

# A Start of Defining ARIN's Directory Service

Mark Kusters

Andy Newton

# Two Take Aways

- Need to fix the Directory Services dilemma
- Need a process to fix this
- Now to the dilemma
  - Next two slides taken from Ray at a recent DHS workshop
  - Will channel Ray now...

# The WHOIS Dilemma

- Legacy, Limited Information Service Protocol
  - Scope Limited
  - Not Intended to be Robust Directory Service System
- Purpose & Function Continuously Evolve
  - Requirements Never Defined
  - Used by Parties not involved in Registration Transaction
- Functions and Access Collide
  - Outside Party Access Needs vs. Registry/Registrant Needs
  - Only One Access Method Defined
- Continuously Patched
  - Meet Evolving Purpose and Functions
  - Resolve Function and Access Conflicts

# Solving The WHOIS Dilemma

- Stop Trying to Fix It
- Define Directory Services Requirements
  - Data Required for Functions
  - Data Access Requirements
- Develop Policy to Meet Requirements
- Implement Policies and Protocols

# Just to Make sure

- My channeling Ray is now completed

# What do we need to do

- Document what the community thinks what the purpose of whois is ( real live use cases)
  - Different from one party to another
  - DNS gurus
  - Legal Enforcement Agencies
  - Legal Beagles
  - ISPs – Routing/Abuse/Sales
  - Businesses
    - Geolocation
    - Yellow Pages, etc

# What We need to do

- Build in added features – an example
  - DHS's Secure Routing Workshop
    - Wanted validated tag to show that info is up to date as a short term fix
    - Linking Origin AS to prefix allocations as part of directory service
    - Provisioning issues (yet another issue that we will not discuss here)
    - So, what's the long term?

# What we need to do

- Based on these use cases, define scope of visibility
- Document into requirements
- Gain community consensus
- Build design doc and do a protocol bakeoff
  - Whois (if we select this we did something wrong)
  - RWhois (I'll shoot you if we do this)
  - LDAP ( I know of one person who will like this)
  - IRIS (sounds better)
  - Something else



# What we need to do

- Deploy
- Sunset whois
- Sounds easy right?

# Example of Some Engineering Requirements

- Common Tools
  - Leverage technologies being adopted in other regions
  - Allows for common tools to be built
- Common Building Blocks
  - Reuse technologies when appropriate
- Extensibility
  - Make sure we can extend the technology to meet future needs (eg versioning, etc)
- Scalability
  - Should scale with need

# Things to Consider (more application specific)

- Purpose of a Directory Service
  - Publish orgs and associated contacts for allocations/assignments for
    - People/orgs to contact wrt network and public safety issues
    - Public validation of network assignment data for fairness
    - Alternative view of DNS configuration data
    - Validation of Routing Announcements

# Things to Consider (more application specific)

- Scope of a Directory Service
  - Law enforcement needs unfettered access to contact/org information for allocations/assignments
  - ISPs need abuse and tech contact information to deal with network issues
  - Independent auditors need org information for the allocation/assignment

# All is Good but Need A Framework

- ARIN's framework is geared for policy development
- Need to have a framework built to deploy/improve services – Specifically to
  - Create Use Cases
  - Generate Requirements
  - Create Policies based on Requirements
  - Development of a Service
- Here's a good trial balloon
- Not insolvable – good work with AREG
  - Beta deployments in RIPE and soon APNIC