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RIPE Database Consistency A Project Plan

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Outline

- Taxonomy of inconsistencies
- Preventing Inconsistencies
  - Database Maintainers
  - Database Users
- Cleaning up the muck
  - Database Maintainers
  - Database Users
- Project Plan

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Taxonomy

1. Dangling References
2. Non NIC-handle references
   admin-c. tech-c, zone-c
3. Person objects with no NIC-handle
4. Multiple objects - Single person
5. Non referenced person objects
6. No status attribute in inetnum objects

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Preventing Inconsistencies

- Database Maintainers (NCC)
  - stricter syntax checking
    - in progress
  - limited reference checking
  - educate users
- Database users
  - adopt good habits

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Prevention - DB Maintainers

- Adding and updating objects
  - Require NIC-handle in person object
  - Require NIC-handle as reference
- Deleting objects - at least:
  - Warn deleter that references exist
  - Warn referencer of possible deletion
  - Easy if maintainers used

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Inetnum "status:"

- Require "status:" in inetnums
  - ASSIGNED PI, ASSIGNED PA, USED, FREE
- Introduce new "allocated" object:
  - Distinct object semantics already present
    - Assigned address space in allocation
  - Simplifies structure
  - NCC manages all allocated objects

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Prevention - DB Users

- Use NIC handles
- Use maintainer objects to:
  - protect your objects
  - centrally maintain notifications
- Modify database before change
- Refer to role objects in
  - tech-c, zone-c

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RIPE Database Cleanup

- RIPE Database Maintainers (NCC)
  - Detect inconsistencies
  - Guess object manager
  - Provide object manager with:
    - informative report of problems
    - cleanup advice & tools
  - Educate users

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Issues

- How often should reports be sent?
- How large should they be?
- How public should reports be?
  - web & ftp access
- Can't find object manager:
  - age objects?
  - leave them alone?

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User Cleanup - advice

- check objects you maintain:
  - whois -i mnt-by NIC-handle/Name
  - whois -i admin-c NIC-handle/Name
  - etc.
  - whois -m 193.0.0.0/16
  - whois -m ripe.net
- replace names in references
- replace "notify:" with "mnt-by:"

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Project plan - rest of 97

- Implement:
  - stronger syntax checks
    - contact reference = NIC-handle
  - limited reference checks
    - what can we check in real time?
  - new allocated object
- Publish user advice on website
  - Suggestions welcome!

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Project plan - rest of 97

- Implement statistics gathering:
  - summary per inconsistency
  - summary per contact/mntner
- Generation of:
  - “State of the Database” reports
- Evaluate and extend plans end-97