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RIPE Network Coordination Centre

Tips and Tricks to Manage your Data

RIPE Database Workshop

Motivation

- Information exchange for operators
  - Who's got that IP address anyway?
  - Does my peering partner know we peer?
  - Is that name delegated to me or not?
  - Is my customer multihomed?
  - Who manages that network filtering my packets?

Goal

- Your data should reflect the part of the Internet for which you have authority accurately.
- The quality of your data depends on how you manage it.

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Network Information

The Internet	RIPE Database
IP assignments	inetnum
DNS delegations	domain
Reverse delegations	domain/inetnum
BGP peering agreements	aut-num
Route announcements	route

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Contact Information

The Internet	DB attribute	Reference
On-site administrator	admin-c	person
Technical contact	tech-c	role/person
Zone contact	zone-c	role/person
Task group	tech-c/zone-c	role
Access control	mnt-by/mnt-lower	mntner
Email reports	notify	email

Contact Data

Aims

- Contact person found quickly
- Effective authorization
- Effective notification

Good Habits

- Always use NIC-handles
  - will be required
- Guard your objects!
  - use maintainers for
    - notifications
    - authorization
    - hierarchical authorization

More Good Habits

- Notifications:
  - Use “mnt-by:” in place of “notify:”
  - Centralizes notification specifications
- Use role objects!
  - tech-c, zone-c
  - role more stable than person!
  - eases task transition and sharing

Remove Old References

- Easier said than done!
- Required:
  - replace references to person object
  - replace references to email address
- First find references
- Then do smart replace

Finding Richard John Jones

- Sometimes called:
  - Richard
  - Dick
  - RJ
  - Rich
- Signs name:
  - Richard John Jones

Get NIC handle

- whois -T person XXX

  with XXX one of:
  - Richard John Jones
  - Rich Jones
  - Dick Jones
  - etc.

Hunting for References

- whois -I XXX YYY

  where XXX is
  - admin-c
  - tech-c
  - zone-c

  and YYY is
  - NIC-handle + all possible names

Hunt Managed Objects

- whois 193.0.0.0/16
  - Review all reference attributes
    - admin-c
    - tech-c
    - zone-c
    - notify
- Repeat for all network objects
- Don’t use “-r” flag!

Email address in "notify:"

- Was it:

  Daniel.Karrenberg@ripe.net
  daniel@ripe.net

  karrenberg@ripe.net

  dfk@ripe.net

  ...

- or what?!?

Dig through managed objects!

- Check the “notify:” attribute in your objects
  - 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

"Smart" Replace

- Reference "role" if possible
- Notification email
  - Use "mnt-by:" & specify notifications in "mntner" object
  - Use a role account to get notificaitons
- next time just change tech-c and admin-c in one or two objects!

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Anything else?

Can’t think of a thing! But what about that time ….?