

# Proxy Resolution



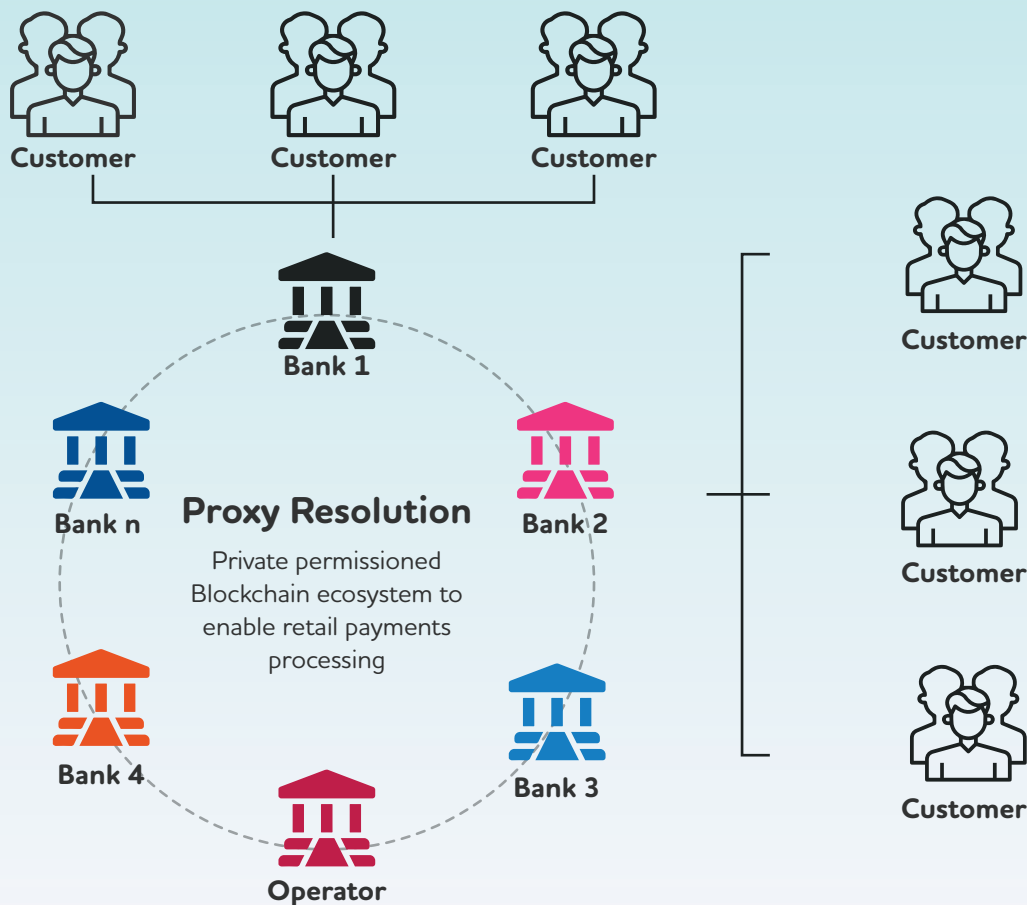
## Background

Pay-by Proxy is becoming increasingly popular today due to the security and convenience it provides to Payers. In this approach, an alias such as a National Identifier/Email id linked to the customer's Account information, is sufficient to make payments. Payers need not enter the Payee Bank account details in order to make a payment, thus simplifying the payment initiation process and reducing the potential for erroneous payments to a different bank account number. Pay-by Proxy is not only a convenient way of making payments but also protects the privacy of customers in terms of ensuring that critical bank account information is not exposed to the external world.

## Solution

The Proxy Resolution solution from Quartz comprises a private permissioned blockchain ecosystem which Banks can connect to in order to enable secure payment transactions for their end customers. The solution ensures that sensitive personal financial information is protected, while ensuring at the same time that payment transactions can be initiated without the need for retail customers/Payers to know the complete bank account information of Payees. Smart Contracts on the blockchain handle business rules and validations such as ensuring for example that a Proxy is active in the system with a valid identifier etc. In addition, blockchain helps ensure immutability of transactions, and can enable better dispute management since the complete audit trail is maintained on the ledger. The solution also supports Proxy Blacklisting - a process that allows Banks to bar a Proxy from being eligible to receive payments.

Quartz enables easy integration of blockchain with the existing systems of the Payment Infrastructure Operator and the Banks for Enlisting, Delisting and Blacklisting of proxies. The Gateway exposes simple REST APIs which can be invoked by participating Banks, thereby reducing the need for any large scale changes to integrate with blockchain.



## Business Benefits

- Protection of sensitive personal financial information of end customers
- Convenient way of making payments – end customers need not know the beneficiaries' bank and account information
- Better Dispute Handling for Banks due to availability of Audit Trail/ Transaction log.
- Real time availability of information such as updates to Proxy information without impacting the underlying transactions.

## Quartz Advantage

- Supports different models for Proxy Resolution - resolving Account details on blockchain or routing Resolution requests to the respective Banks or Third Party
- Data Privacy through Smart Contracts to ensure that each Bank has access only to their transactions
- Integration with Clearing & Settlement systems via REST APIs

## Quartz - The Smart Ledgers

Quartz comprises an Intelligent smart contract development toolkit, Integration solutions and 'Designed for DLT' business solutions that help organizations leverage the power of DLT in their businesses. Built on the core principles of **Coexistence, Integration and Interoperability**, Quartz enables existing systems to coexist and integrate with blockchain platforms and other messaging networks.

To know more about Quartz, please write to us at [tcs.quartz@tcs.com](mailto:tcs.quartz@tcs.com), or visit our website <https://www.tcs.com/quartz>

## About Tata Consultancy Services Ltd. (TCS)

Tata Consultancy Services is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge.

TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 469,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

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