

DNSSEC.CZ

CZ.NIC - <http://www.nic.cz>

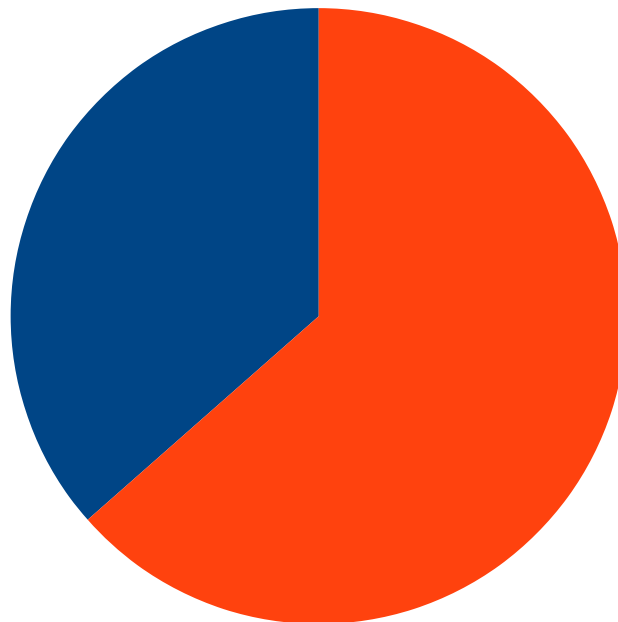
Ondrej Filip / ondrej.filip@nic.cz

Jul 27 2012, Prague, ICANN, DNSSEC WS

DNSSEC penetration



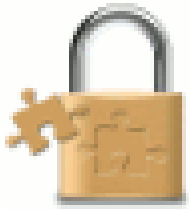
- About 36,5% domains is signed
- That means ~ **350.000** domains! (of ~ 955.000)
- Check numbers at <http://www.nic.cz>



Communication

- Registrars – seminars, training, financial incentives, direct, conferences, technical support
- Important web sites (government, news, e-shops) – direct, conferences
- ISPs – campaign (via end users) and direct
- End users – campaign
- Tools





DNSSEC HARDWARE TESTER

- Test DNSSEC compatibility – device (and network)
- On-line database - EN/CZ/HU

ZYXEL – LIST OF DEVICES

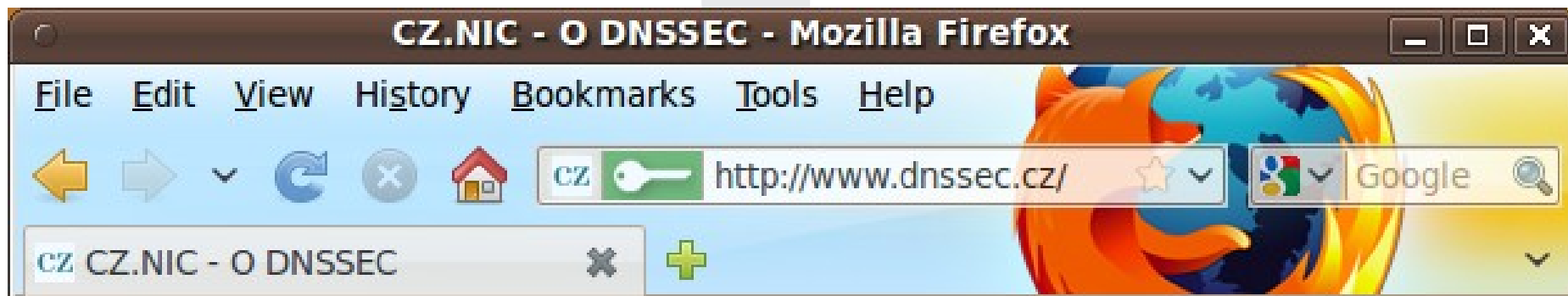
Device	Reports	Score	CZ.NIC score	DNSSEC compatibility	Last test
ZyXEL P-320W	1	102	0	☁ 52%	06-12-2009
ZyXEL P-660HW	4	574	0	☀☁ 72%	08-12-2009
ZyXEL P-660RU	1	182	0	☀ 92%	08-12-2009
ZyXEL P-660R-63	1	182	0	☀ 92%	02-01-2010
ZyXEL P-661HW	0	0	0	–	–
ZyXEL USG 200	0	0	0	–	–

- Windows / Linux / Mac OS supported
- Download at <http://www.dnssectester.cz>



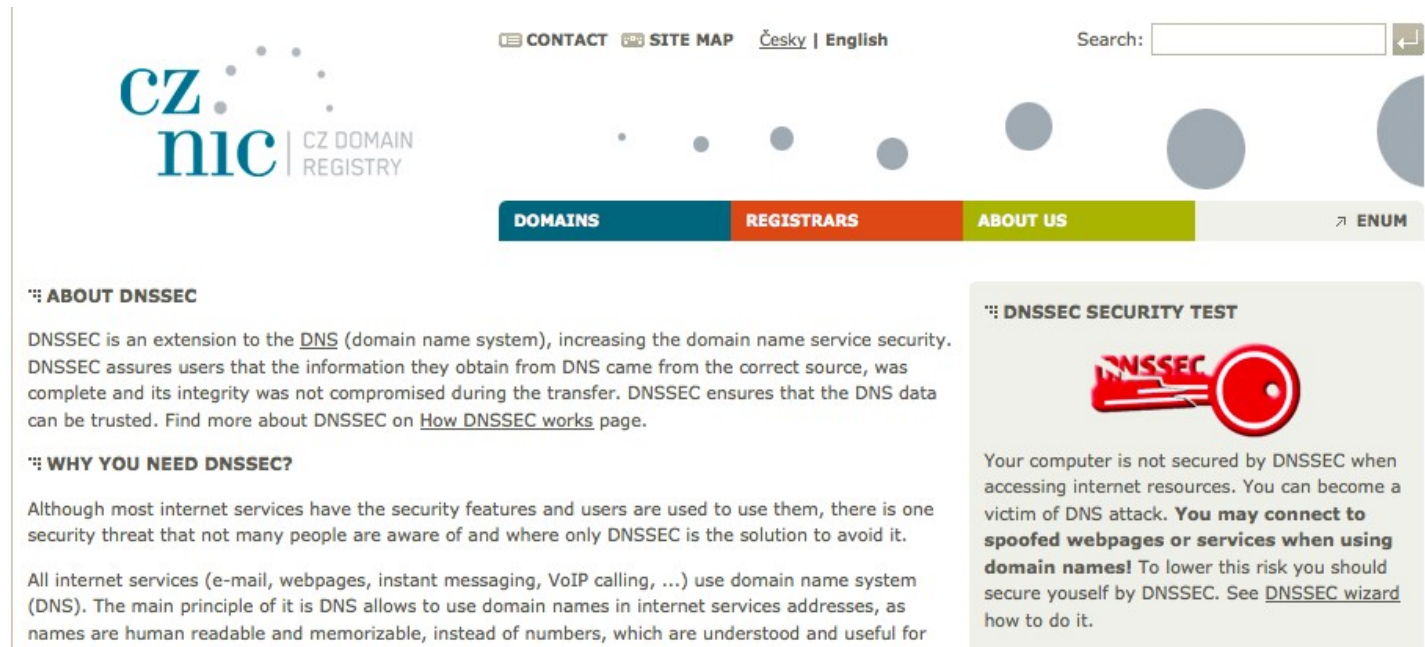
DNSSEC Validator

- Firefox/Chrome/IE add-ons - Shows icon similar to 'https'
- Validates domain name in the address bar
- No DNSSEC, broken DNSSEC, functional DNSSEC
- Download at: <http://labs.nic.cz>
- (Or search for DNSSEC at browser Add-ons)



Open validating resolvers

- Public DNSSEC validating resolvers
- Integrated into browser add-ons




The screenshot shows the CZ.nic website with the following content:

- Logo: CZ.nic | CZ DOMAIN REGISTRY
- Navigation: CONTACT, SITE MAP, Český | English, Search: [input field]
- Menu: DOMAINS, REGISTRARS, ABOUT US, ENUM
- Section: **ABOUT DNSSEC**

DNSSEC is an extension to the [DNS](#) (domain name system), increasing the domain name service security. DNSSEC assures users that the information they obtain from DNS came from the correct source, was complete and its integrity was not compromised during the transfer. DNSSEC ensures that the DNS data can be trusted. Find more about DNSSEC on [How DNSSEC works](#) page.
- Section: **WHY YOU NEED DNSSEC?**

Although most internet services have the security features and users are used to use them, there is one security threat that not many people are aware of and where only DNSSEC is the solution to avoid it.

All internet services (e-mail, webpages, instant messaging, VoIP calling, ...) use domain name system (DNS). The main principle of it is DNS allows to use domain names in internet services addresses, as names are human readable and memorable, instead of numbers, which are understood and useful for
- Section: **DNSSEC SECURITY TEST**



Your computer is not secured by DNSSEC when accessing internet resources. You can become a victim of DNS attack. **You may connect to spoofed webpages or services when using domain names!** To lower this risk you should secure yourself by DNSSEC. See [DNSSEC wizard](#) how to do it.

- Using anycast technology
- <http://labs.nic.cz/odvr>

DNSSEC HTML Widget

- Informs about DNSSEC validation and IPv6 support of connection (on <http://www.nic.cz>)



- Measures speed of IPv4 and IPv6
- <http://labs.nic.cz/widget>

Current situation



- 36,5% of all Czech domains - growing
- All major registrars (with 90% of market share) support DNSSEC – many of them by sign default
- Many major ISPs validate (2 of 3 cell phone operators – Telefonica and Vodafone; majority of B2B; major xDSL provider
- Many important sites signed

Thank you!



ondrej.filip@nic.cz

<http://www.dnssec.cz>