



DNSCheck

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What does DNSCheck do?

- DNSCheck is a program that was designed to help people check, measure and hopefully also understand the workings of the Domain Name System, DNS. When a domain (aka zone) is submitted to DNSCheck it will investigate the domain's general health by traversing the DNS from root (.) to the TLD (Top Level Domain, like .SE) to eventually the nameserver(s) that holds the information about the specified domain (like iis.se). Some other sanity checks, for example measuring host connectivity, validity of IP-addresses and control of DNSSEC signatures will also be performed.

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What makes DNSCheck special?

- Checks previously used name servers in redelegations done after February 2007 (only .SE-zones though)
- Checks the full .SE-zone periodically
- Clarifies any found warnings/errors
- Saves history for tests done / domain
- Advanced tab for techies
- Written as modular code which helps reuse of whatever functions that are needed elsewhere
- Open source under BSD-license
- Able to fully test undelegated domains

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Built for tomorrow

- Fully capable of running all checks that are performed over IPv4 over IPv6. (Note however that for <http://dnscheck.iis.se> these are not run today, this is because the location of the DNSCheck-server does not have IPv6 connectivity yet).
- Since focus today is DNSSEC, let's go into the details of the DNSSEC-testing module...

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DNSCheck::Test::DNSSEC

- If there exists DS at parent, the child must use DNSSEC.
- If there exists DNSKEY at child, the parent should have a DS.
- A DNSSEC key should not be of type RSA/MD5.
- At least one DNSKEY should be of type RSA/SHA1.
- There may exist a SEP at the child.
- RRSIG(DNSKEY) must exist on all nameservers, be valid and created by a valid DNSKEY.
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DNSCheck::Test::DNSSEC (cont)

- RRSIG(SOA) must exist on all nameservers, be valid and created by a valid DNSKEY.
- The DS must point to a DNSKEY signing the child's DNSKEY RRset.
- The DS may point to a SEP at the child.
- At least one DS algorithm should be of type RSA/SHA1.

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How about a real test?

- <http://dnscheck.iis.se>

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Want to test from home?

Adress to current running DNSCheck (v0.91) –
<http://dnscheck.iis.se>

Adress to the source code of the new DNSCheck -
<http://opensource.iis.se/trac/dnscheck>

Adress to the developers of the GUI -
<http://www.pingdom.se>

Adress to the previously used DNSCheck –
<http://www.dnscheck.se>

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