



RIPE Database Operations Update

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Outline

- Statistics
- Support
- Development
 - Recent changes
 - Upcoming changes



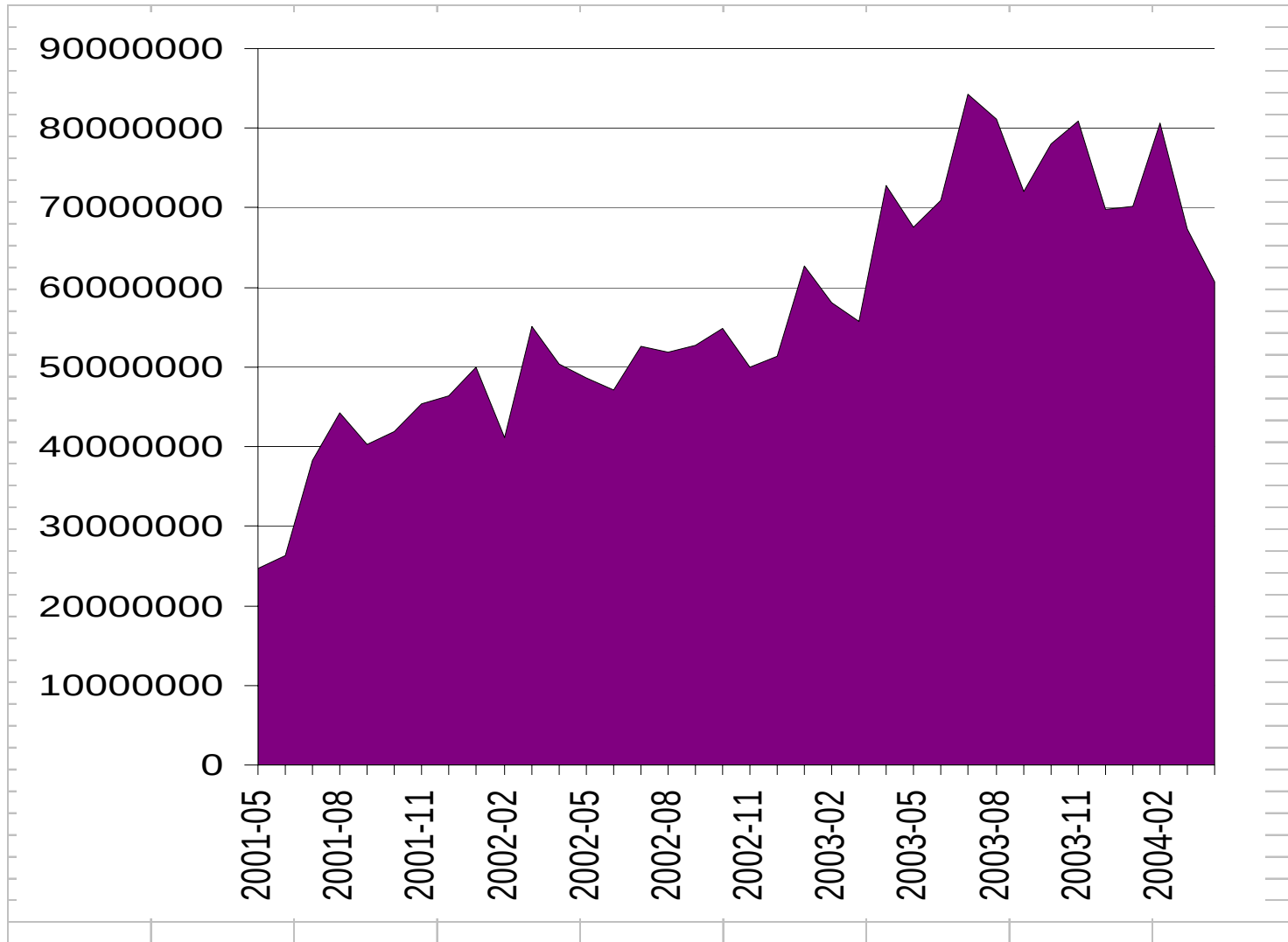
Database Facts and Figures

- 2.15 million objects
 - 150000 more than at RIPE 47
- 49% INETNUM, 42% PERSON, 6% DOMAIN
 - Constant ratio for many months
- 27 queries/second on average
 - 2 queries/second less than at RIPE 47
- 7.5 updates/minute
 - 3 *times* as many as at RIPE 47, due to various clean-up efforts

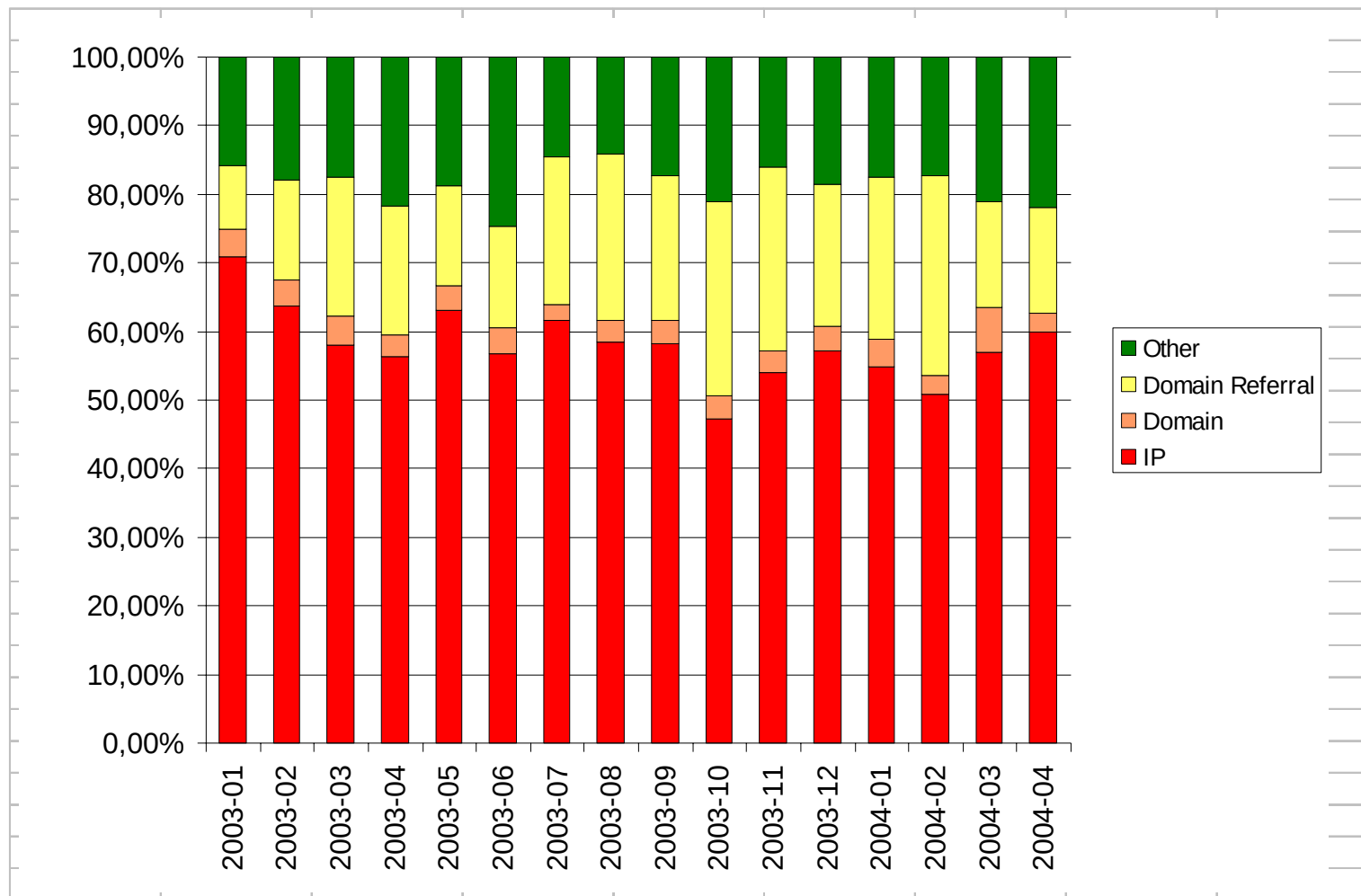
Object counts, query loads, etc. available on-line:

<http://www.ripe.net/db/dbconstat>

Whois Query Rate over Time



Whois Query Types over Time



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Database Support

- RIPE DBM changes
 - Auto-replies to e-mail to ripe-dbm@ripe.net
 - “reply-to:” changed for replies from auto-dbm@ripe.net
- Full-time RIPE DBM
 - Load will increase due to rDNS and RIS tickets
 - Support specialist rather than software engineer
 - Software engineer will provide second-line support

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X.509 Support

- Part of *Improved Secure Communication System for RIPE NCC Members*
- KEY-CERT class updated
- Update mechanisms updated
 - E-mail supports S/MIME
 - webupdates/syncupdates support client SSL certificates

Organisation Object Type

- Provides easy way of mapping resources
- May be linked to any object type, by “org:” attribute
- Queries
 - Lookup by handle or name
 - Inverse queries
 - Referenced organisations are returned by default
- Initial organisation objects
 - IANA, RIR, LIR organisation objects
 - Updated INETNUM, INET6NUM, and AS-BLOCK



Reverse DNS – the Old Way

- DOMAIN objects, DNS zone files separate
- E-mail auto-inaddr@ripe.net
- Problems:
 - Separate interface for maintaining DNS
 - Direct database updates did not affect DNS
 - No support for web updates, X.509, etc.
 - Lack of full automation
 - Policy required significant work from LIRs



Reverse DNS – the New Way

- DOMAIN objects are the sole source.
- DNS periodically rebuilt from the database.
- E-mail to auto-dbm@ripe.net
- Policy constraints reduced:
 - ALLOCATED space can be delegated
 - Non-LIR users can delegate space
- Data clean-up completed
- *Full presentation in the DNS Working Group*



NONE Authentication Deprecated

- Maintainers modified
 - “auth: NONE” removed
 - If necessary, password generated with MD5-PW
- RIPE - NCC - NONE - MNT
 - Changed to RIPE - NCC - LOCKED - MNT
 - Special URL sent to contacts to create new maintainer
- RIPE - NCC - RPSL - MNT
 - Password published in object
- LIM - MNT



Other Database Changes

- CIDR notation for INETNUM creation supported
- Prefix range lists for “mnt-routes:” implemented
- “cross-nfy:” and “cross-mnt:” deprecated
- Overlapping INETNUM objects prevented

Future Plans

- “abuse-mailbox:” attribute ?
- RPSLNg
 - Waiting on the IETF standards process
- CRISP
 - IETF standards process waiting on us
- Route creation authorisation from more specific
 - RIPE NCC proposes to *not* implement this change

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