DNSSEC Deployment Status

2012: Experimental
- Attended the forum, conference
- RFC for DNSSEC

2013: Announced
- DNSSEC OT&E
- Training & drills

2014: Approve Project
The project of DNSSEC deployment for .VN domain name was approved with 3 phases from 2015-2017
DNSSEC Deployment Status

2015 Preparation stage
• Raising public awareness among ISPs, registrars...
• Building policies and regulations guiding DNSSEC
• Preparing human and technical resources

2016 Implementation stage
• Implementing DNSSEC for the national DNS system
• Connecting DNSSEC to DNS ROOT and international DNS systems

2017 Accomplishment stage
• Upgrading the national DNS system
• Upgrading domain management system
• Providing Internet users in Vietnam with services and products with DNSSEC specifications

Preparation stage
- Implementing DNSSEC for the national DNS system
- Connecting DNSSEC to DNS ROOT and international DNS systems
Implementation stage
- Upgrading the national DNS system
- Upgrading domain management system
- Providing Internet users in Vietnam with services and products with DNSSEC specifications
Accomplishment stage
VNNIC Implementation:

• OT&E System for testing.

• Not support:
  • `<secDNS:maxSigLife>`: apply the default value for all RRSIG in National DNS.
  • `urgent` attribute in `<secDNS:update>` element.
  • `secDNS:keyData`:

• VNNIC support `<secDNS:dsData>` only for further investigation process before update to National DNS.

• Maximum 06 DS Records.
• Process of DS creation in National DNS:
  • DO NOT create the DS Record as soon as Registrar provided.
  • VNNIC compare the public key information between:
    • <secDNS:keyData> registrar provided via EPP.
    • DNSKEY Record in the Hosting zone.
  • Inform the Registrar if 2 information is not match.
  • Approve the creation if match.
DNSSEC Deployment Status

- **2015**
  - Implementation of DNSSEC trial system
  - Development of management softwares;
  - registration of domain names for DNNSEC
  - 03 training courses on DNSSEC for ISPs, registrars and IT enterprises in Ha Noi and Ho Chi Minh city...

- **2016**
  - Collaboration with APNIC and ICANN, hosted a workshop on DNSSEC for: government authorities, ISPs, CSPs, .vn accredited registrars
  - Workshop with NZRS (registry .NZ) on 8/2016
  - Preparing signing ceremony on 12/2016
**DNSSEC Deployment Status**

<table>
<thead>
<tr>
<th>No.</th>
<th>Tasks</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DNSSEC Plan for .VN domain name</td>
<td>Done</td>
</tr>
<tr>
<td>2</td>
<td>Established DNSSEC team &amp; Training skills</td>
<td>Done</td>
</tr>
<tr>
<td>3</td>
<td>Infrastructure for DNSSEC:</td>
<td>Done</td>
</tr>
<tr>
<td></td>
<td>- Topology: DC/DR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- DNSSEC System: DNS/DNSSEC server &amp; HSM</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>DNSSEC Production for VN zone:</td>
<td>Done</td>
</tr>
<tr>
<td></td>
<td>- BIND &amp; HSM Integrated</td>
<td></td>
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<tr>
<td></td>
<td>- Inline-signing bump in the wire</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>DNSSEC monitoring</td>
<td>Done</td>
</tr>
<tr>
<td>6</td>
<td>DNSSEC documents &amp; DPS</td>
<td>Done</td>
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<th>No.</th>
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<tbody>
<tr>
<td>7</td>
<td>Key signing ceremony scripts</td>
<td>In Progress</td>
</tr>
<tr>
<td>8</td>
<td>Signing VN zone &amp; update DS to root</td>
<td>Dec, 2016</td>
</tr>
<tr>
<td>9</td>
<td>SRS-EPP OTE support DNSSEC, open testing with Registrars</td>
<td>Jan, 2017</td>
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</tbody>
</table>
THANK YOU!

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