



Odyssey
AltaSigna
Pine

*For e-receipt processing and RBI
compliance*



E-Receipt
Process Flow



Standardization &
new requirements



Challenges in
compliance



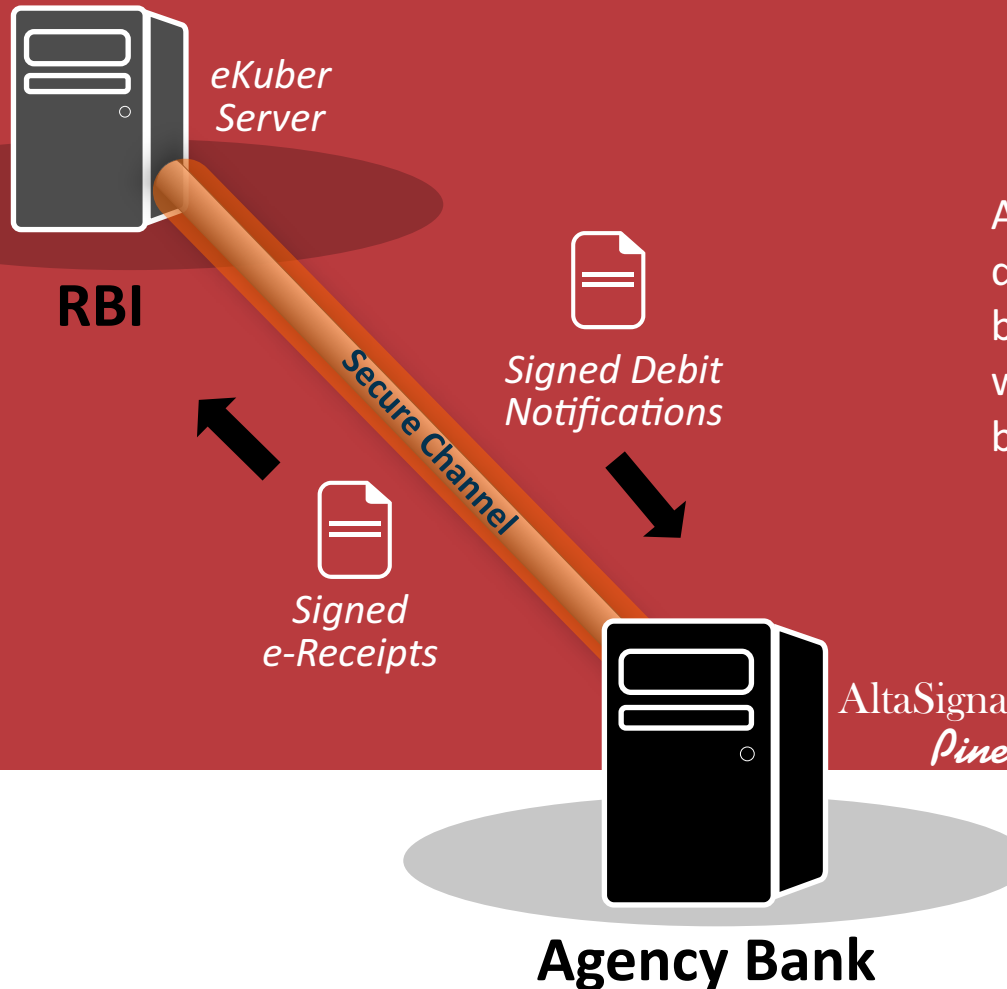
AltaSigna
Pine



Feature Highlights



Standards Compliance



AltaSigna Pine is a fully standards compliant digital signature solution that enables agency banks to comply with e-security regulations when interacting with RBI's eKuber core banking solution.

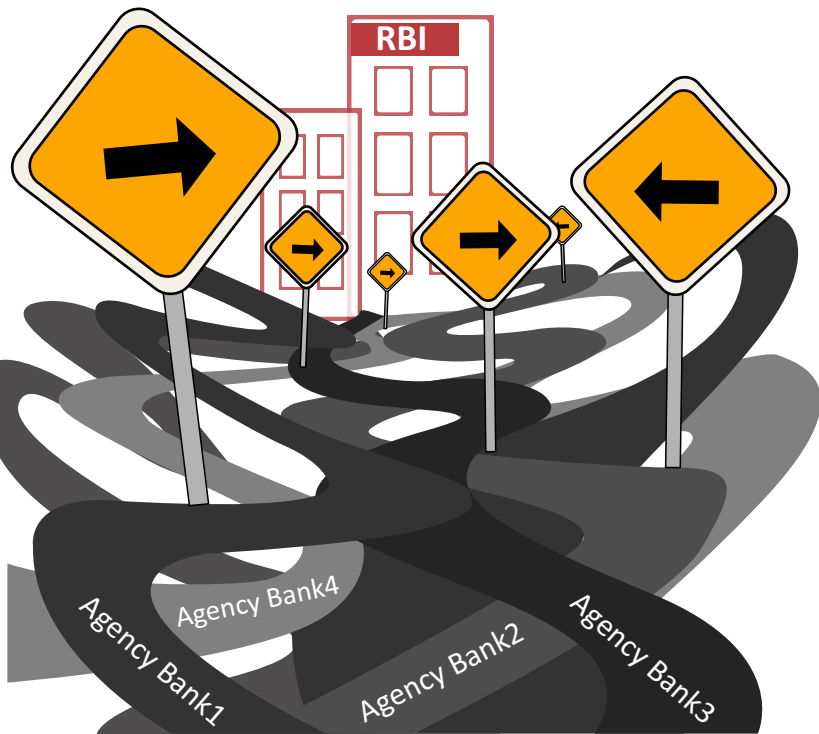
E- Receipt Process Flow

Many state governments collect taxes and other dues electronically.

In a typical scenario, a depositor that pays taxes accesses the state government treasury portal and fills out the challan details along with payment information. If the depositor chooses to pay electronically by net banking or debit card, the depositor will be redirected to the agency bank's website after being provided with a reference challan number for completing the payment. Once payment is complete, the bank generates an e-receipt.

Alternately, if the depositor chooses to make the payment over the counter, he can use the reference challan number to do so, and the bank raises cyber e-receipts for the payments.

While all e-Receipts are processed through the RBI's eKuber server, the transactions initiated by the agency banks with the eKuber server have different messaging standards and structures of servicing.



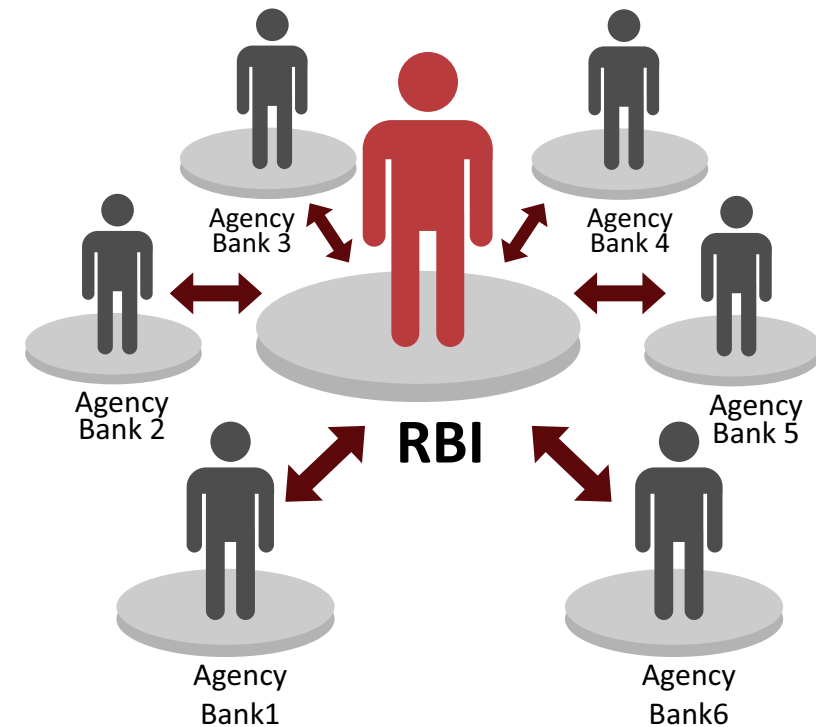
Standardization and new requirements

In an attempt to standardize the process and make it secure, the RBI has issued regulatory requirements for banks that interact with its eKuber server. The requirements pertain to :

1. Establishing a secure SFTP connection with the server

2. Standardizing the data format for files that are transmitted to or received from the RBI

3. Digitally signing the data that is sent to the RBI and validating the signature on files received from the RBI





Challenges in compliance

Complying with the new RBI regulations and standardization may be done in-house with the agency bank's native IT team or outsourced. However, either option can pose several challenges leading to budget overflow and delayed implementation.

Chief problems include finding human resources knowledgeable in Public Key Infrastructure (PKI) and e-security for product development and maintenance, new bugs arising due to changing application code-base, and application performance degradation due to introduction of cryptographic operations.



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Feature Highlights



Standards Compliance

AltaSigna Pine

AltaSigna Pine is a fully standards compliant digital signature solution designed specifically to help agency banks comply with RBI requirements when interacting with the eKuber server.

Developed by Odyssey Technologies, a company that specializes in PKI and e-security solutions and has over 15 years of experience in fulfilling the e-security and compliance needs of India's financial sector, AltaSigna Pine is a good fit for agency banks that route eReceipts through RBI.



With AltaSigna Pine, agency banks will be able to:

- ▶ *Streamline and automate the e-Receipt process flow*
- ▶ *Establish a secure SFTP communication channel with the eKuber server*
- ▶ *Digitally sign e-Receipts and upload the same at configured intervals to the eKuber server*
- ▶ *Download signed response files from the eKuber server and validate the signatures*
- ▶ *Be in full compliance with RBI regulations pertaining to e-Receipts*





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Standards Compliance

As a fully functional solution with zero-touch deployment, AltaSigna Pine removes many of the challenges associated with developing a new solution from scratch to fulfill requirements.

- ▶ *Quick and painless plug-configure –play deployment. Agency bank can be in full compliance of the new regulations within days.*
- ▶ *No need for specialized and expensive skill set to operate and manage the application.*
- ▶ *Discrete from the application server and therefore does not degrade application performance.*
- ▶ *Continued compliance with changing regulatory requirements through product upgrades.*



*E-Receipt
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Feature Highlights



Standards Compliance

Feature Highlights

Supports RSA 2048 and SHA-2 algorithms for digital signatures

Establishes authenticated SFTP connection with the RBI's eKuber server at configured intervals

Automatically signs and uploads e-receipt files to the eKuber server

Automatically checks the eKuber server for signed response files

Downloads signed response files from the eKuber server and verifies the signature with support for optional CRL

Archives the response files in the local system

Supports PKCS#7 signature embedded within XML tags as per RBI specifications

Supports a comprehensive logging and reporting system for accountability and audit trail



Standards Compliance

Digital Certificates	X. 509 V3
Digital Signatures	PKCS #7
CRL	X. 509 V3
Smart card/token	CAPI/PKCS #11
RSA keys	2048
Message Digest	SHA2
SSH	RFC 4253



Platform Requirements

Processor	Core2 Duo
RAM	2GB
Hard disk size based on transaction volume	
OS	Windows XP Service Pack 3 and above

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