

8mn SME's use emSigner to digitally sign invoices and GST forms

eMudhra's signing utility helps large and small enterprises go paperless with their goods and Service Tax filings

Industry

Government

Banking Security

The Goods and Service Tax network is one of the largest single tax system network in the world wanting to automate invoice signing and tax filings by SME's using legally valid digital signatures

Business Need

Reduce turnaround times for the ecosystem using Digital Signatures for a completely paperless experience of sending/receiving invoices and filing tax forms with the authorities

Approach

Deploy a digital signature based signing and validation document that is capable of working across environments to handle signing by enterprises



Background

The Goods and Service Tax network is a single tax system which subsumed Service Tax and Value Added Tax across tax apart from a host of other taxes. In order to facilitate digital filing that is safe and secure, The GSTN envisaged a digital signature based filing system which had to address the following challenges

- Handle registrations, invoice signing and tax filings for 8mn companies
- Reduce turn around times for GST officers using electronic processing
- Provide quick and transparent access to historic company data

To fast track the process of electronic document submission by Companies, a workflow based solution was developed to allow authorized signatories of Companies to digitally sign and submit forms/filings thus completely eliminating any physical paper movement.

It was envisaged that the solution provide a cost effective process for digitally signing PDF/XML/TXT forms with a legally valid Digital Signature Certificate which establishes the origin of the documents. The Digital Signature Certificate shall be from a Certifying Authority in India. The solution shall also ensure that the documents are not tampered with to ascertain the integrity of documents. All access to the system shall be with Digital Signatures to ensure complete traceability for audit purposes

Digital Signature Technology

The Digital Signature Technology works on the Public Key Infrastructure framework which uses a Cryptographics Key Pair – Private and Public Key for secure access and transmission of Information

The Public Key Infrastructure frameworks prescribed in a model law provided by UNCITRAL (A United Nations body)



Benefits

GST and the end customers have reaped significant benefits by implementing digital signature based submission of documents. These include

- Ensuring document integrity, confidentiality and authorship
- Curbing the risk of signature forgery
- Eliminating the use of papers and printers saving huge cost
- Faster turnaround time, increased employees efficiency, productivity and transparency
- Meeting compliance & regulatory requirements
- Going green and reducing carbon footprint in line with “Digital India” vision

Solution

In a one of a kind implementation which involved massive scale, eMudhra worked closely with the GST network to enable two types of digital signature based tax filing for 8mn users using a desktop component that runs a Windows service

- Crypto Token Based Digital Signatures issued by a Licensed Certifying Authority.

These Digital Signatures are typically issued after verifying the identity of the user and issued for a validity of 1 year or 2 years.

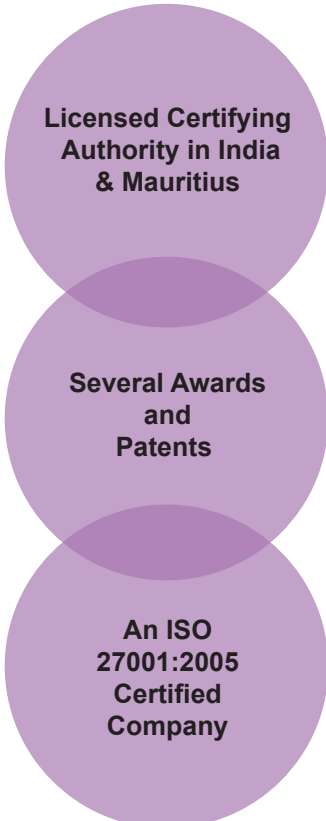
To facilitate ease of signing, eMudhra provided a Websocket based signing solution which is available as a download on the GSTN website. This allowed end users who had a Crypto token to sign forms across Browsers, Operating Systems with ease.

- AADHAAR eSign which leverages National ID for authenticating users to digitally sign documents.

These digital signatures are server side signatures which are used for one time transactions. These digital signatures do not require a Crypto token or Websocket solution.

All digital signatures used for signing are validated using eMudhra’s Authentication Server for user identity and document integrity before they are accepted for straight through processing. This ensured error free filing of documents with the Departments with legally valid digital signatures.

The validation component is built for high availability to handle large volume document validation.



**Licensed Certifying
Authority in India
& Mauritius**

**Several Awards
and
Patents**

**An ISO
27001:2005
Certified
Company**

About eMudhra

eMudhra is a technology and digital identity and transaction management company providing solutions which ease financial and statutory needs of consumers. eMudhra was established in 2008 and is a Certifying Authority in India and Mauritius to issue Digital Signature Certificates.

eMudhra's current enterprise and consumer solutions include Digital Signature Certificates, emSigner – Paperless Office Solution, emAS – secure multifactor authentication for banks, emCA for Digital Signature issuance and management and Prism – Voice of Customer Analytics using Semantics.

eMudhra is a market leader in India and has worked with large Banks, Financial Services companies and several Government agencies in India to implement Digital Signature based solutions which include secure access and paperless workflows.

eMudhra won the e-Asia award, an award given by AFACT (A United Nations body) for implementing Digital Signatures based on India's National ID – AAD-HAAR to bridge Digital Divide.