Challenges and Opportunities in DNSSEC Deployment and Usage

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What Should The End User Experience Be?
DNSSEC-Validating Resolvers
Application Developer Libraries

DNSSEC Developer Libraries

At the current time we are aware of the following libraries for developers seeking to add DNSSEC support to their applications:

**C**
- ICns from NLnet Labs
- libval from the DNSSEC-Tools Project
- libunbound, a component of the Unbound DNS resolver that can be used in other applications

**Erlang**
- dns_erleng

**Go**
- godns

**Java**
- dnsjava
- DNSSEC4J (based on the DNSSEC primitives in dnsjava)

**Perl**
- Net::DNS and Net::DNS::SEC
- Perl modules from the DNSSEC-Tools Project

**Python**
- dnspython – available at dnspython.org and on Github
- python-dnssec
- PyUnbound – a python wrapper for the libunbound library (mentioned above under C)

**Ruby**
- dnsruby

Source: www.internetsociety.org/deploy360/resources/dnssec-developer-libraries/
## Domain Name Registrars

### Deploying DNSSEC

Registrars that support end user DNSSEC management, including entry of DS records

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<table>
<thead>
<tr>
<th>Registrar</th>
<th>Accepts DS records for</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GoDaddy (US)</td>
<td>.com, .net, .biz, .us, .org, .eu, .se, .co.uk, .me.uk, .org.uk, .co, .com.co, .net.co, .nom.co</td>
<td>Also supports DS record entries for domains you may host elsewhere. (1) (2)</td>
</tr>
<tr>
<td>NamesBeyond (US)</td>
<td>.org</td>
<td>(1) (2)</td>
</tr>
<tr>
<td>DYN (US)</td>
<td>.org, .se</td>
<td>(1) (2)</td>
</tr>
<tr>
<td>DK-Hostmaster (DK)</td>
<td></td>
<td>A list of DNSSEC DS supported domains could not be located on the site.</td>
</tr>
<tr>
<td>GKG (US)</td>
<td>.net, .us, .biz, .org</td>
<td>Also supports DS record entries for domains you may host elsewhere. (2)</td>
</tr>
<tr>
<td>Binero (SE)</td>
<td>.se, .eu</td>
<td>All domains are automatically signed. (1) (2)</td>
</tr>
<tr>
<td>Registro (BR)</td>
<td>.br</td>
<td>(1) (2)</td>
</tr>
<tr>
<td>NAME (US)</td>
<td>.us, .org, .biz</td>
<td>(2)</td>
</tr>
<tr>
<td>OVH (FR)</td>
<td>.eu</td>
<td></td>
</tr>
</tbody>
</table>

Notes: (1) Provides DNSSEC signing services. (2) UI supports DNSSEC.

The list does not constitute an endorsement of any particular registrar. This is being provided for informational purposes to track the adoption of DNSSEC and provide information for users who may have questions about which registrars support DNSSEC.

Source: www.icann.org/en/news/in-focus/dnssec/deployment
User Experience at the Registrar / DNS Hosting?
Complexity of Modern Web Sites

Source: www.dnssec-deployment.org/index.php/2012/02/are-you-secure/
Awareness of DNSSEC Information

DNSSEC HOWTO

Secure Domain Name System (DNS) Deployment Guide

Improving the security of the Internet’s naming infrastructure

We have Wiki!

DNSSEC-Tools

Is your domain secure?

Sign Your Zone  Tutorials  Install
Internet Society Deploy360 Programme

Can You Help Us With:

- Case Studies?
- Tutorials?
- Videos?
- Whitepapers?
- Tools?

How Can We Help You?

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Thank You!