|  |  |
| --- | --- |
|  | Solution Design Document |
|  | <customer> |
|  | [Process Name] |
|  | Version 1.0 |

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# Document Control

## Authors

|  |  |  |
| --- | --- | --- |
| Date | Author Name | Role |
| 03/10/2019 | <name> | Solution Architect |
|  |  |  |

## Version Controls

|  |  |  |  |
| --- | --- | --- | --- |
| Version History | | | |
| Date | Version # | Revised By | Reason for change |
| 03/10/2019 | 1.0 |  | Initial Draft |
|  |  |  |  |

## Document Review and Sign-Off

This document has been approved as the official Solution Design Document for <process name>, and accurately reflects the current understanding of business requirements. Following approval of this document, requirement changes will be governed by the project’s change management process, including impact analysis, appropriate reviews and approvals.

|  |  |  |  |
| --- | --- | --- | --- |
| Document Approvals | | | |
| Date | Approver Name | Project Role | Signature/Electronic Approval |
|  |  |  |  |
|  |  |  |  |

# Introduction

## Purpose of this Document

The purpose of this document is to describe the functional and non-functional requirements for automation of the use case/process, including any design constraints and factors necessary to provide a complete comprehensive description of the requirements. This document also details the low-level design of the robot built for automation of the chosen process.

This document serves as an agreement between the customer, business users, solution architect and developers on the future behaviour of the robot.

# Process Overview

Provide details about process

## RPA - In Scope

e.g.

1. Email Flow
2. Shared Folder Flow
3. IQ Bot Data Extraction – 100 templates
4. …
5. Post Process - Notification & Update into the tracker

## RPA - Out of Scope

e.g. private customers

# Assumptions

e.g. private customers

# Validations

e.g.

1. File exist for all templates and Inputs
2. Only email received from particular senders, whose email ids mentioned in parameters file will be picked-up.
3. Validation condition for cases where email is not received after particular time period, bot to send reminder.

# Applications

e.g. All the Web+ environment for DEV, UAT and PROD should be identical.

## Application Access and Bot credentials

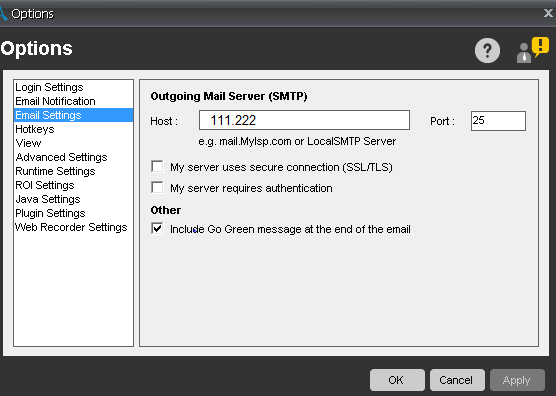
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Application Name | Application Type | Role | Access Method | Password management |
| ABC | Web Application | SME | User ID and password | Credentials to be stored in AA control room credential vault for ABC |
| Microsoft Excel | MS office application | NA | No password |  |
| … |  |  | DB |  |

## Pre-requisites

All application dependencies, libraries, required plugin installations etc.

## Email setup

e.g.



# Process Design Document

<pls embed here approved PDD or link to shared drive, link to recordings and other artefacts

# High-level TO-BE solution

## To-Be solution description

Short description incl differences to AS-IS process.

## To-Be process flow

Process workflow diagram

# Hardware and Software requirements

## Environment details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Environment name | Machine ID | User ID | Status | Expected by |
| e.g. DEV VM | 999 | Bot1@ | completed | --- |
| e.g. UAT VM | 888 | Bot2@ | Open | 19-May-2020 |
|  |  |  |  |  |

## BOT Execution

|  |  |  |
| --- | --- | --- |
| # | Details | Bot #1 |
| 1 | e.g. Mode of execution | Daily (0600 – 2000) and Email based. |
| 2 | Window of Operation (Hrs/Day) | 9hrs/day |
| 3 | Frequency | Excluding Sundays and Sunday |
| 4 | Initiation Trigger | Time and Email |
| 5 | License Usage | Dedicated |
| 6 | Bot Utilization | 8 hours per day |
| 7 | Bot Run Time Schedule | Excluding Sundays and Saturday |

# Infrastructure Architecture

If necessary: e.g. Below diagram is to benefit the new developers to understand the RPA setup

# Bot Framework

## Bot Folder Structure

Below are the folders which will be created in bot execution environment to be utilized during the bot execution. The folders are to be maintained in AAE My Docs folder or user provided folder path in config file.

|  |  |  |
| --- | --- | --- |
| # | Folder name | Description |
| 1 | e.g. Input | e.g. Any inputs to the BOT should be placed in the folder. |
| … |  |  |

## Exception Handling / Alerts

|  |  |
| --- | --- |
| # | Exception |
| 1 | e.g. If excel performance is slow BOT will wait for specific time and end the execution and send email to BOT Error Email id. |
| … | e.g. If required columns are not found in the input file bot will send email to BOT Error Email id |

## Configuration

e.g.

<ABCApplication>: This element stores ABC application path

<MasterList>: This element is specifying where to store Master List file

…

## Parameters

Parameter files, tabs, Email templates

## Technical Design

Task Flow diagram

### Main Task Design

e.g. **Main MasterTask - MT01\_Test**,

is the only MasterTask that has to be called during automation. Its this parent task which calls the other 2 main task and subsequent subtasks.

* Automation Starts with Header comments containing all details related to process
* Next ConfigAndFolderStructure subtask is called which reads config and creates the folder structure for automation
* …

**Main Task 2: MT02\_DailyRun**

…

### Sub-tasks

e.g. **Sub Task 1: ST03\_Placeholder**

1. Downloaded file from email is checked only .xlsx file is picked up.
2. File is opened, file validation is done.
3. …

## My Docs

e.g. $AAAplicationPath$\Automation Anywhere\My Docs\CS\CS01\**Config**

## My Metabots

e.g. **Outlook Metabot – Outlook.mbot**

1. Selecting Profile: Selects the bot profile, bot email id for it picked up from config file
2. Selecting Account: Selects the account for which outlook is setup
3. …

## Scripts

**e.g. ColourCell.vbs**: Used to color the cell as Yellow, this is when pending data from previous squad has to be copied to 2nd clinical SME sheet and first cell has to be highlighted as yellow.

## MasterTracker Details

e.g. details on the excel process tracker

## Logs

### Audit Log

This CSV log contains information on the performance of the bot.

* This file will be in the location <pls enter the location: “Config Log Folder\Logs\Audit log\<<Date>>\Activity Log\_<<Timestamp>>.csv">
* This log will also be used to feed into a monitoring the BOTs.

**Format:** <pls enter the format: Date time, BOT ID, BOT Operator, Event Description, Transaction ID>

### Error Log

This CSV log to contain information on the errors noticed during BOT execution.

* This file will to be in the location <pls enter the location: “Config Log Folder\Error log\<<Date>>\Error Log\_<<Timestamp>>.txt">
* This log will also be used to feed into a monitoring the BOTs.

**Format:** <pls enter the format: Date time stamp, BOT ID, Error Line, Error Description, Transaction ID>

### Process Log

The bot will create log entry in each action performed by bot into a csv file. The CSV log is a way to help the process owner or the BOT owner to understand more the process steps (from business perspective).

* This log is to provide any information that the Process owner or BOT owner will need to know regarding the execution of the bot.
* Log all major steps involved during BOT execution and these steps to be documented in the BOT user guide.
* This file will be stored in the following location: <pls enter the location: "Config Log Folder\Logs\<<Date>> \Process Log\_<Timestamp>>.csv".>

**Format:** <pls enter the format: Date time stamp, BOT ID, Process step, Transaction ID>

# Appendix