



# RIPE Database Update

Shane Kerr  
RIPE NCC

# Outline

- Database Statistics
- Database Operations
- Projects
- Future Work

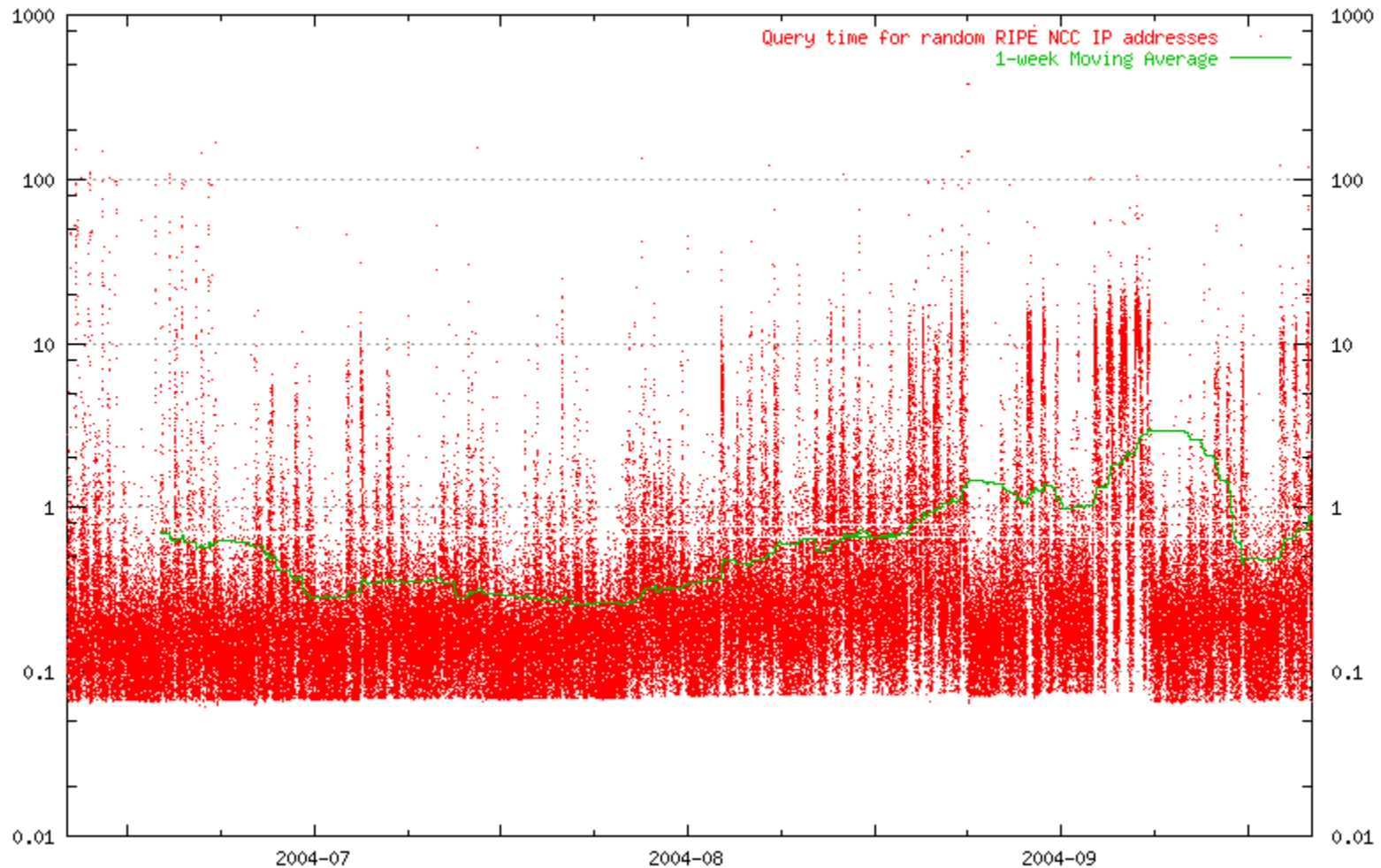
# Database Contents

- **2.3 million objects**
  - **200000 more than RIPE 48**
- **48% INETNUM, 41% PERSON and 6% DOMAIN**
- **7400 INET6NUM**
  - **Annual growth rate over 100%**
  - **85% are ASSIGNED networks**
  - **Unintended consequence of policy?**

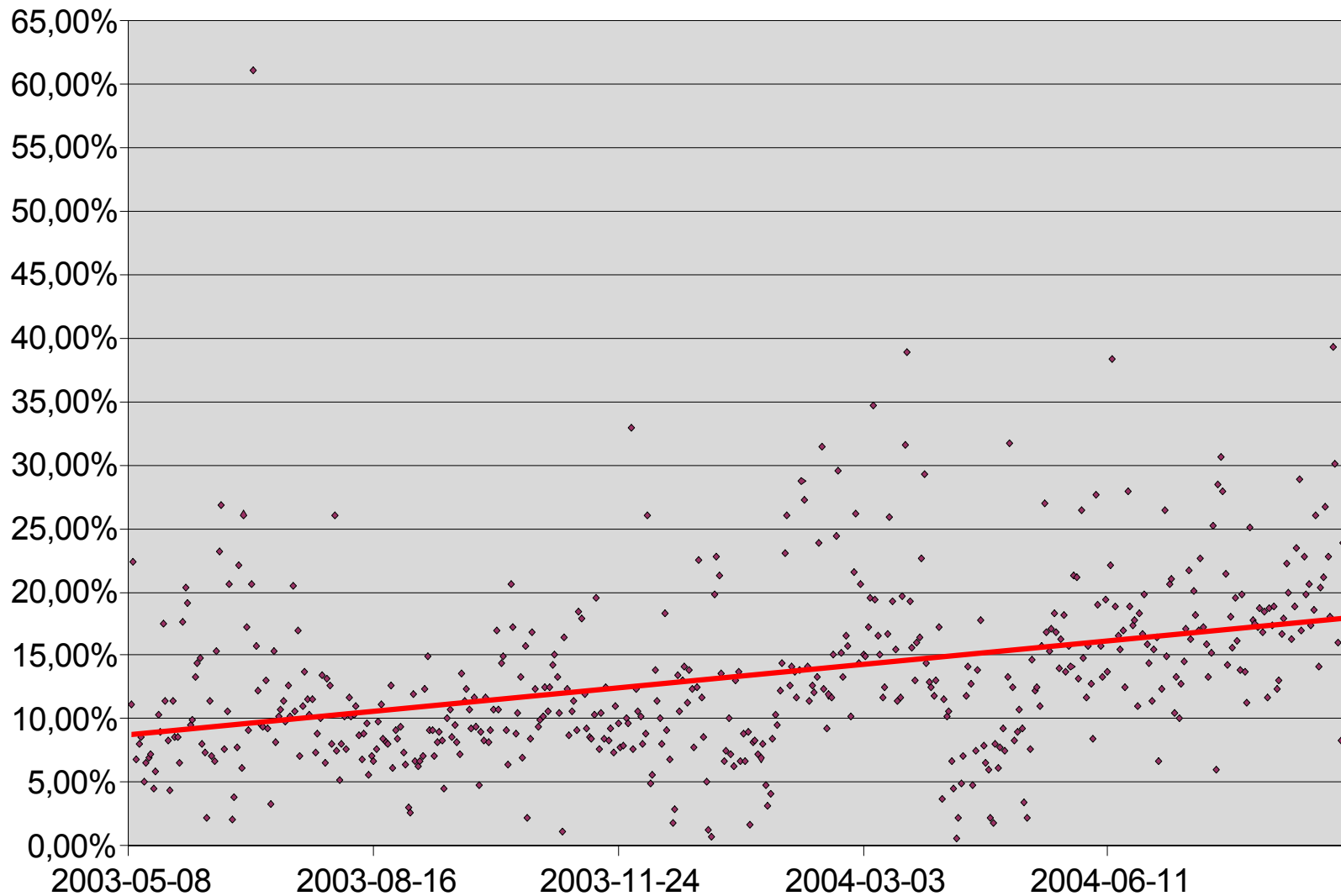
**Object counts, query loads, etc. on-line at:**

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

# Queries



# Synchronous Updates



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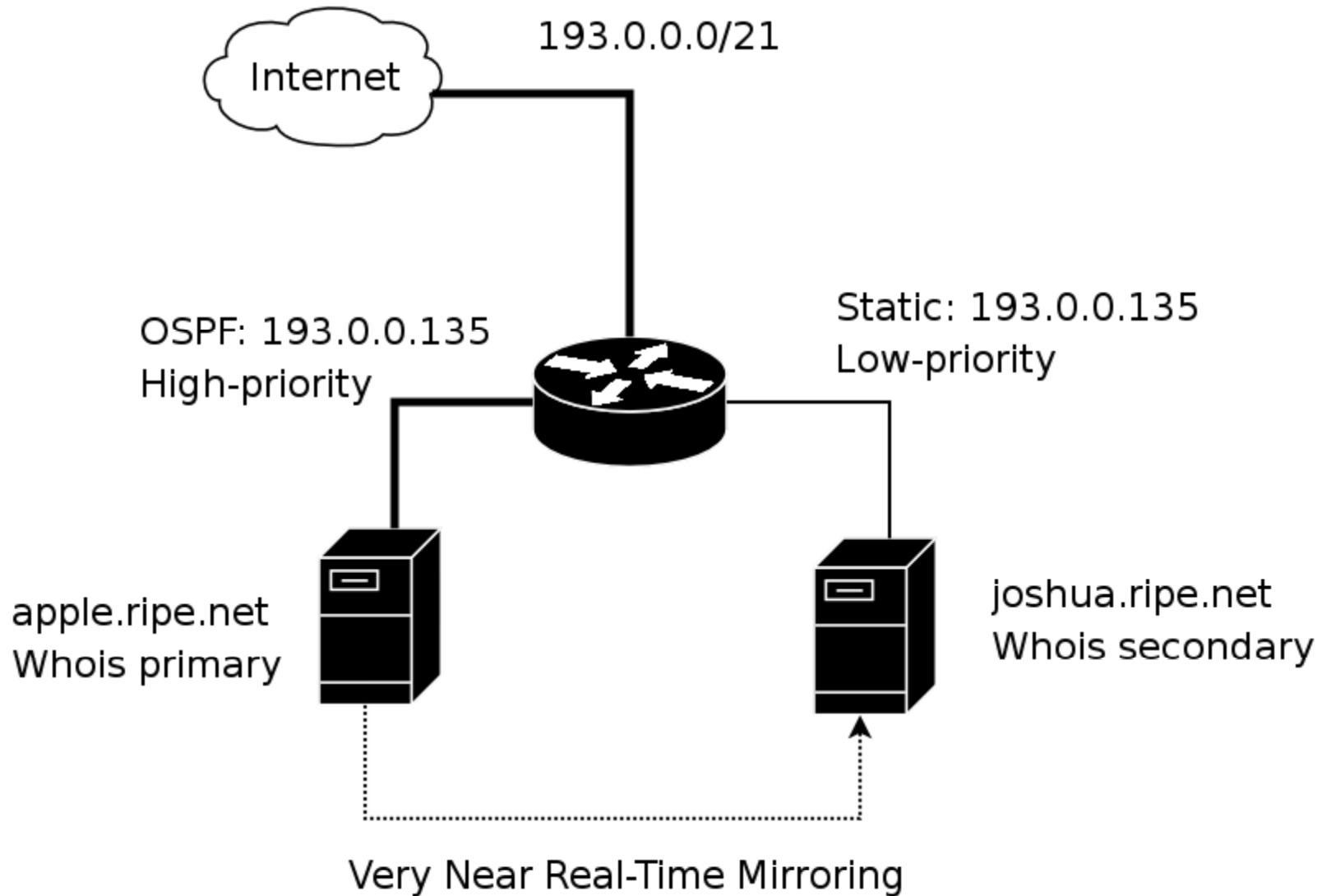
# Hanging Connections

- Discovery
  - Server limits concurrent queries
- **Research**
  - **Single user? Single network? No.**
  - **Worm? No.**
  - **Client bug? No?**
- **Evasive action**
  - **Double maximum concurrent queries**

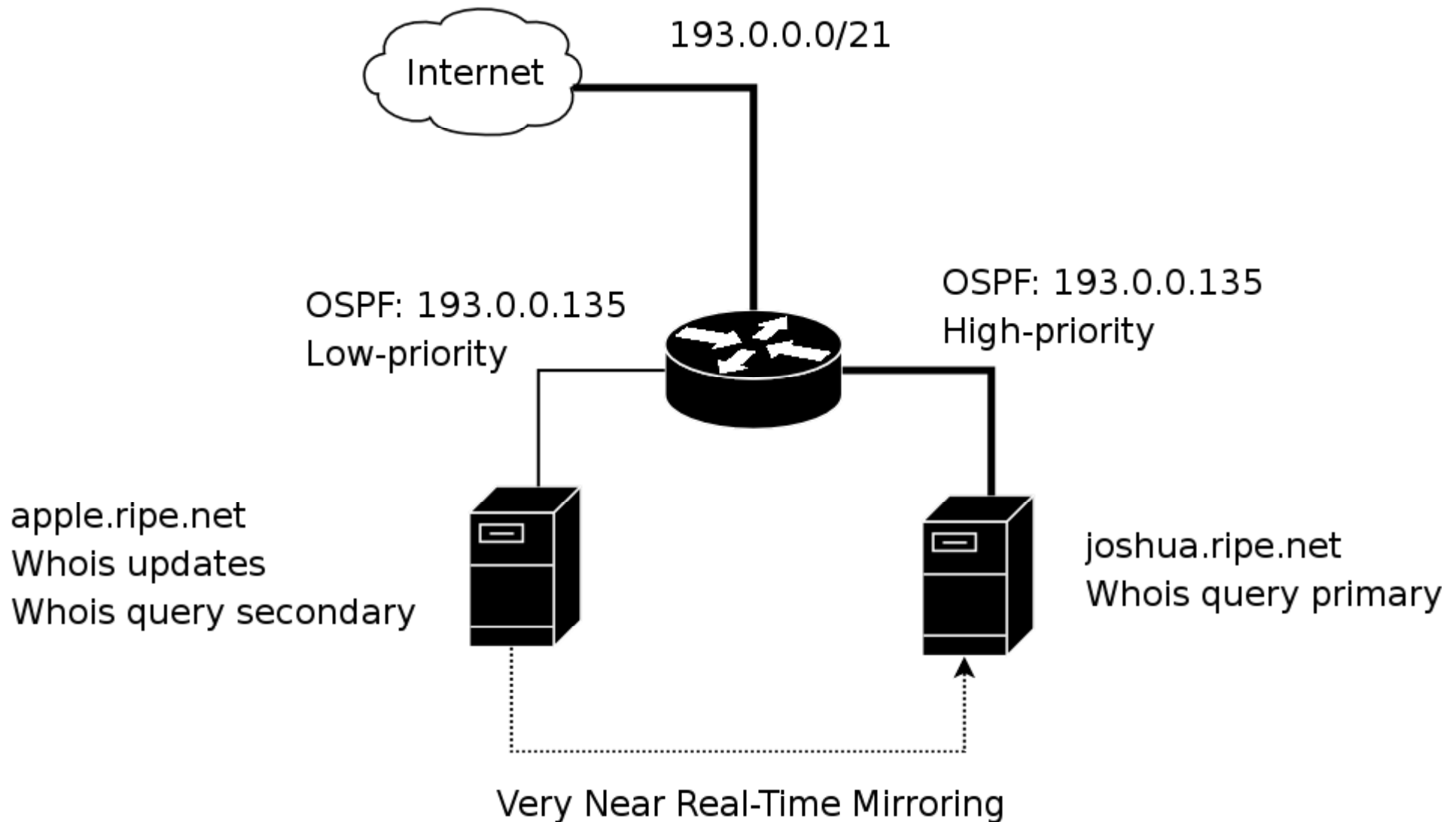
# Server Performance

- Server CPU load 100%, from mid-August
- Query response slowed
- ***Update acknowledgements greatly delayed***
- ***But why?***
  - ***Theory: change in queries***
  - ***Named? No***
  - ***Domain referrals? No***
  - ***HTTP queries? Interesting, but no***

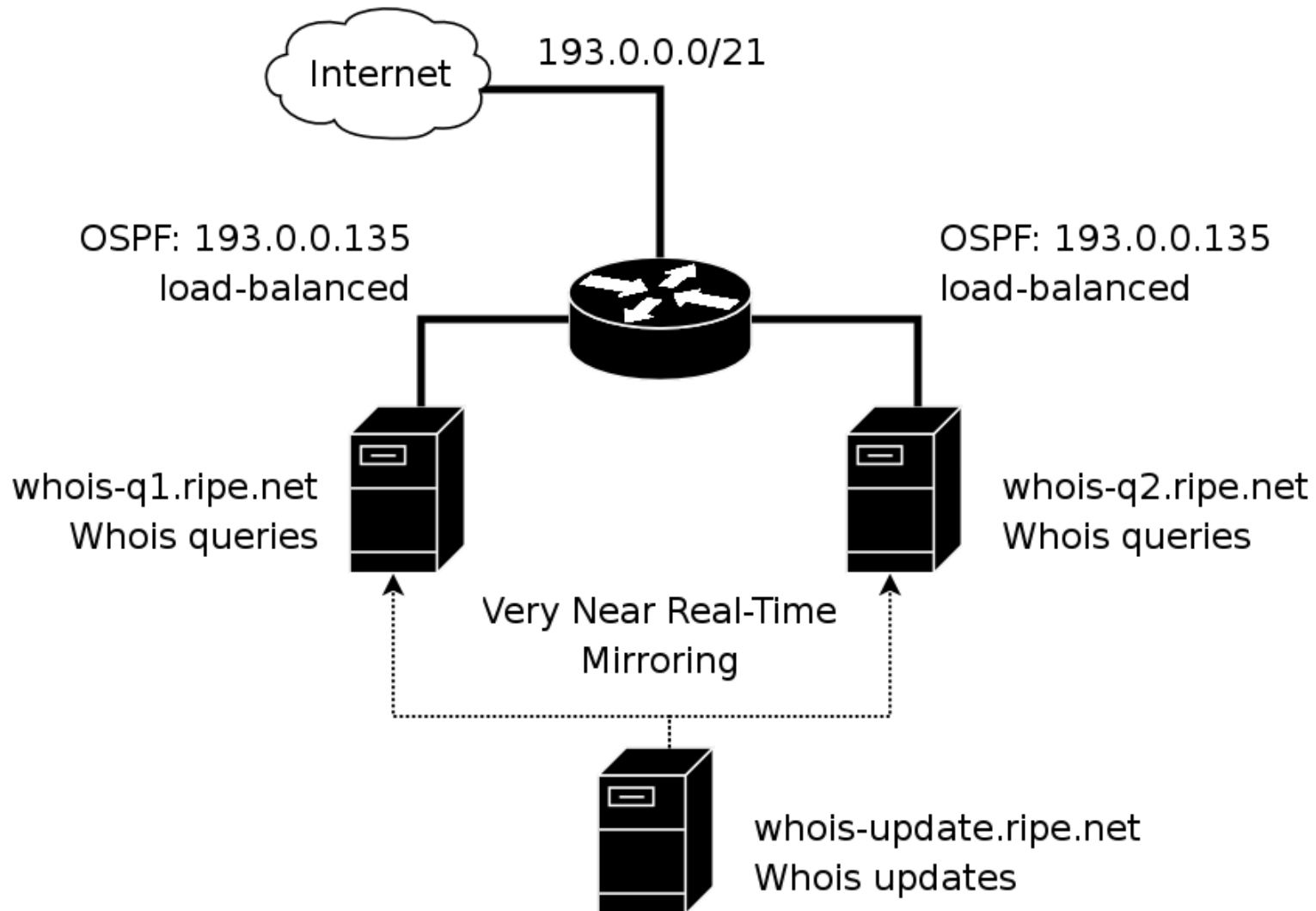
# Old Server Architecture



# Current Server Architecture



# Future Server Architecture



# RIPE DBM

- General purpose database help  
ripe-dbm@ripe.net
- **Full-time user support specialist**
- **Software engineer for second line support**



# No MNTNER Restrictions

- MNTNER were handled by RIPE DBM
  - Prevent “hijacking” or ASSIGNMENT
- Took significant time
- Improved security model reduces risk
  - Deprecation of MAIL-FROM and NONE
  - “mnt-lower:” default to “mnt-by:”
- Currently anyone can create a MNTNER

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# Projects

- RPSLng
  - Software ready
  - Internet draft in RFC Editor Queue
- rERX
- Afritrans
- KEY-CERT/MNTNER LIR Portal Integration

# Other Database Changes

- References to “AUTO-” fully followed
- “auth:” can now be inverse queried
- “fingerpr:” can now be queried

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# Future Work

- CRISP
- Abuse reporting
- 3.3 release
  - Public CVS available too

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