

Payments Bank in India uses eSign to onboard customers

AADHAAR eSign helps payments bank acquire more than 100,000 customers in a day

Industry

Banking

About the Payments Bank

A market leader in Payments Banks, a new form of Bank established for promoting financial inclusion in India by leveraging digital technologies under Digital India

Business Matters

Use legally valid large volume dynamic server side eSignatures to sign onboarding forms for acquiring customers digitally



Approach

Deploy an integrated solution to digitally sign and encrypt documents that are legally binding and guarantee the authenticity, integrity and confidentiality of data.

Background

The payments bank had a mandate of acquiring several millions of customers using AADHAAR and eSign which are legally valid in a short span of time. The mandate involved leveraging Digital India stack of National ID and eSignature platform based on National ID to facilitate large scale acquisition of customers without the need for physical branch setup.

This would completely transform Banking dynamics as the Payments Bank was focussed on targeting tech savvy millennials and other unbanked segments of the population with the hope of attracting them for Banking and cross selling of other services such as Insurance etc

Business Requirement

A legally valid eSignature platform offered by a licensed eSign Service Provider and Certifying Authority offered as a Service capable of handling huge volume of transactions with plug and play integration capabilities.

Technologies Used

- eSign API is exposed through a web service.
- Consumers of the service use the HTTPS protocol with a POST request containing an Incoming XML packet.
- The digital signatures use SHA-256 family for Hashing and X.509 certificates.



Benefits

Today the Payments Bank onboards customers in excess of 100,000 per day resulting in large scale financial inclusion

Company gets following benefits by using eMudhra solution:

- Real time onboarding of Banking customers
- Ensure document integrity, confidentiality and authorship
- Curbs the risk of signature forgery
- Access to Certifying Authority as a service avoiding complex PKI deployments
- Centralized storage and management of digital signature certificates in a highly secure environment using HSM appliance
- Meet compliance & regulatory requirements

Solution

eMudhra being the first licensed eSign Service Provider exposed the its Certifying Authority as a Service for providing eSign service to the Payments Bank.

The Payments Bank would conduct real-time KYC of the customers with India’s National ID database AAD-HAAR. The KYC information along with the Hash of the document would be sent to eMudhra’s eSign service systems.

eMudhra validates the KYC and affixes the Digital Signature using dynamically generated private keys to the hash of the document which is consumed the Payments Bank. The solution uses attached signatures where the public key travels with the signed hash.

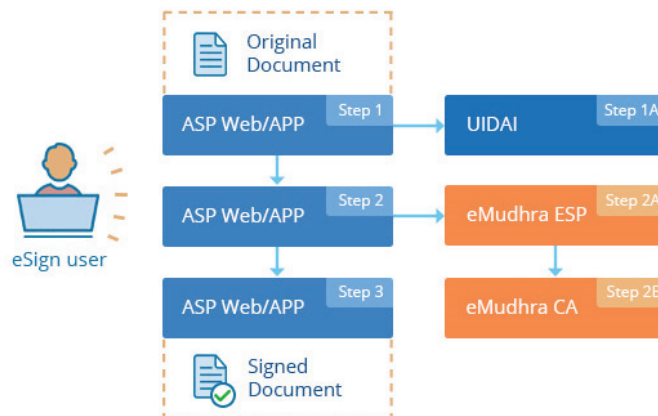
From an infrastructure perspective, eMudhra’s CA systems generated keys real time using high throughput HSM’s and supported upto 100 transactions per second (100 key-pairs generated per second).

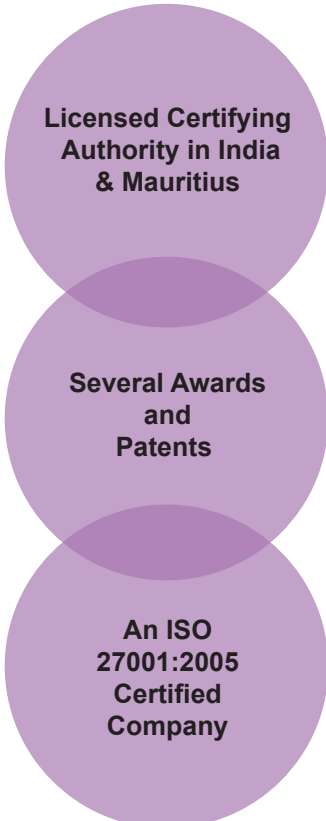
As per the required regulations, the generated private keys were destroyed post every transaction

The eSign API uses the following software components:

- **Certifying Authority Life Cycle Management:** Solution to manage lifecycle of keys issued
- **Hardware Security Module - A Farm of FIPS-2 level 3 certified physical computing device that safeguards and manages digital keys for strong authentication and provides crypto processing**
- **eSign API**
Allowing organizations to connect through the API for digitally signing documents from end customers

eSign services run in a data centre hosted by eMudhra which is audited by Government of India through empanelled audito.





**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.