# Reverse DNS Project Update

RIPE NCC

# Reverse DNS project goals

- Allowing fine grained control and enable delegation for maintenance
- Allow for multiple interfaces while maintaining consistency
- Simplification of policy
- Allowing implementation of DNSSEC key exchanges

# Status

- Consistency cleanup performed 1st week of April
- Since April 26 the new interface and policy are operational
- “Marvin” will be disabled per July 1, 2004

- DNSSEC implementation is deferred
  - Key exchange based on attributes in the WHOIS DB will be easy to implement

# Cleanup of inconsistencies

- Prerequisite for the Whois Database to be used for generation of zone files
- Information in the zone files had preference over information in the Whois Database.
  - N DOMAIN objects were modified
  - M DOMAIN objects were created
  - O DOMAIN objects were deleted
  - No lameness checks were performed

# The new policy

Most important changes:

- No need for assignment. Reverse DNS can be set up when the allocation has been made.
- Anybody authorised by the address block user can request reverse delegation for that address block.

# The Request Procedure
# An Overview

- Set up your zones.
- Fill in a DOMAIN object template
  - “mnt-by:” is mandatory
- Make sure the object is properly authorised
  - Main difference with the “Marvin”
- Use a Whois Database interface to submit it
  - auto-dbm@ripe.net
  - Web update

# Setting up your domain

- Your DNS setup will be checked during submission of your **domain** object.
  - Also when other attribute than ‘nserver:’ is changed.
- Checks have not changed.
  - RFC 1912 and RFC 2182 based checks
  - Mandatory ‘ns.ripe.net’ as secondary server for /16
  - Review of checks is pending

# Authorisation Changes

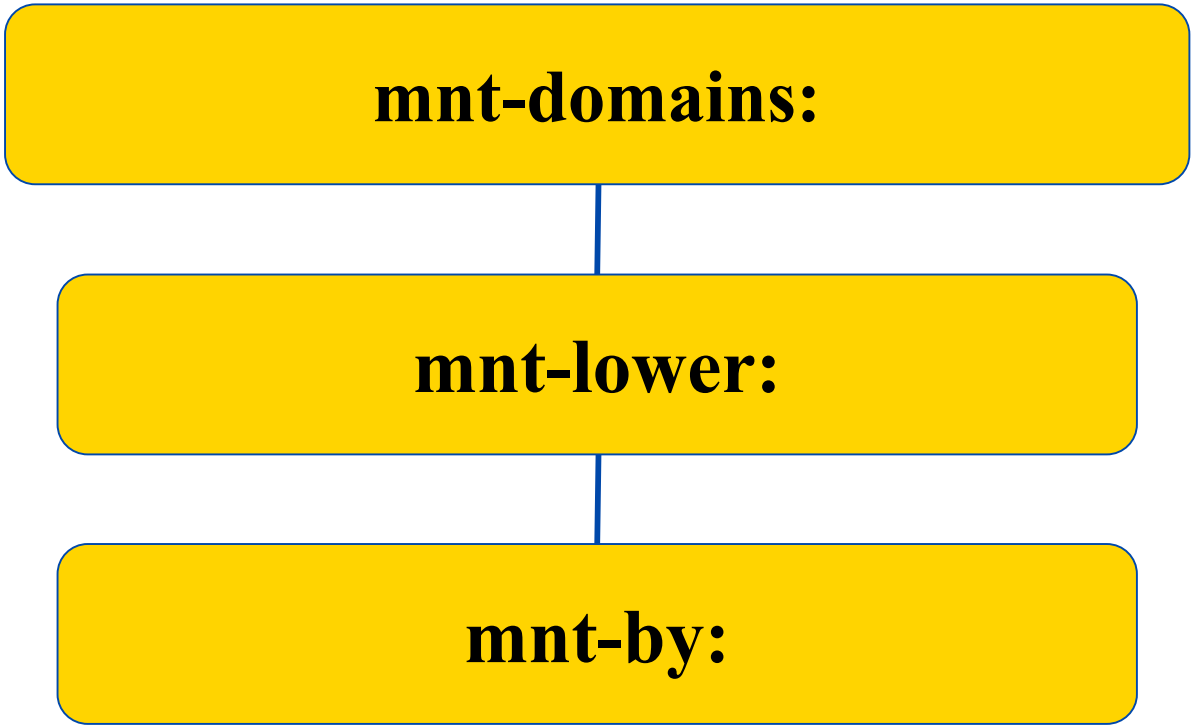
Based on Whois DB authorisation rules only

- Creating delegation/object
  - Authorisation by **NETNUM** object
  - Closest less specific **INETNUM object** is used

- If **INETNUM based** authorisation fails less specific **domain** is used

# Database based Authorisation

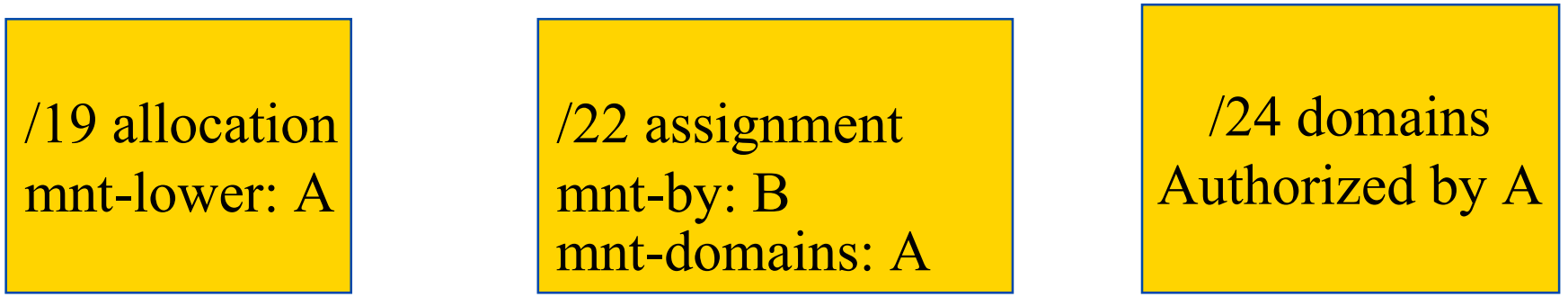
Authorisation from INETNUM objects:




Closest less specific **inetnum** checked.

# Consequence

- LIRs will be able to request delegation without the need of special preparation;
- ‘mnt-domains:’ allows for flexibility
- ‘mnt-domains:’ will need to be added in special cases.
  - e.g. blocking through assignment



# Modification and Deletion

- Modifying delegation/object
  - Usual DB rules
  - DNS checks are performed
- Deleting delegation
  - Usual DB rules + INETNUM's override
    - Allows LIRs to remove a domain object: useful when the maintainer of the domain is "gone"

# Backend processing

- Zone files are generated from the Database
- Updates appear 15 minutes-2 hours
- In case ns.ripe.net is secondary
  - SOA mname field for primary
  - IP address resolved and cached at regular basis
  - Send NOOP update in case of renumbering primary and you want to force reconfiguration

# Transition

- auto-dbm@ripe.net is the preferred interface
- auto-inaddr@ripe.net is available until July 1
  - Uses the ‘old’ authorisation scheme
    - REG-ID based
  - New policy is **not** (fully) implemented
- Please report problems to ripe-dbm@ripe.net

# Conclusion

- The new interface allows for more flexibility for administrators of reverse space
- Data in the Whois Database is consistent with the data in the DNS
- Any interface available for updating the Whois Database is available for updating the reverse DNS

# Questions???

- Slides will be available from

  http://www.ripe.net/ripe/meetings/ripe-48/presentations/

- Questions and feedback to

  ripe-dbm@ripe.net