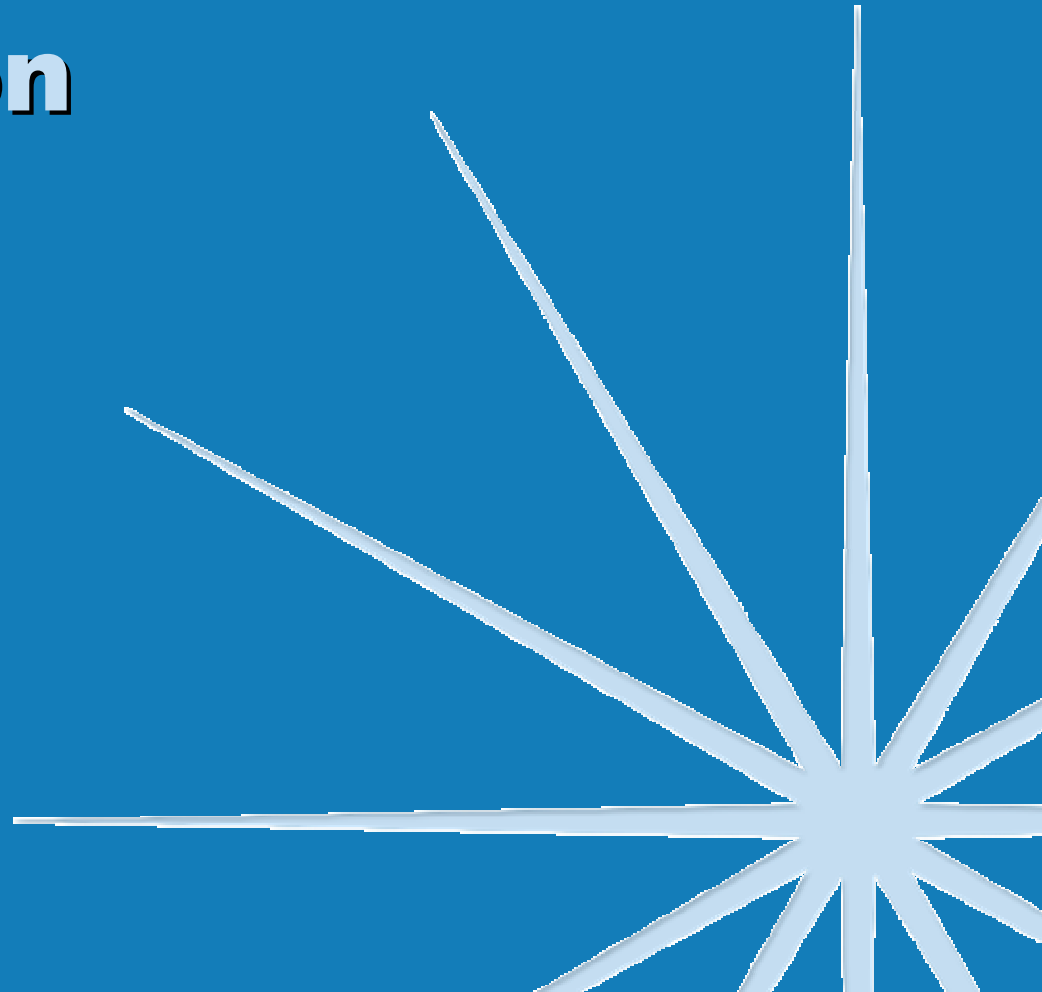
Overview

- ✳ **Goals**
- ✳ **Requirements**
- ✳ **Scope**
- ✳ **System at deployment**
- ✳ **Progress**

Goals

* **Improve legitimacy of inbound mail**
  * ▶ Is it source-authentic?
  * ▶ Is it unaltered?
* **Improve integrity of database**
* **Improve authenticity of outbound information**
  * ▶ Did ARIN issue it?
  * ▶ Is it unaltered?

Requirements

- **Verify sender identity**
- **Ensure unaltered content**
- **Improve customer confidence**
- **Demonstrate stewardship**
- **Adhere to applicable IETF RFCs**
- **Follow industry BCPs**
- **Permit future extensibility**

Scope of current project

* **Secure template-based registration**
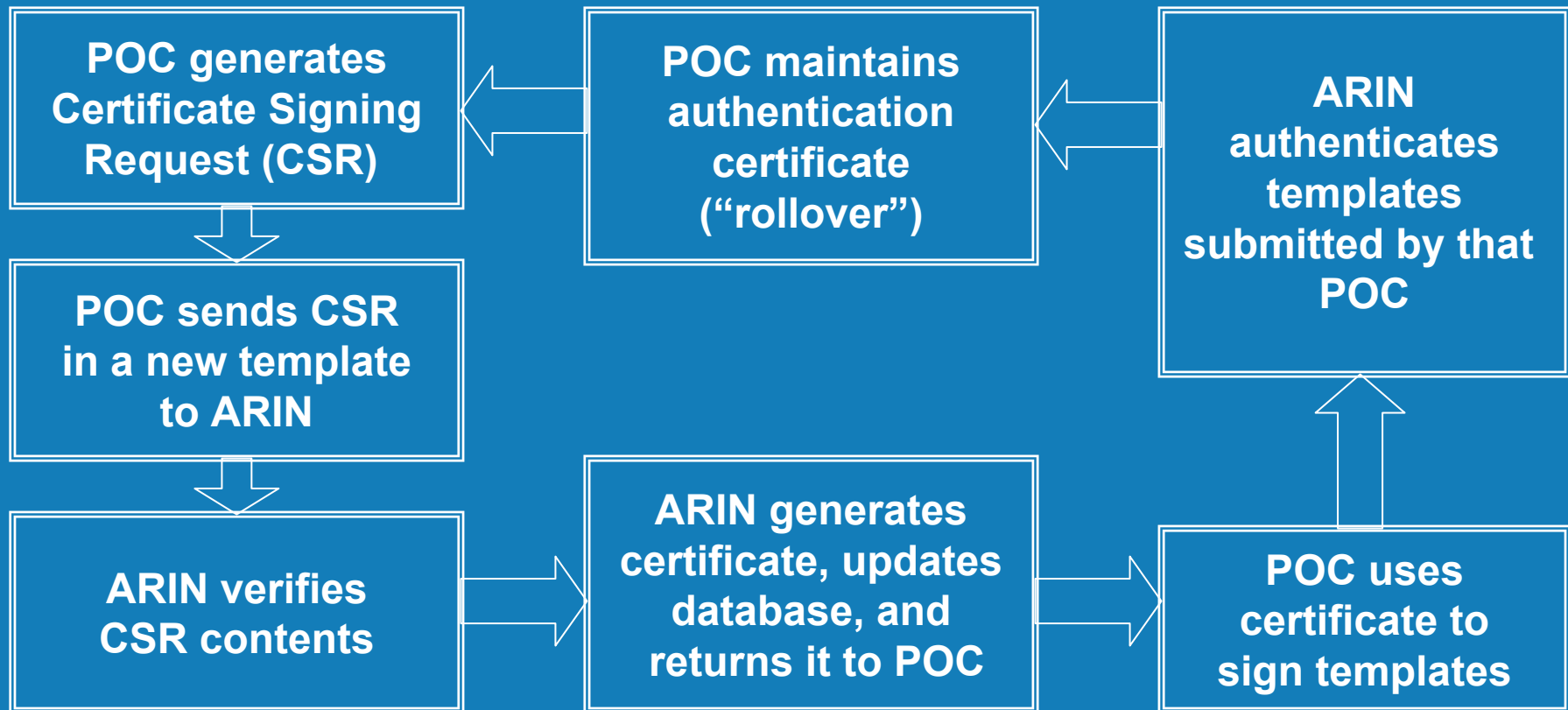 * ► Inbound templates
  * ► Inbound prose requests
* **Establish ARIN CA**
  * ► Identification procedures
  * ► Workflow
* **Secure outbound communication**
  * ► E-mail responses
  * ► Certificate issuance

System at Deployment

POC generates Certificate Signing Request (CSR)	←	POC maintains authentication certificate ("rollover")	←	ARIN authenticates templates submitted by that POC
↓				↑
POC sends CSR in a new template to ARIN				
↓				
ARIN verifies CSR contents	→	ARIN generates certificate, updates database, and returns it to POC	→	POC uses certificate to sign templates

Beta Testing

* **Certification**
  * ► Applying for a certificate
  * ► Generating certificates
  * ► Installing certificates
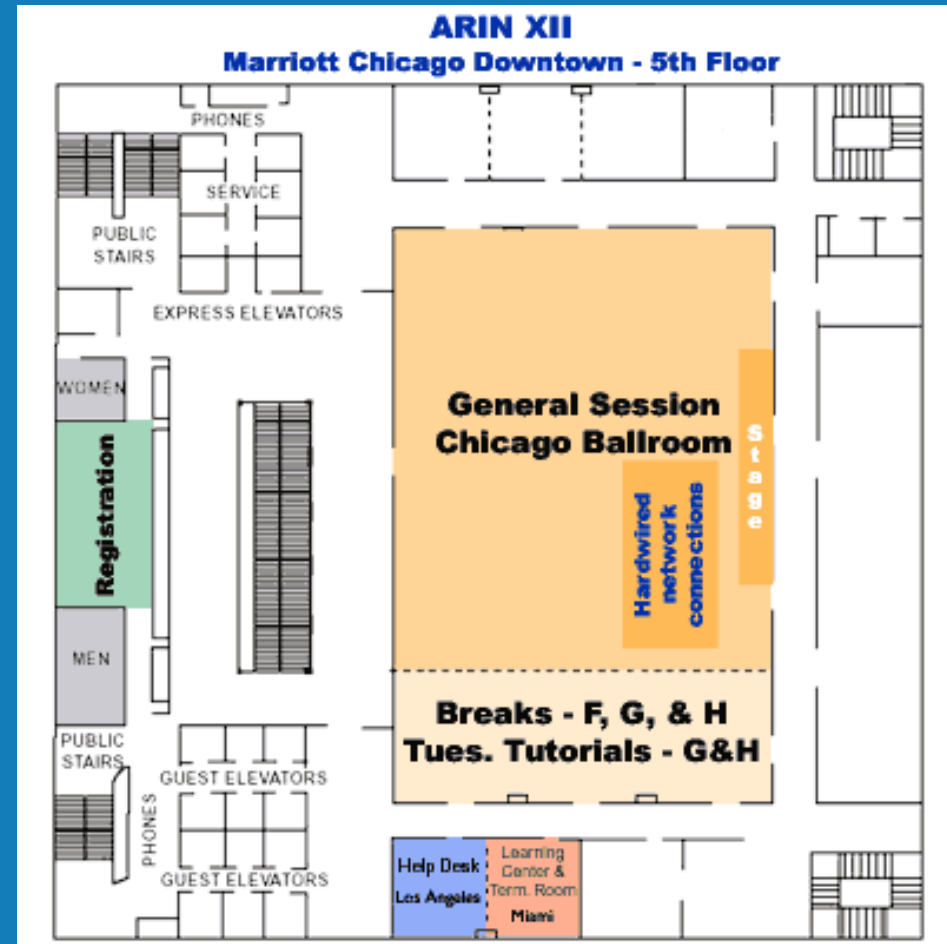* **Using certificates**
* **Revocation and Renewal**

See For Yourself!

Two demonstrations:

Wednesday 5:00PM
Thursday 5:00PM

Learning Center (Miami)

ARIN XII
Marriott Chicago Downtown - 5th Floor

Thank You