



mobiquity[®] TPS based Licensing Policy Document

mobiquity[®] Money

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1 Document Information

This chapter gives an introduction to the scope and organization of the document.

1.1 Purpose

The objective of this document is to articulate the “Transaction Per Second” (TPS) based Licensing policy for mobiquity® Money software. The definition of “Business Transaction” used for this calculation and method of calculating “TPS” is defined in this document.

1.2 Scope

The scope of this document is for definition of Transaction and TPS only.

1.3 Audience

Business and Technical Teams of Comviva and its Licensed Customers for mobiquity® Money.

1.4 Definitions, Acronyms, Abbreviations

This section provides a list of all definitions, acronyms and terms required to properly interpret the document

1.4.1 Definitions and Acronyms

Term	Full Form
USSD	Unstructured Supplementary Service Data
MSISDN	Mobile Subscriber ISDN (i.e. Mobile Number)
mobiquity®	Comviva’s M-Commerce Solution
PIN	Personal Identification Number
Txn ID	Transaction Identifier
TPS	Transaction Per Second

1.4.2 Definitions

In the rest of the document the following concepts and associated vocabulary will be used

Term	Full Form
USSD	Unstructured Supplementary Service Data is associated with real-time or instant messaging type phone services
Customer	Active customer registered for mobiquity® services

2 Document History

Version Number	Description of Changes	Date	Author
1.0	Initial TPS Calculation Parameters	10/10/2018	Comviva
1.1	Update the document: 1) Access Channel Updated	25/03/2020	Comviva
	Source: Comviva		

3 Description

3.1 Transaction

Any request that puts load on the mobiquity® Money system through any source or access channel is known as a “Transaction”. A transaction is considered as a complete request that has a defined set of input parameters and a defined set of output parameters with a status (success/failure/error code).

Transactions can fail due to various reasons (Business Rules, 3rd party interface failures, etc.). However, a Transaction is considered complete irrespective of the status of the response (success or failure).

3.2 Transaction Sources and Access Channels

The source of transactions are all possible channels through which any transaction can originate .e.g.

1. USSD
2. Mobile App
3. APIs invoked by/exposed to 3rd parties (e.g. Payment Gateways, Remittance Partners.)
4. mobiquity® Web (e.g. Consumer Portal, Merchant Portal, Channel User Portal, etc.)
5. Bulk upload on mobiquity® Web
6. Scheduled jobs for Business Transactions (Commission Payout, Tax Calculations, etc.)

Note: Scheduled Jobs for mobiquity® Technical Maintenance (e.g. sweeping of balances from internal split wallets, etc.) are not considered as a source of Transactions from a License Perspective

3.3 Service Categorization

Services are nothing but “Transaction Types” in the mobiquity® system and are useful for identifying various types of transactions. In order to calculate the TPS of a mobiquity® system, we have divided the services in below 4 categories:

1. Financial (Cash In, Cash Out, P2P, Recharge etc)
2. Non-Financial (Mini Statement, Balance Enquiry etc)
3. 2 Step Transactions (Voucher based Cash Out, etc)
4. Others (User Validation, Pin Validation etc)

3.4 How to count the number of Transactions

Individual Transactions for most of the above services are logged in the mobiquity® Database. There are also a few services that are currently not logged in the DB. Below is a categorization of how we can arrive at the count of Transactions of the different services for a given time period:

- Financial Services can be identified from DB (MTX_TRANSACTION_HEADER table).
- Non-Financial Services can be identified from DB (MTX_TRANSACTION_COUNT table).
- 2 step services can be identified either from counting the native service twice (for TS transactions) or from the logs using request type.
- Other services will be calculated from logs.

3.5 Services Counts to be eliminated

There are some system initiated transactions which needs to be eliminated from the TPS calculation as they are internal to mobiquity® Money system maintenance.

Auto Settlement (sweep of money from all the wallet sequences to zero wallet sequence) is one of the services that need to be overlooked while calculating the Transaction Count and TPS data.

3.6 TPS calculation method

To calculate TPS for a given month, the following method is used:

1. Calculate the “Total Transaction” count for the month (from DB & logs)
2. For every 1 minute (60 second) interval over the month, count the number of transactions for that minute
3. Determine the “Average TPS” for each minute by calculating as follows Average TPS for a given minute = Total transactions for that minute / 60
4. Averaging out the transactions on a per second basis over a minute (dividing by 60 seconds) allows us to determine the sustained load on the system for a minute
5. This also averages out any unusual spikes in a given second as the data is averaged over a minute
6. The highest “Average TPS” for the month is considered as “TPS” of the month
7. The TPS of the month thus calculated is used for Licensing purposes for mobiquity® software

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