PROJECT NAME: M-PESA	Safaricom
DOCUMENT NAME: TRANSACTIONS EXTRACT	VERSION: 0.2
COMPANY/DIVISION: PRODUCT AND SERVICE DEVELOPMENT	DATE: 8 <sup>TH</sup> JUNE 2015

# **Transaction Extracts**

# **Interface Specification**

Version 0.2

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# Review

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# **Revision Log**

Revision Number	Revision Date	Revision	Revision made by
0.1	21 <sup>st</sup> May, 2015	Initial Draft	Eneth Kubai
0.2	8 <sup>th</sup> June, 2015	Added access IP's	Eneth Kubai

PROJECT NAME: M-PESA	Safaricom
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# 1.1 Introduction

All Organizations on M-Pesa can get data extracts of all the transactions that occurred on a specific day from the Broker SFTP server. This is the process to follow to access the data extracts.

Action	Responsibility
Establish connectivity the Broker SFTP server (See access IP's below)	3 <sup>rd</sup> Party and Vas Support team
Provide a list of Organisation short codes and Broker SPID. If the Organisation does not have a Broker SPID the SPID will be created.	3 <sup>rd</sup> Party
Create Broker SPID, 3 <sup>rd</sup> party SFTP profile and append the short codes to the account	Vas Support team
Access the data extracts	3 <sup>rd</sup> Party

# 1.1.1 Access IP'S

### **P2P** Connection

192.168.9.36

192.168.9.37

#### **IT VPN**

196.201.214.95

196.201.214.94

Port 15423

PROJECT NAME: M-PESA	Safaricom
DOCUMENT NAME: TRANSACTIONS EXTRACT	VERSION: 0.2
COMPANY/DIVISION: PRODUCT AND SERVICE DEVELOPMENT	DATE: 8 <sup>™</sup> JUNE 2015

## 1.2 Transactions Extract

#### 1.2.1 Introduction

This data feed includes all transactions (completed, failed, declined, cancelled, expired, excluding intermediate status) in the M-PESA system within the extraction period. This data feed is required to be extracted every day.

## 1.2.2 File Generation Frequency and Scheduled Task

The Mobile Money system will extract corresponding information of all transactions and send the CSV payload file every day.

A new scheduled task (based on exiting G2 platform system task plan capability) will be configured in the SP portal of Mobile Money system to perform the Organization Transaction extraction processing every day. After the process is completed, the extracted data will be packaged into a CSV payload file which is transmitted to the SFTP server within the Mobile Money system. The scheduled task can also be triggered manually when it is required to be performed immediately or the automatic task fails.

PROJECT NAME: M-PESA	Safaricom
DOCUMENT NAME: TRANSACTIONS EXTRACT	VERSION: 0.2
COMPANY/DIVISION: PRODUCT AND SERVICE DEVELOPMENT	DATE: 8 <sup>TH</sup> JUNE 2015

# 1.2.3 Payload File Format

#### 1.3.1.1 File Name Format

The format of the file name will be with timestamp which is the payload file generation time on SFTP server within the Mobile Money platform.

Example of File Name Format for Organization Transaction:

MPESA\_ShortCode\_{YYYYMMDDHh24mmss}.csv

Example of a file name:

MPESA\_000001\_20111013012608.csv

File name format description:

Field	Description
File Prefix	Indicates the prefix of the file name and refers to the contents in
	the file. The file prefix is always
	MPESA_Shortcode
YYYYMMDD	Indicates the date when the file is generated.
Hh24mmss	Indicates the time when the file is generated.
File Suffix	Indicates the type of the file. For payload file will always be .csv

The timestamp format requirements in filename are shown in the following table:

Time	Format	Example
Year	YYYY	2014
Month	MM	02
Date	DD	19
Hour	Hh24	23
Minute	mm	42
Second	ss	23

#### 1.3.1.2 Content Format

A sample file of complete contents is shown as below:

#RECEIPT\_NUMBER,DATE1,DETAILS,STATUS,WITHDRAW\_AMOUNT,PAID\_IN\_AMOUNT,B ALANCE,BALANCE\_CONFIRMED,TRANSACTION\_TYPE,OTHERPARTYINFO,TRANSACTION PARTYDETAILS,TRANSACTION\_ID,REMARK # head line

"JEK4FESX2M","2015-05-20 23:38:33","Business Payment to 254717267846 - FAITH NDWIGA via API","Completed","4,029","0","5,924,891","true","B2C Payment 254717267846 - FAITHNDWIGA","","JEK4FESX2M","0"

PROJECT NAME: M-PESA	Safaricom
DOCUMENT NAME: TRANSACTIONS EXTRACT	VERSION: 0.2
COMPANY/DIVISION: PRODUCT AND SERVICE DEVELOPMENT	DATE: 8 <sup>™</sup> JUNE 2015

The description of the CSV payload file content format is as follows:

- The file is a CSV file format.
- Each record ends with a carriage return character.
- The headline should be the title columns. The field name in the header in based on Data field but not the above example file.
- Each record occupies one line.
- Fields in the file are separated by comma (,).
- Fields' values in the file should be encapsulated by double quotes. The encapsulation will not be done on the file headers and footers where they exist.
- The values of certain fields can be blank, and these values must still be encapsulated by the double quotes, with no characters between the quotes. This is represented as the two bars with only double quotes in the file record, such as "a", "", "c", "d".
- For each segment value, the comma character (,) and double quotes are not allowed to be included in the value. If there are comma characters or double quotes in the data field which cause the third-party resolution failure, the Mobile Money system will not handle the failure.

PROJECT NAME: M-PESA	Safaricom
DOCUMENT NAME: TRANSACTIONS EXTRACT	VERSION: 0.2
COMPANY/DIVISION: PRODUCT AND SERVICE DEVELOPMENT	DATE: 8 <sup>TH</sup> JUNE 2015

#### 1.3.1.3 Data Field

The data format and field description of the Transaction Extract payload file is shown in the following table:

SN	Field Name	Туре	Example value	Description
1	RECEIPT NUMBER	String	3063400210	The receipt number for the transaction.
2	DATE	String	2015-05-20 23:38:33	Date
	DETAILS		Business Payment to	
3		String	2547XXXXXXX -	Description of the account entry
			Safaricom via API	
4	STATUS	String	Completed	The status of the transaction. The value should be completed, failed, declined, cancelled, or expired.
5	WITHDRAW_AMOUNT	String	4,029	Indicate the debit amount of the account entry. Can be principal amount or charge amount.
6	PAID_IN_AMOUNT	String	0	Indicate the credit amount of the account entry. Can be principal amount or charge amount.
7	BALANCE	String	5,924,891	Available balance of the account after the transaction.
8	BALANCE_CONFIRMED	String	true	
9	TRANSACTION_TYPE	String	Business Payment to 2547XXXXXXXX - Safaricom via API	Description of the account entry
10	OTHERPARTYINFO	String	2547XXXXXXXX - Safaricom	Transaction party info
11	TRANSACTIONPARTYDET AILS	String		
12	TRANSACTION_ID	String	JEK4FESX2M	Unique identifier of the transaction in M-PESA system.
13	REMARK	String	0	Indicate the remark of the transaction.

#RECEIPT\_NUMBER,DATE1,DETAILS,