

NONE Considered Harmful

Shane Kerr, RIPE NCC



Historical Context

- In the beginning... no authentication/authorisation
- mntner introduced
- PGP support added
- RPSL
 - Maintainers required for almost all objects
 - Detailed authorisation rules defined
- MD5-PW added
- MAIL-FROM deprecated
 General Trend Towards Improved Security!



Today

- Continued "tweaking" of rules:
 - Default to protected for inetnum/inet6num/domain
 - Reclaim functionality
 - "mnt-ref:"
- X.509



"auth: NONE"

- This "authentication" offers no protection
 - Useful when notification is desired, but not protection
 - Allows use of "mnt-by:" as a tag
- Many maintainer objects exist with "auth: NONE"
 - About 500, or 5% of all maintainers
 - Mostly historical very rare in new maintainers



NONE is... the weakest link

- Unprotected data affects the entire community
 - Accidental updates
 - Hijacking concerns
- Password authentication is easy to use
- PGP or X.509 can be even easier

Proposal: Deprecate NONE



#include <std-dbchange.h>

Usual procedure for changing the database:

- 1. Announce change (web page, mailing lists)
- 2. Notify specific users
- 3. Wait for users to fix data
- 4. Clean up / notify specific users
- 5. Announce completion (web page, mailing lists)
- 6. Champagne



The "Band-Aid" Approach

- Usual approach is bad in this case:
 - Security concerns
 - Users only vaguely aware of phases
- So Just Do It™
- Differences from usual method:
 - No announcement
 - No waiting for users
 - Heavy reliance on easy-to-use recovery mechanisms



Details for maintainers

- Remove "auth: NONE"
- If necessary, add generated MD5-PW password
- E-mail contacts
 - Explanation
 - Password
- Can also get passwords from <u>ripe-dbm@ripe.net</u>
- After a period of time, stop e-mailing passwords



RIPE-NCC-NONE-MNT

- A very special maintainer
 - Added to objects during RPSL conversion
 - Also used to unprotect non-RIPE NCC resources
 - Currently "protects" about 6% of inetnum objects
- RIPE-NCC-RPSL-MNT with public password
- Most "mnt-by:" become RIPE-NCC-LOCKED-MNT
- Provide CGI link to unlock these objects:
 - Create a new maintainer
 - Change "mnt-by:" to the new maintainer



Other maintainers

- RIPE-NCC-PN-NONE-MNT
 - Historical from 2001 person cleanup
 - No current purpose: remove from "mnt-by:"
- LIM-MNT
 - Critical operational maintainer
 - Use public password
 - Pending approval from Secret-WG



