IRRToolSet Use @ Deutsche Telekom

Rüdiger Volk, RIPE64 ToolSet BOF

use of IRRToolSet in DT (TROPOS generator)

- TROPOS generates complete eBGP config

- IRRToolSet (**library**) only used for RPSL route-set expression evaluation + AS-path regexp

- main use case: rigid prefix filters for customers +more

- no other tool set known with sufficient scope:

  - access to different type of data bases

  - evaluating RPSL expressions (mainly route-set)

fixes

(most due to Hagen Böhm)

- some small stuff (partially mirrored back)

- ensure ABORT with exit code for all database access problems

- do some diagnostic output on abort (expression stack dump)

- problems:

  - stuck with an ancient Solaris environment

  - did not fully synchronize with 5.0.0 (and immediate predecessors)

  - how to move to a current environment + synchronize/publish

extensions

- allow proxy server (using standard HTTP tunneling)

- alternate (to RtConfig or peval) slim front end IRReval supports output

  - RPSL (route-set:)

  - vendor specific (JunOS, IOS, IOS-XR) filters

  - not yet AS-set (would need to do a syntax extension!)

- optimized options for feeding validated ROA info

  - per AS route-set for all ROAs

  - modify AS-set resolution exclusively from ROAs or from RPSL route:s + ROAs (only RIPE-style db)

my view forward

- RPKI is getting ready to be used, should be taken serious, and can be used (even without router sw upgrades)

    - development efforts are best spent in this future direction

    - starting significant new development for RPSL of dubious value

    - starting to deploy RPSL new now seems bad timing

- for networks having already tool chains (what else than RPSL?) a little tweaking for feeding RPKI data can make sense

- there are even low hanging fruit that work essentially without tweaking

    - like: RS-RPKI-MUST-BE-INVALID (even solves YouTube criterium!)