Swingin` Stuttgart
- Changing a TLD server`s address -

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- Changed address of `S.DE.NET`

  - 193.159.170.149 -> 195.243.137.26

  - Same AS, no significant RTT change

  - This is a `DE` only name server

- Captured query traffic

  - Determine dominant source for the address

  - Count queries and queriers

  - Find *Query Swing*

  - Find *Stalking Resolvers*

   - inspired by: work for B and J root servers

- Server's name appears

  - in NS RRSet at zone apex

  - and in the delegation in the parent zone

- Server's address originates from

  - Authoritative data in `DE.NET`

  - Root zone *glue* data spread through TLD referrals

  - [additional section for authoritative `DE` responses]

  - Special influence of the `NET` zone

- Change of authoritative data in `DE.NET` zone

  - effective 2008-02-13 09:00 2008 UTC

  - TTL was 3600

- Change of „glue" in the `NET` zone

  - effective 2008-02-20 16:23 2008 UTC

  - TTL was 172800

- Root zone delegation change (glue)

  - effective 2008-02-21 15:37 2008 UTC

  - TTL was 172800

Queries by Node
From Feb 21, 2008, 00:00:00 To Feb 22, 2008, 00:00:00 CET
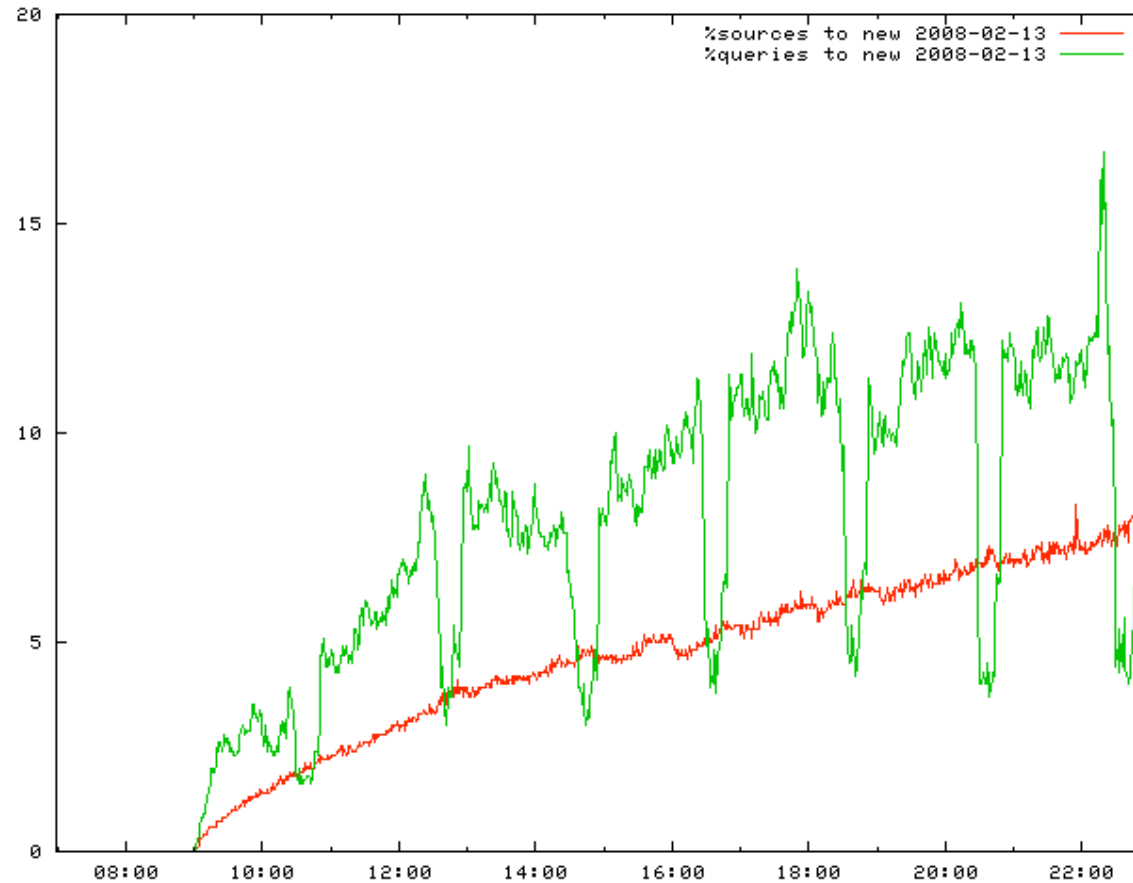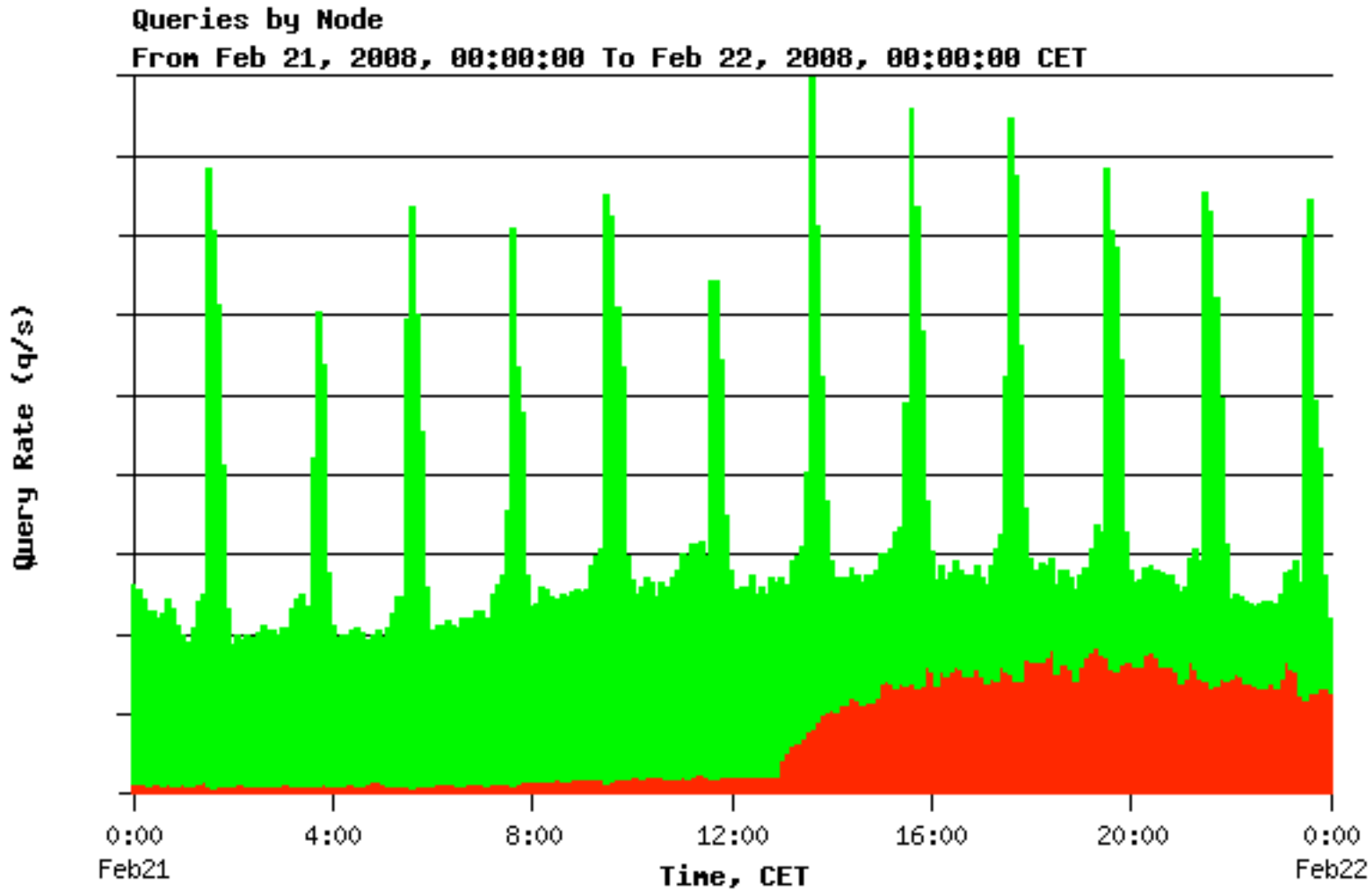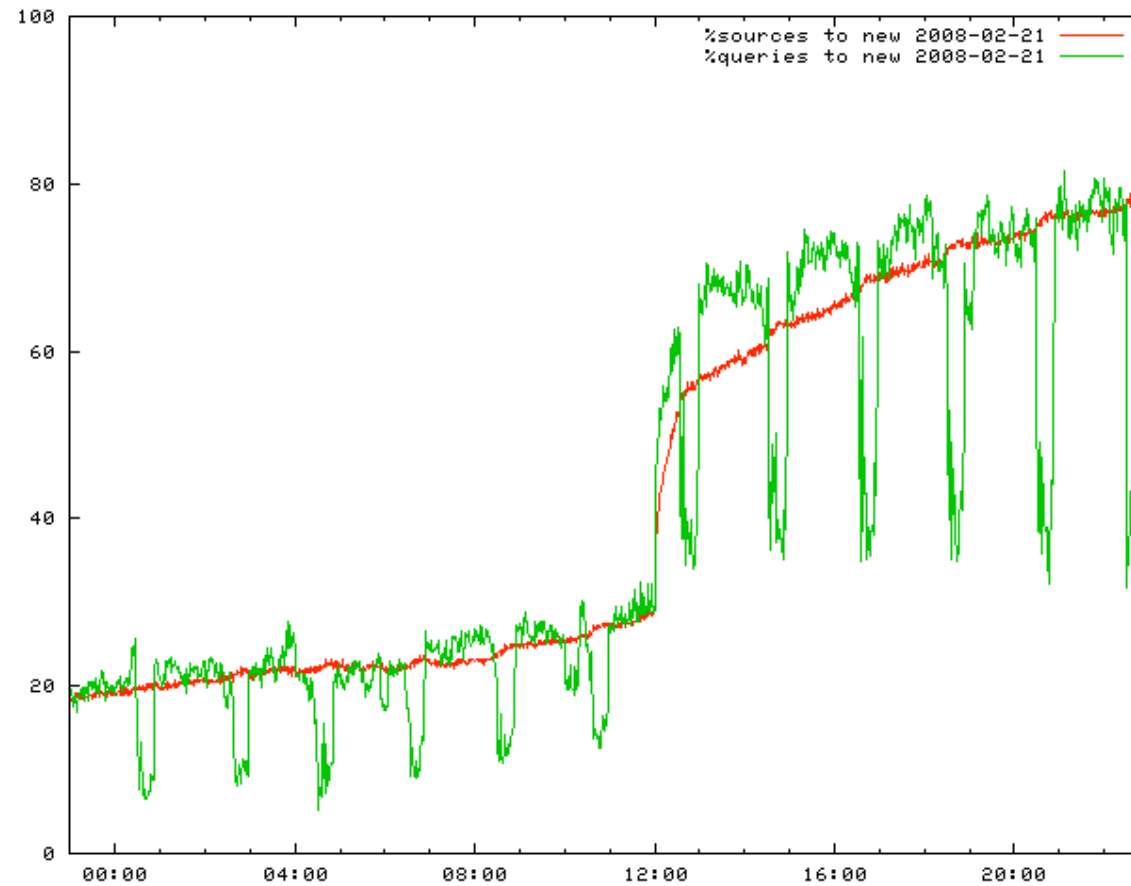
- Authoritative less dominant than referral data

    - Additional section filled from *glue*

- No immediate correlation with root zone dist?

- We may have many „first contacts"

- But:

    - This is for an out-of-domain server

    - Special handling of `NET` zone needs to be considered

    - `DE` is largely, but not solely a *delegation only* zone

    - Sensors went dead just in time :-(

- After almost 3 months, query rate is still high

  - Die-hard dropcatchers

  - Resolvers with outdated root zone!

    - `2006082700`

  - Open Recursive Name Servers

  - Weird high TTLs on TLD NS RRSet and A RRSets

    - `s.de.net.  2132443279 IN A  193.159.170.149`

- Investigate some resolvers in more detail

- Investigate „first contacts"

  - Early cache expiry?

  - No cache at all?

- Redo measurements with different server name

?/!

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