

DNSSEC Outages: The Ugly

- Encountered a bug during KSK rollover
- Signature over DNSKEY set missing
 - Affected e164.arpa on 15 February 2011
- Vendor could not reproduce the problem and concluded that high load on system caused it

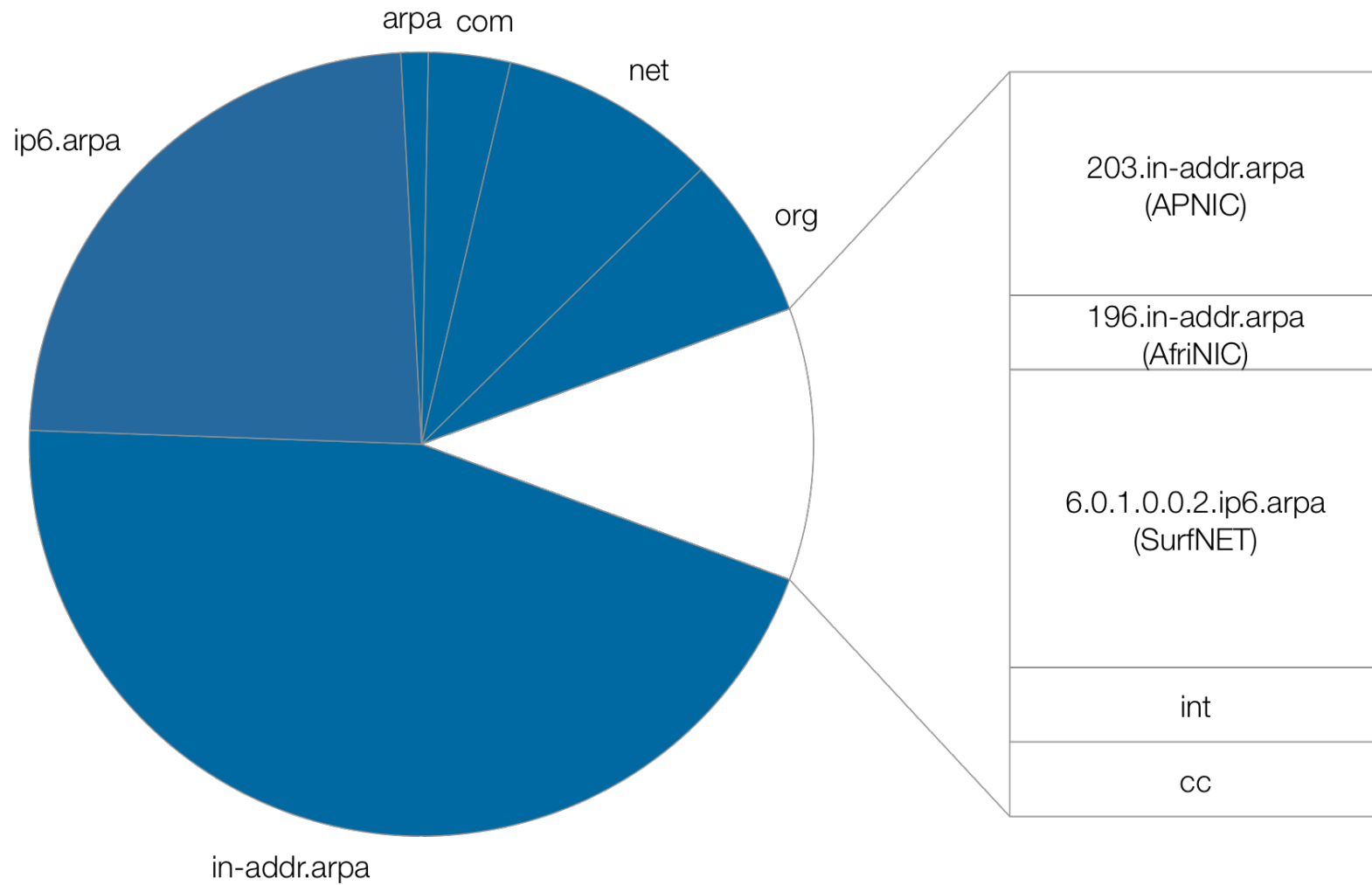
DNSSEC Outages: The Bad

- Second outage on 14 April 2011
 - Affected ripe.net and 0.a.2.ip6.arpa
- Same exact problem – no high system load

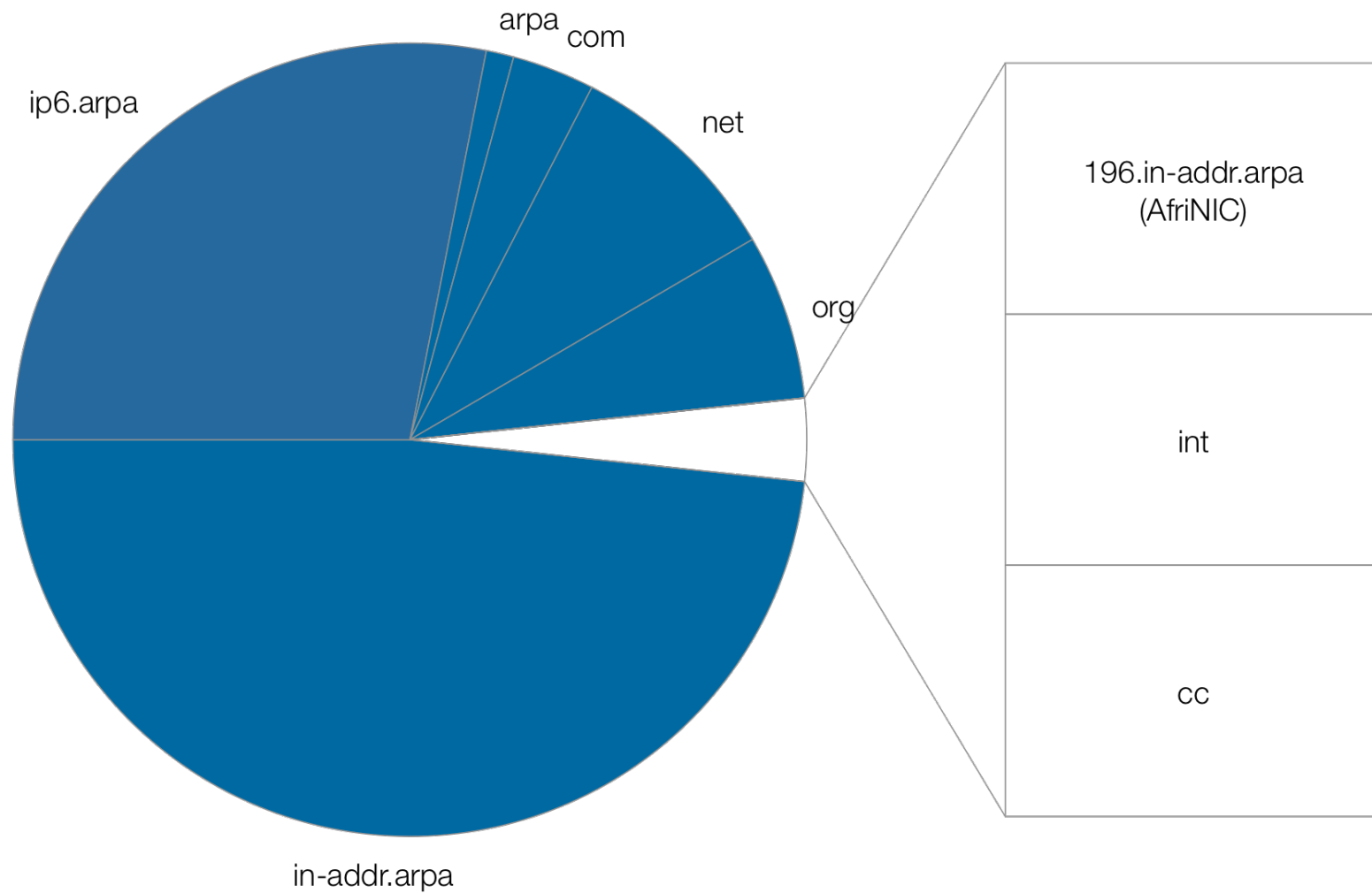
DNSSEC Outages: The Good

- Gathered enough data to reproduce the bug
 - Awaiting release with bug fix before our next rollover
- Called for broad work on a safeguard
 - Spurred interest from others (SIDN, AFNIC, DENIC, ...)
 - Initial work on a DNSSEC verification proxy started
 - Coordination on the DNSSEXY mailinglist
 - <http://nlnetlabs.nl/mailman/listinfo/dnssexy>

DNSSEC: Signed Parents



DNSSEC: Signed Parents (By Fall 2011)



DNSSEC in Reverse DNS

- DS records over time

