Information Technology

MIGS Settlement

System Design Specification

1. INTRODUCTION

The document was developed to document the enhancement of Migs Visa Settlement process to optimize manual work effort and employ Robotic workforce.

1.1. Purpose

The RPA solution will be expected to eliminate a lot of the manual steps currently involved in the process For Migs Visa Settlement Banking transactions. Bot first checks for pending task, its resumes if any is found else the bot first download three reports from the File server and necessary filtering are done. Performs all necessary data manipulations. The bot goes ahead to build an upload file. If the account is balanced or not, it notifies via email with the generated report.

1.2. Overview

This document gives the overview of important parts of the system to be built and the means of communication between each component to be built. The document also gives the overview of responsibility of each component to be built and the entry and exit criteria

1.3. References

The Functional Requirement document provided by the internal audit team is one of the documents used for this integration.

1.4. Definition and Acronyms

No	Abbreviation/Term	Description
1	RPA	Robotics Process Automation
2	Bot	Virtual Worker
3	SDD	Solution Design Document
4	PDD	Process Design Document
5	TBO	Transaction Banking Operation
6	FIP	First Instant Pay
7	EFT	Electronic Funds Transfer

2. SYSTEM OVERVIEW

This document defines the high-level requirements for the proposed Agency Banking Visa settlement process. It will be used as the basis for the following activities:

- Creating solution designs
- Defining functional requirements
- Developing test plans, test scripts, and test cases
- Determining project completion
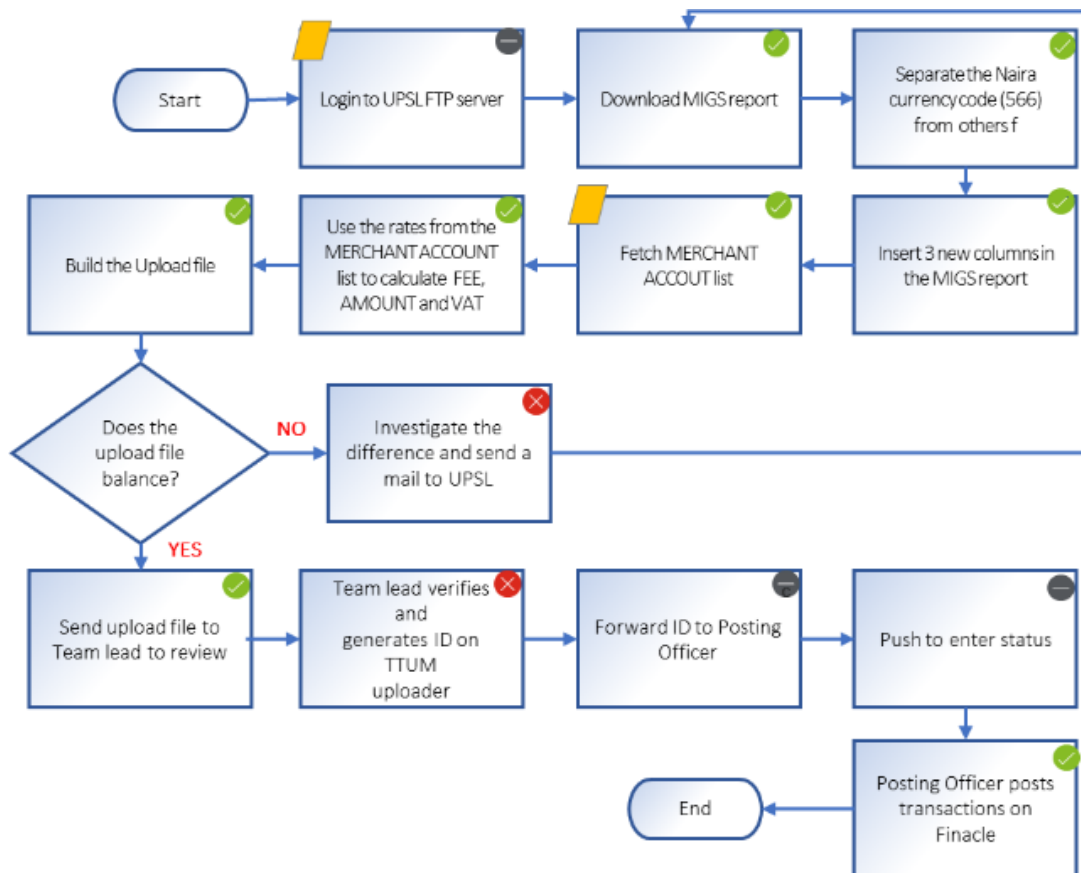- Assessing project success
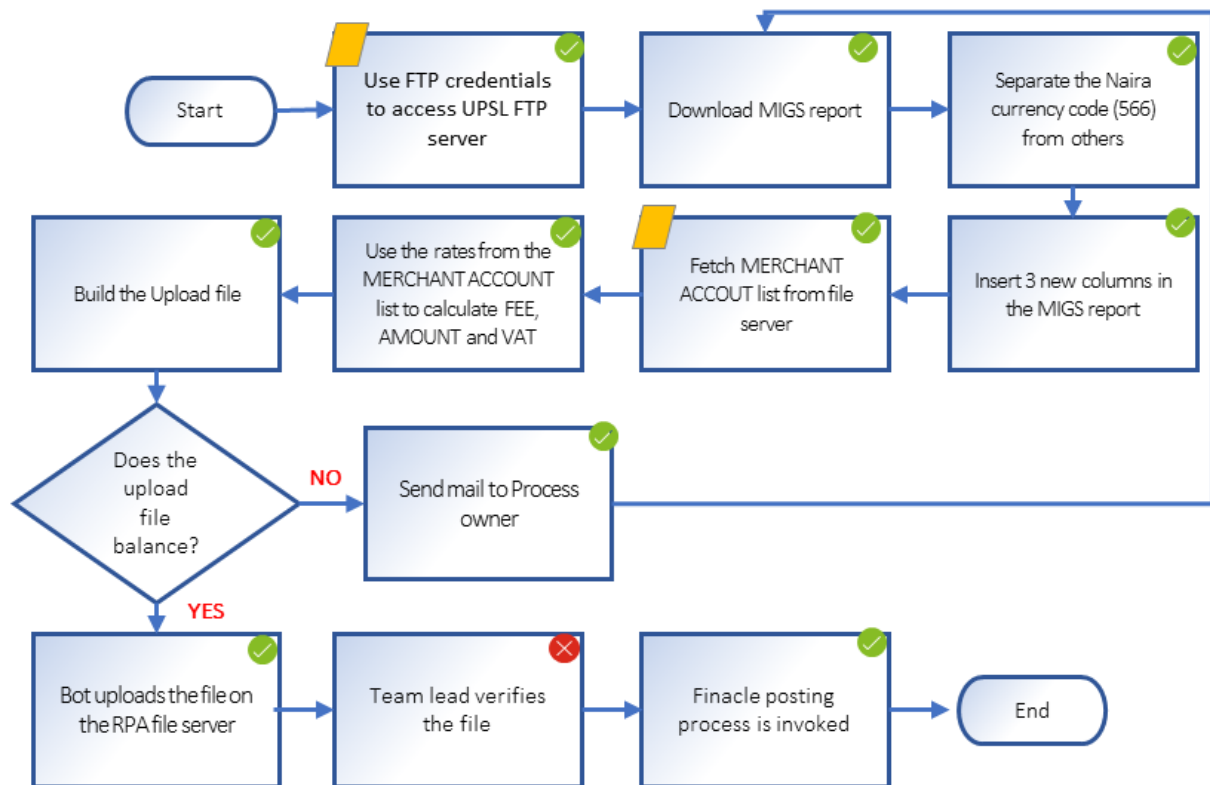
3. SYSTEM ARCHITECTURE

Download Report from Portal
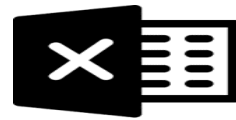
Read Report, Filter and Data Manipulation

Reporting

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Start → Login to UPSL FTP server → Download MIGS report → Separate the Naira currency code (566) from others f
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Login to UPSL FTP server

Download MIGS report

Separate the Naira currency code (566) from others f

Build the Upload file ← Use the rates from the MERCHANT ACCOUNT list to calculate FEE, AMOUNT and VAT ← Fetch MERCHANT ACCOUT list ← Insert 3 new columns in the MIGS report

Does the upload file balance? — NO → Investigate the difference and send a mail to UPSL

YES

Send upload file to Team lead to review → Team lead verifies and generates ID on TTUM uploader → Forward ID to Posting Officer → Push to enter status

Posting Officer posts transactions on Finacle → End

Current state for Agency Banking Process

Targeted state for Agency Banking Process

MIGS VISA SETTLEMENT

1. Bot opens browser and Generate Report
   - Bot goes to UPSL FTP server address
   - Bot uses FTP credentials to access the platform and download MIGS report and visa clearing files
2. Process the settlement
   - Bot opens the MIGS report
   - Bot sorts by ORIGCLEARCCY to separate 566 from others (treat only 566)
     i. Bot fetches the MERCHANT ACCOUNT list to get the NGN RATES for the merchant names in the MIGS report

   - Bot inserts 3 new columns to calculate FEE (ORIGINAL AMT * RATE), AMOUNT DUE MERCHANT (ORIGINAL AMT – FEE) and VAT (7.5/107.5*FEE)
   - Bot sorts by Merchant names to separate each merchant's transaction
   - Bot totals the FEE, AMOUNT and VAT for each merchant
   - Bot subtracts FEE total from AMOUNT total to get ACTUAL AMOUNT
3. The Bot will compare the total ORIGINAL AMOUNT on the naira sheet of the visa clearing file with the ORIGINAL AMOUNT on the MIGS report

4. Extract all items in the generated report and build an Upload File
   - To build the unique narration for AFRICAN TOURISM merchant, concatenate RRN-, DD.MM.YY, RRN number from MIGS report, AFRICAN TOURISM

- Bot copies and pastes the total ORIGINAL AMOUNT for all merchants to the 48934389043901-account number
- Bot copies and pastes the totals for ORIGINAL AMOUNT, AMOUNT DUE MERCHANT (credit 2029798609), STAMP DUTY (debit 2029798609 and credit 48934300008501), VAT (credit 51357000003001) and ACTUAL AMOUNT (credit 51357000003001) for each merchant
- Note: STAMP DUTY of N50 for each transaction is charged on ORIGINAL AMOUNTS that are 10,000 and above
- Note: AFRICAN TOURISM has a cap for the FEE charged. The FEE charged cannot be more than N2,000. If it is more than 2,000 the Bot will change it to 2,000
- Note: for AFRICAN TOURISM, the Bot copies and pastes AMOUNT DUE MERCHANT, STAMP DUTY, VAT and ACTUAL AMOUNT
- Note: For FBN INSURANCE, the Bot copies and pastes ORIGINAL AMOUNT and FEE for each transaction, ACTUAL AMOUNT, VAT total and STAMP DUTY

5. If the upload file does not balance, send a mail to the process owner
6. If it balances, Bot uploads the file on the RPA file server

3.2.1.   Network system
Network software and protocols for systems to communicate:

a.   TCP/IP
b.   HTTP
c.   HTTPS
d.   SFTP

3.2.2.   Authentication Credentials
Valid authentication credentials are required to run software from third party vendors:

a.   To use application development tools
b.   To use web server, application server and database software in development, test and
c.   production mode

3.   DatabaseServer
Oracle Server

4.   Client Computers
Windows (Preferred) client computers

5.   Production support systems
Web server computer(s) and related hardware support.

4. REQUIREMENT MATRIX

Requirement	Fulfilling component
Download Report from the FTP File Server	Bot
Send Upload file Report	Bot

5. DOCUMENT CHANGE RECORD

Date	Version	Author	Change Details
05/09/2022	1.0	Bakare Sodiq	Migs Settlement

CREATEDBY

Name	Department/ Unit	Signature	Date
Bakare Sodiq	**Developer/RPA**		**06/10/2022**

REVIEWEDBY

Name	Department/ Unit	Signature	Date

APPROVALS

Name	Department	Designation	Signature	Date
	IT			