

Indian PKI Use Cases

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India PKI Forum

PKI Ecosystem in India

India



- 1. National Root Certificate by Government of India (Controller of Certifying Authorities).
- 2. Information Technology Act, 2000 provides legal validity.
- 3. Userbase: 50 million+
 - 5 million+ smart card (USB Crypto Token) based electronic signature users
 - 45 million+ online electronic signature users
- 4. Mandatory for several classes of Tax filing, Company law filings, e-Procurement / tendering systems, etc.
- 5. Certification Authorities:
 - 5 CAs for issuance to general public
 - Couple of them for Military, Government, etc.
- 6. Custom Audit Criteria for CAs with government auditor empanelment and training program.



Company Return Filing

- 1. Digital filing was introduced in year 2006.
- 2. Today, all the company law return filing is digital. There is no provision to file in paper form.
- 3. Filing Statistics:
 - 1. Companies required to file: 1 Million
 - 2. Directors: about 2.5 Million
 - 3. Number of Forms: 100+
- 4. The company incorporation is also fully online with digital signature certificate, and helped substantially in improving "ease of doing" business rating.
- 5. The filer can get Digital Certificate from any of the public CA licensed by government and use it to submit the return.
- 6. Implementation status is 100%



Income Tax Filings

- 1. India has about 66 million Income Tax Filers (as of 2018 data).
- 2. The filing by lower income / salaried classes can be made using basic verification methods.
- 3. But **about 3 million users are mandatorily required to use Digital Certificate** to authenticate and sign their tac return.
 - This includes, 1 million companies and about 2 million other businesses.
- 4. The complete filing process is online, and there is no physical interaction.
- 5. The filer can get Digital Certificate from any of the public CA licensed by government and use it to sign their tax return.
- 6. In addition, most of the acknowledgements and forms issued by the Income Tax Department is also digitally signed. (Eg: Tax deduction statement for salaried employees).

Since 2006

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e-Procurement System

- 1. India introduced procurement transparency in public sector and government since last decade, by enabling online procurement process.
- 2. Online procurement system mandatorily requires Digital Signature and Encryption
- 3. The tender applicant has to
 - 1. Digitally sign the tender forms and supporting documents
 - 2. Encrypt the tender using encryption certificate
- 4. This ensures legal validity for the tender, as well as, confidentiality by allowing only authorized person to decrypt the tender by defined time.
- 5. The applicant can get Digital Certificate from any of the public CA licensed by government and use it to submit the tender.
- 6. Implementation status is 100% and Implemented by:
 - 1. Central & state government system
 - 2. Public Sector Procurement systems





- 1. Indian GST system was introduced in 2017.
- 2. It has more than 10 million registered businesses.
- 3. GST system collects the Periodic Tax returns, that includes
 - 1. Invoice level details from large businesses
 - Tax credit data
- 4. All these information are collected electronically, and there is no physical mode.
- 5. Mandatory to sign digitally.
- 6. Users can submit the return in tax portal, OR come through application providers who consume GST API system.
- 7. Complete online and instant processing, as the data is digitally signed. The tax credits are reflected in GST business account immediately and can be viewed by logging in to respective account.
- 8. GST filer can take Digital Certificate from any CA and use it immediately.



Other major use cases

- 1. Export/Import
- 2. e-Governance
- 3. Banking functions
- 4. Railways reservation through agents
- 5. Several private sector functions like finance, legal, HR, etc



THANK YOU

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