

Database Working Group

To subscribe: dbwg-request@arin.net

To post: dbwg@arin.net

Archives: <http://www.arin.net/maillinglists/dbwg/index.html>

- Should/must a downstream self-register prior to receiving resources from an upstream?
- Should ARIN accept country code aliases?
- Proposed Templates
- Proposed Enhancements
- Soliciting Beta Testers

Pros:

- Maintainer ID controlled by downstream
- Reduce duplicate Mainainer IDs
- Downstream to update POC and Org information
- Cleaner data
- Facilitates multi-homed companies
- No Org information required on SWIP template

Cons:

- Downstream Maintainer ID is required to process SWIP Allocations
- Requires registration from downstream
- May require education from upstream regarding ARIN registration process
- Requires clean-up process by ARIN, to remove Orgs without resources

Country Code Aliases

Pros:

- Reduces return templates due to erroneous data
- More user-friendly

Cons:

- Requires additional resources for ARIN to maintain
- Not ISO 3166 compliant
- May require some interpretation by ARIN

New Templates

- Seven Templates ready to be reviewed:
 - 2 Organization Templates
 - 1 POC Template
 - 2 IPv4 Network Address Templates
 - 2 Autonomous Systems Templates
- <ftp://ftp.arin.net/pub/proposed>
- Templates have ability to be compacted
 - If POC is registered, only POC handle required
 - If Organization is registered, only Org handle required
- Action type defines new/modify/delete

Proposed Enhancements

- Resources associated with an Organization
 - Organization information required only once
- If no POC provided for resources, defaults to Organization POCs
 - Reduced redundancy
- Only require canonical name for inaddrs
- No longer store host handles
- Complete registration templates via the web
- Expand types of POCs to include Abuse & NOC
- Expand types of Phones to include Mobil & Pager

Who would like to test the new
software before we go live?

Email us at dbwg@arin.net

Questions?

April 1 – 4, 2001

San Francisco, CA

Early Registration Record Transfers

Richard Jimmerson
Director of Operations

- Current Situation
- Background
- Goals
- Tasks
- Maintaining in-addr.arpa
- RIR Coordination Efforts
- Next Steps

- Many registration records are not maintained in the appropriate RIR database
- Many organizations
 - have to interact with more than one RIR to modify their registration records
 - have difficulty making efficient and timely in-addr.arpa updates
- The in-addr.arpa zone contains delegations longer than a /8 (/16s & /24s)

1980s:

- All IP and AS number registrations were made by entities under a US Department of Defense contract

1990s:

- APNIC and RIPE NCC began registering IP and AS numbers for their respective regions
- All previous registrations from these regions remained in the InterNIC database
- In 1997 all IP and AS number registrations were transferred from the InterNIC to ARIN

- Registration records will be maintained in the appropriate RIR database
- Organizations will be able to:
 - interact with a single RIR
 - make more efficient and timely in-addr.arpa updates
- In-addr.arpa zone will contain only /8 delegations

- Transfer all IPv4 registrations from ARIN to the appropriate RIR DB (does not include reassigned records)
- Transfer AS registrations from ARIN to the appropriate RIR DB
- Establish process for maintaining in-addr.arpa sub-domains
 - Update the in-addr.arpa zone file to contain only /8 delegations
 - RIRs maintain /8 zone files

- Each RIR will maintain a suite of in-addr.arpa servers
 - APNIC & RIPE NCC have already deployed this solution
 - ARIN will establish a suite of in-addr.arpa sub-domain servers (testing now underway)
- Non-shared /8s maintained by appropriate RIR
- Shared /8s maintained by majority record holder
 - RIR having majority of network space for a /8 will have primary responsibility
 - RIRs will provide updates to zones maintained by other registry

- Planning and preparation
 - Sample dump was provided by ARIN in early 2000
 - Candidate list of transfer networks provided by ARIN 08/22/2000
 - Companion dump of all network data provided by ARIN 08/23/2000
 - Updated/additional data provided in March 2001
- Options for updating shared zones
 - Database update and secure copy
 - Dynamic updates (RFC 2136) and TSIG (RFC 2845)

- RIRs to complete testing of shared zone update mechanism (Q2 2001)
- Notification to registrants to be submitted
- Completion/Cut-over target: CY 2001

Questions?

Exporting WHOIS Data AUP

Richard Jimmerson
Director of Operations

- October 2000 Meeting Discussion
- AUP
- Data Availability
- Data Format

- PPM attendees voted in favor of providing bulk WHOIS data to research organizations
- AUP to be signed before data is made available
 - Data would not include point of contact information

- BOT has reviewed an AUP for this data
- Counsel is currently reviewing European privacy issues related to AUP
- Completed AUP will soon become available

- Which Data?
 - Network/AS name
 - Associated IP or AS numbers
 - Organization name
 - Postal address
 - No POC information
- Release Procedure
 - Made available only to organizations who have signed the AUP

- Which Format?
 - RPSL
 - XML
 - Other

Additional Comments?

Routing Information Service (RIS)

Antony Antony, Thomas Franchetti,
Henk Uijterwaal, Daniel Karrenberg

presented by Mirjam Kühne

RIPE NCC

Overview

- Why a Routing Information Service?
- What is the Routing Information Service?
- How to use the RIS!
- How to participate!

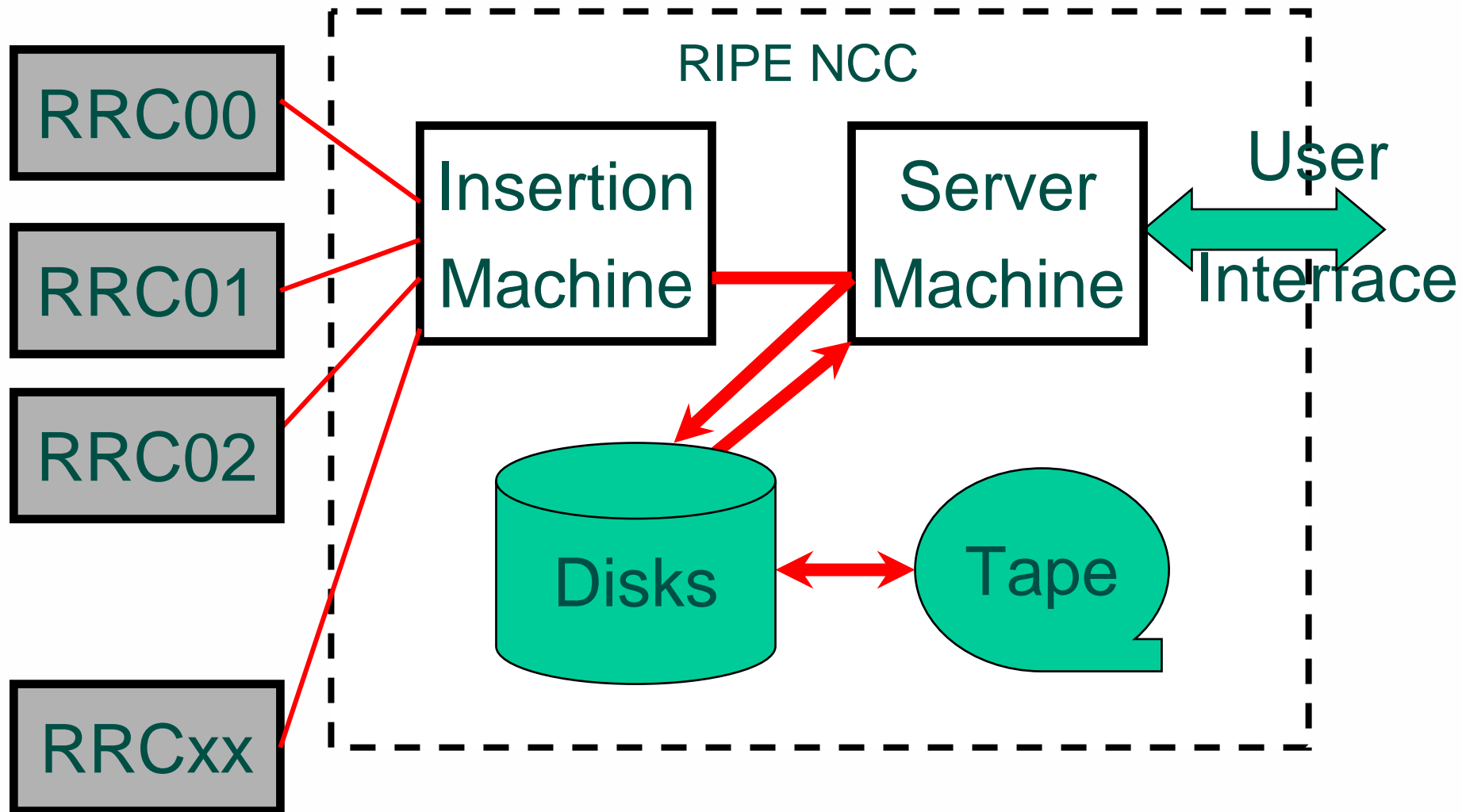
Why a RIS?

- Global routing behavior affects I(S)P service
- Distant routing problems difficult to diagnose
- 'Routing quality' of neighbors difficult to assess
- Destination based routing provides 'one-way-only' control & diagnostics
- Looking glasses are crude tools to cover the 'other direction'

What is RIS?

- “Looking Glass on Drugs”
- Multiple route collectors integrate multiple views
- Access to more than just instantaneous data
- Supports various (longer term) analysis
- Multiple collectors and database enable complex analysis products

Data Base @ the RIPE NCC new setup



Remote Route Collectors

- Currently 4:
 - RIPE NCC, \pm 15 peers worldwide
 - LINX, \pm 40 peering sessions from LINX members
 - AMS-IX
 - SFINX, in transit
- Next steps:
 - Investigate the added value from more RRC's?
 - Where to locate the next RRC's?
 - 2 more in Europe, Americas, Asia Pacific?

User Interface

- <http://www.ripe.net/ris/ris-index.html>
- Raw Database Queries
- ASinuse
 - shows peering history of a particular AS
 - Beta, but quite popular
 - used by RIPE NCC registration staff
- Other queries? Yes

A yellow thought bubble with a black outline, containing the text "We need your input!" in red, italicized font.

*We need
your input!*

Raw Database Query

- Main Parameters

- RRC
- AS# or IP Address
- Time Period

live

- Example: APNIC Service Machine in Tokyo

- AS# in form not used (we clicked 'Search Network')
- Note: query for /32s possible
 - returns routes containing address
- output starts with routing table dump, then updates

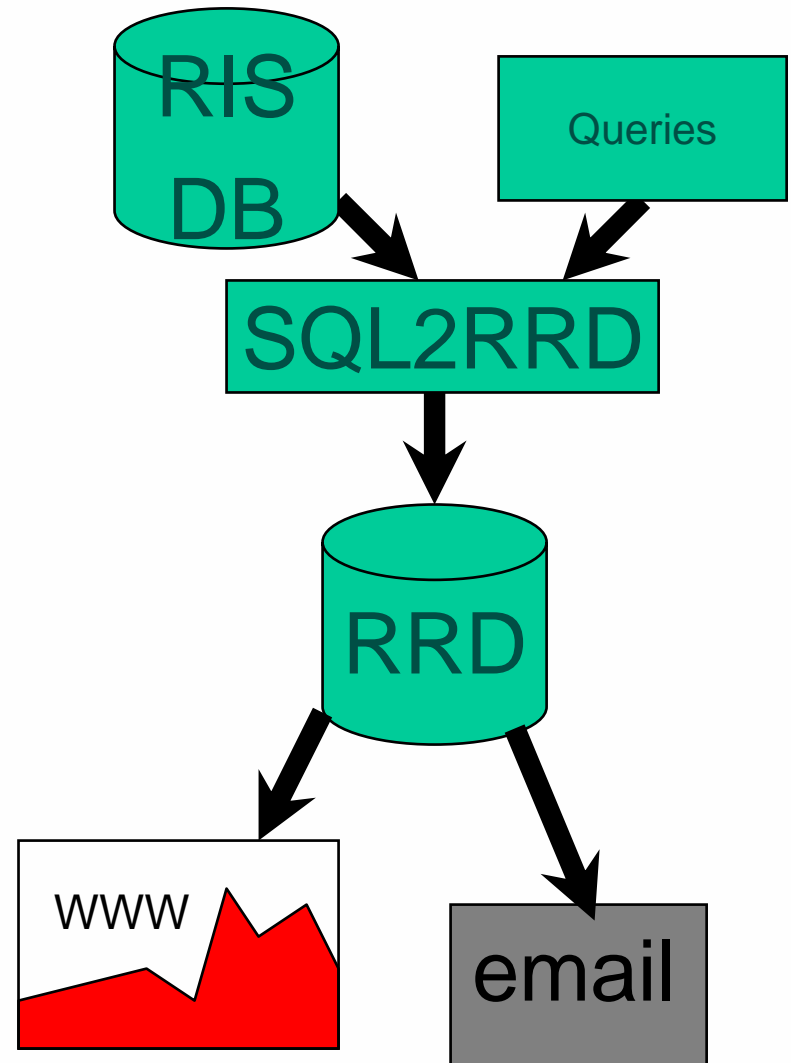
ASinuse Tool

- Presents 'Peering History' of an AS
 - current main user is RIPE NCC registration staff
 - after informal announcement other users appeared
- Example: AS4777
 - takes 1-3 minutes, whole database searched
 - provides links to registration data
 - useful to check out your own AS

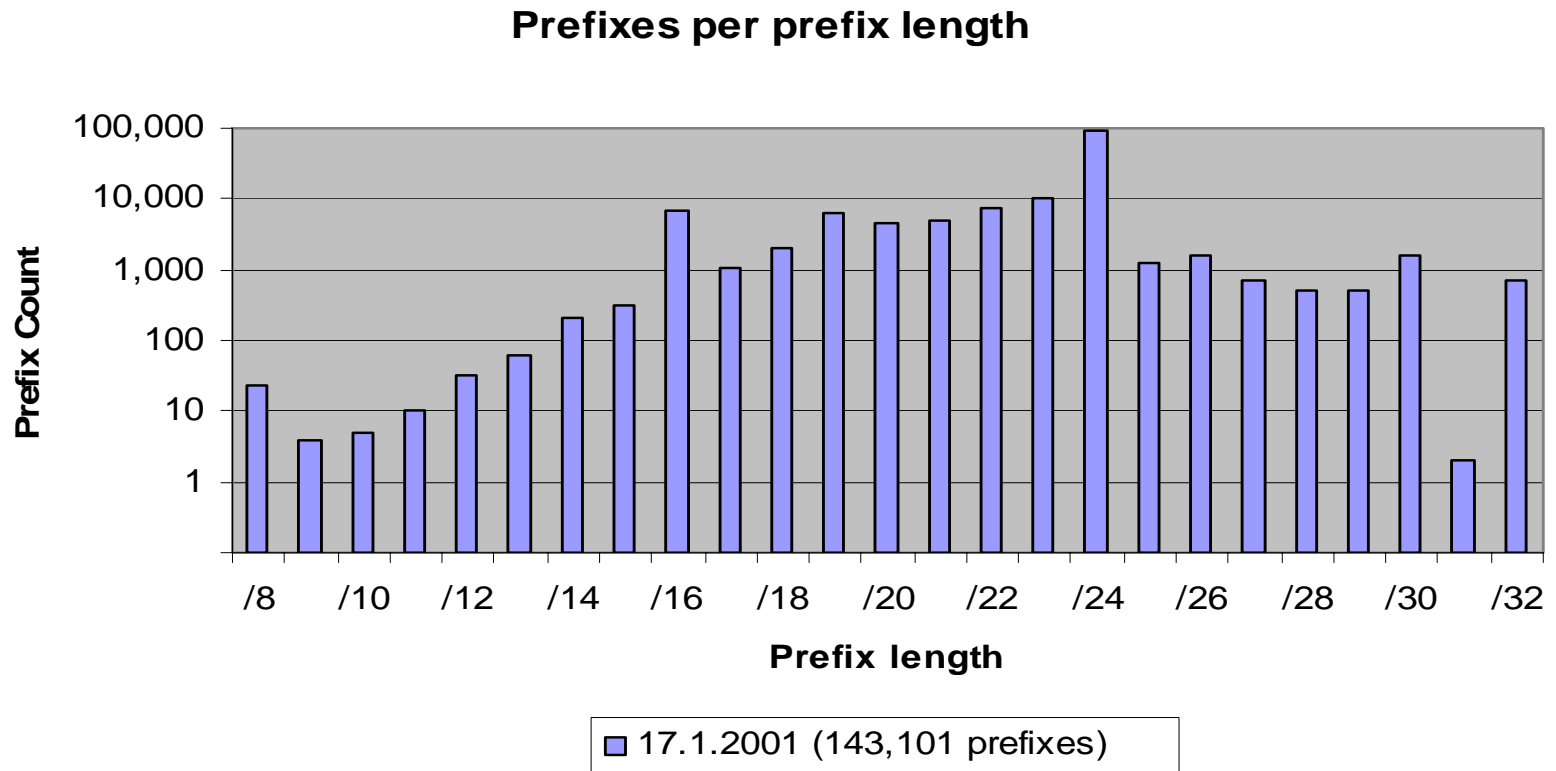
live

Daily Analysis

- RIS Database
- SQL2RRD: Universal tool to do large amounts of (similar) queries
- RRD Database:
 - Plots on the Web
 - *Last* command to generate report

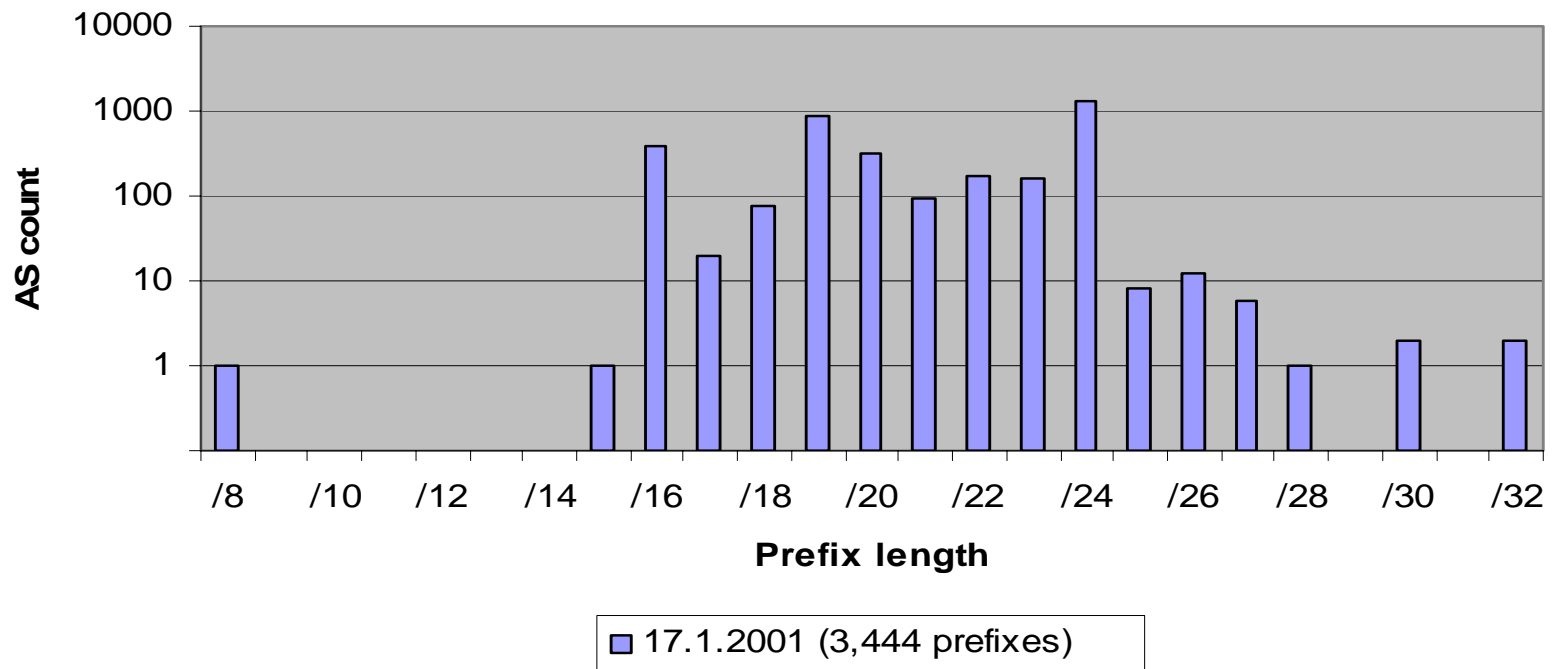


Prefixes per Prefix Length



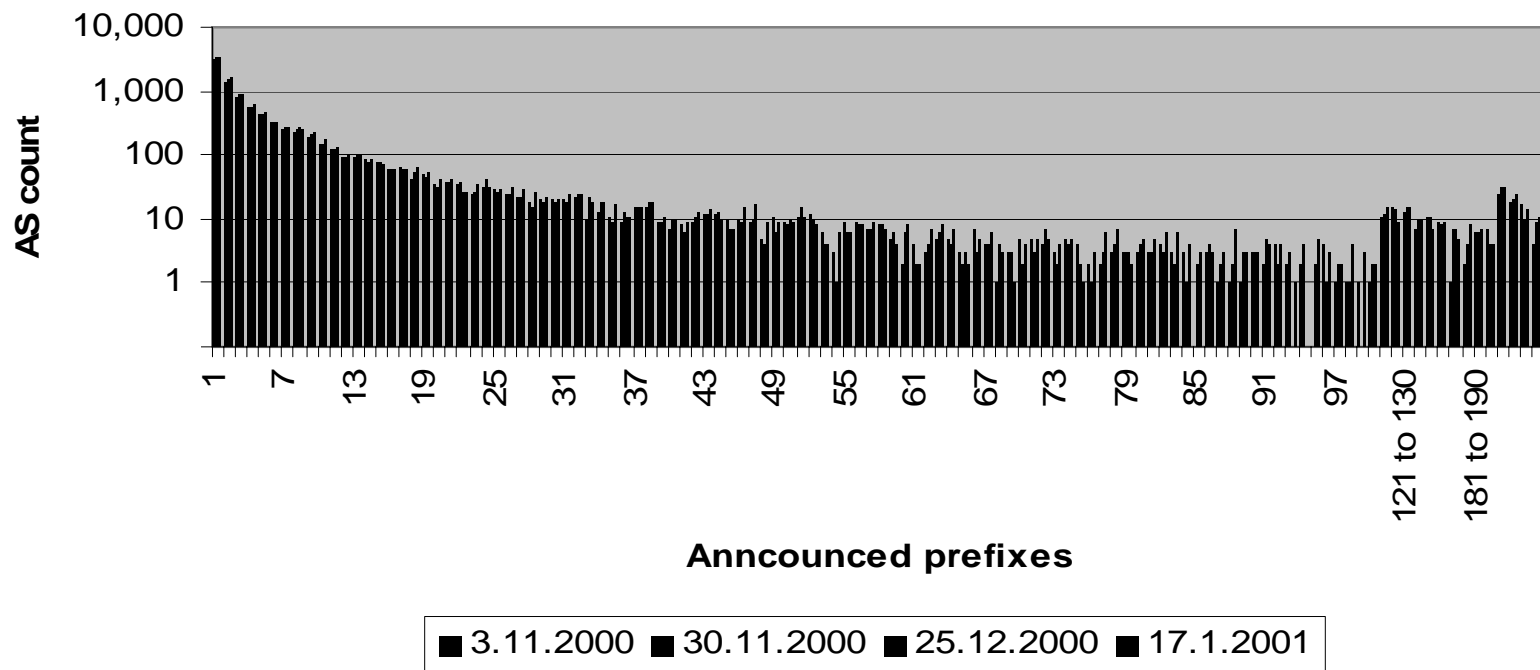
Origin ASes announcing only one Prefix

Origin ASes announcing only one prefix



Origin ASes per announced Prefixes

Origin ASes per announced prefixes



How to Participate

Please suggest topologically
interesting places willing to house
a remote route collector to us at

<ris@ripe.net>

Questions, Discussion





OPEN MICROPHONE

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