Vietnam PKI Update

INDIA, 2023

Đặng Đình Trường
Deputy General Director NEAC
PKI related organizations

- **Root CA:**
  - Managed by NEAC, Root CA performs role of operation information security infrastructure that includes electronic authentication and PKI based services.

- **Public Sub CAs:**
  - Providing digital certificate service in Vietnam.
  - License issued by NEAC is required.
  - Currently 25 public Sub CAs received the license to provide digital certificate issuance services.

- **Vietnam Government Root CA (VGCA):**
  - For government agencies and officials.
## Policy framework

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<td>Law, Policy, Standards</td>
<td>- Law on Electronic Transactions 2005 (Currently in the process of amending and supplementing)</td>
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<td>- Decree on digital signatures 2007 (superseded in 2018)</td>
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<td>- Circulars guiding standards and regulations (7 Circulars)</td>
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<td>- Certification Practices Statements</td>
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<td>PKI Model</td>
<td>Government PKI system (Government)</td>
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<td>PKI Applications</td>
<td>Electronic tax, Electronic customs, Electronic social insurance, ....</td>
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Active and licensed public CAs

Public digital signatures in Viet Nam: 25 CAs.
CA that has remote signing service: 8 CAs.
Objects and purpose of using public digital certificates

Digital certificates issued by public CAs

- E-tax declaration and payment
- Social insurance declaration
- e-customs
- e-invoice
- Banking and securities transaction
- Online public services transaction and e-commerce

Entity

Individual
Public digital signatures

❖ Approximately 4.6 million public certificates already issued.
❖ Approximately 2.5 million public certificates have been activated.
❖ Customers set: legal entities, end-entities (individual customers).
❖ Main purposes of digital signatures:
  - Tax declaration.
  - Social insurance claiming.
  - Customs declaration.
  - …

Number of active public certificates in the period of 2015 - 2023
Licensed and active digital certificates

<table>
<thead>
<tr>
<th>Year</th>
<th>Issued</th>
<th>Active</th>
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<tbody>
<tr>
<td>2017</td>
<td>2,051,308</td>
<td>898,053</td>
</tr>
<tr>
<td>2018</td>
<td>2,420,048</td>
<td>1,068,961</td>
</tr>
<tr>
<td>2019</td>
<td>3,042,622</td>
<td>1,368,331</td>
</tr>
<tr>
<td>2020</td>
<td>3,942,074</td>
<td>1,570,039</td>
</tr>
<tr>
<td>2021</td>
<td>4,622,026</td>
<td>1,631,151</td>
</tr>
</tbody>
</table>
Active digital certificates divided by public CAs

Unit: Certificate

- Viettel-CA, 459,914
- BkavCA, 102,768
- CA2, 68,237
- VNPT-CA, 420,088
- Fast-CA, 69,559
- Easy-CA, 33,981
- LCS-CA, 85,585
- NC-CA, 27,821
- MISA-CA, 22,995
- TrustCA, 874
- EFY-CA, 44,833
- SmartSign, 81,021
- Safe-CA, 24,209
- Newtel-CA, 116,837
- FPT-CA, 71,475
Forms of digital signature in Vietnam

- USB token.
- Remote signing: eIDAS compliance.
- SIM PKI.
Amendment of Electronic Transactions Law

- Many contents are outdated and obsolete by the current situation of Vietnam’s e-commerce.
- New services are introduced in Amended Electronic Transaction Law 2023.
Thanks for your attention!