dnscheck

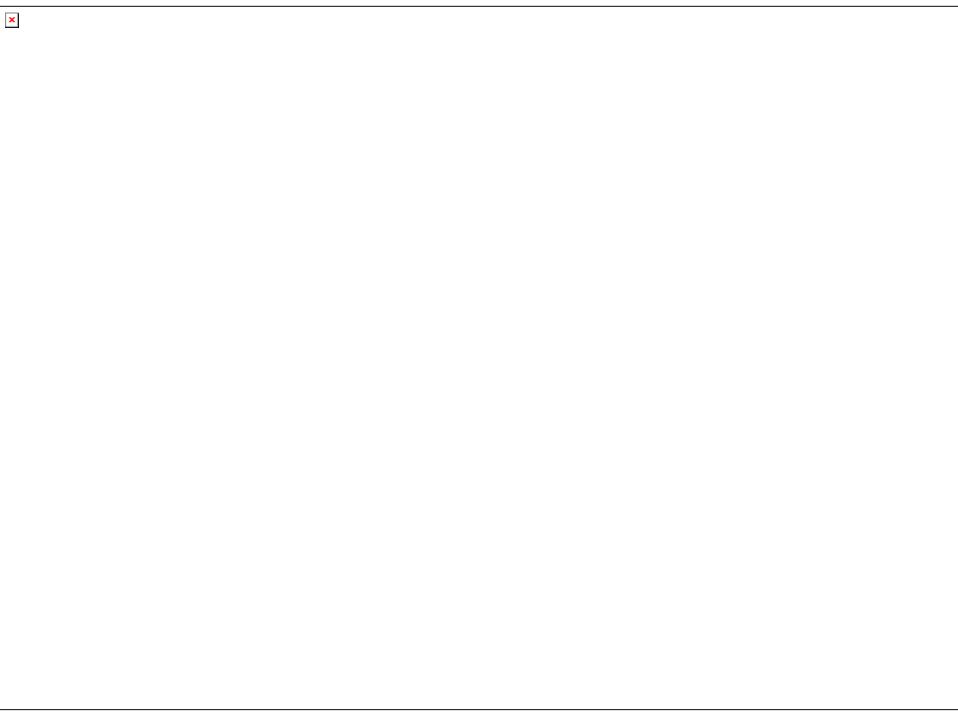
Patrik Fältström paf@cisco.com

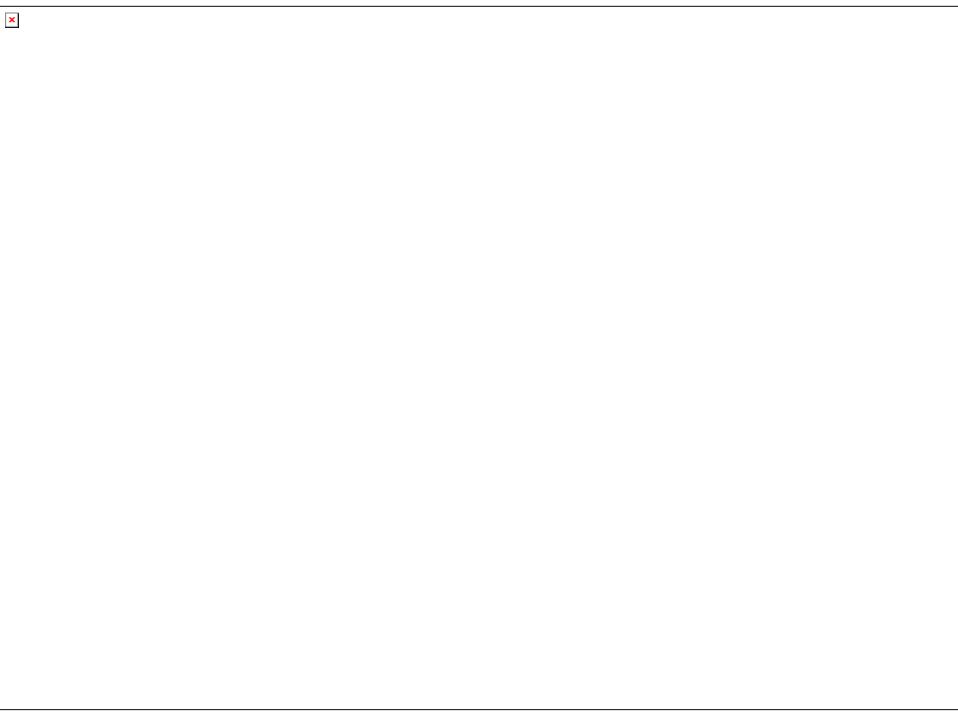
Some examples...

- You can look yourself at similar graphs on my website
- http://dnscheck.se/

What is an error?

- Today, I say a warning or error exists in a delegation if at least one of the NS records (for example) is not reachable
- It is not "no nameserver is reachable", but "at least one of the nameservers is unreachable"
- ...but, more about the meta-discussion later





What do I test?

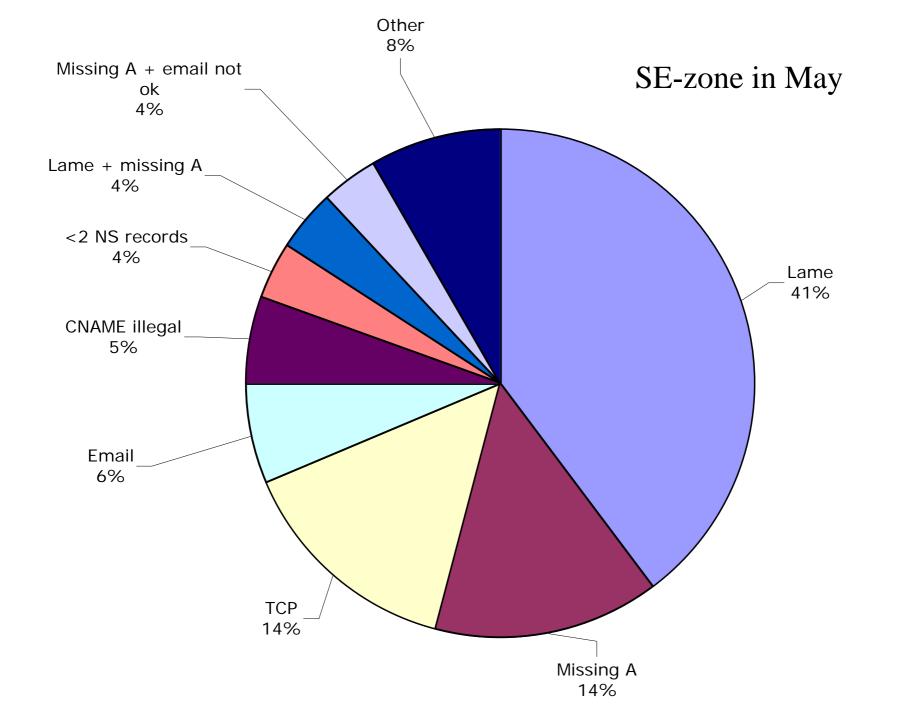
- Slightly different things than "other" testers
 - At least when I started 4 years ago...
- Concentrate on the delegation point, and delegation data
 - Parent-Child coherency
 - SOA data correctness

Tests? 1(2)

- >1 nameserver for zone?
- All responses from authoritative servers authoritative?
- Serial numbers from all authoritative servers the same?
- NS records at parent and child the same?
- Does A record(s) exist for NS record?
- Does PTR exist for IP address(es) found when looking for A?
- Does A exist for all domain names (including the ones found when looking for PTR)?

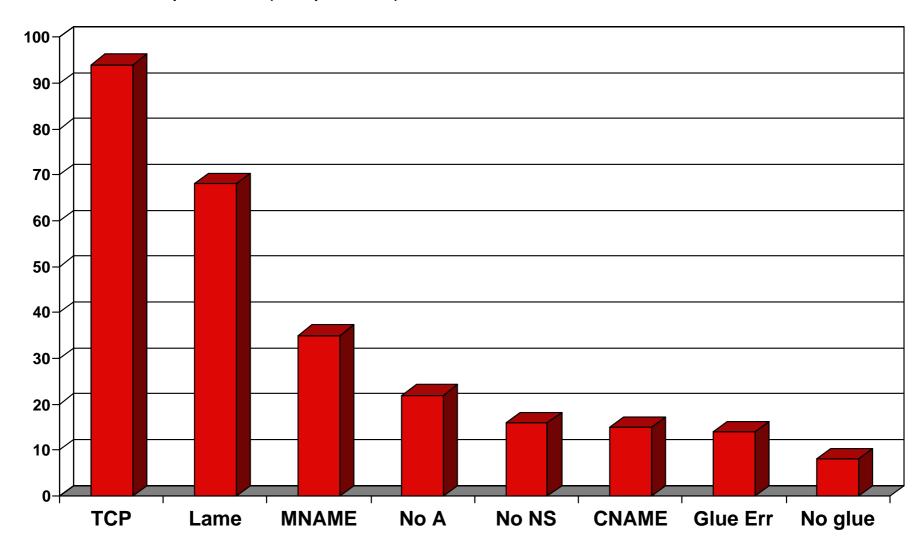
Tests? 2(2)

- Does the nameservers respond over both UDP and TCP?
- Does the email address found in the SOA actually work?
- Is CNAME (not) used for MX and NS?
- Can the SMTP server handle EHLO and empty envelope sender address?
- Does all MX records work, or only some of them?
- Does correct glue exist when glue is needed in parent?



Root-zone July

Zones with this problem (not percent)



Meta-issues (findings)

- DNS works perfectly as long as at least one server respond
- Is the mismatch between parent a child due to policy, technical or protocol issues?
- How bad is a lame delegation?

Real questions?

- What is "correct" requirement a parent sets on a child zone?
- What is recommended "quality" a child should follow?
- Is this wg where this should be discussed?

 This tool (http://dnscheck.se/) is discussed on dnscheck@lists.paf.se