

Process DESIGN Document

{Title}

{Creation Date Month DD,YYYY}

Adobe

India

Document Review and Sign-off

The information is standard Company Confidential but due to its sensitivity it has restricted distribution and viewing within Adobe.

|  |  |
| --- | --- |
| **Classification** | Company Confidential |
| Definition | Information is Group confidential and needs to be protected |
| Context | Where loss of information confidentiality would result in significant harm to the interests of the organization, financial loss, embarrassment or loss of information |

Review and sign-offs History

The following table contains the people required to sign-off and/or review this document and those that require the document for information only.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Version | Description | Developer | SME Approver |
| {Creation Date} | {Draft version} | {Version Description } | {Developer Name} | {SME Name} |

Table of Contents

[Document Review and Sign-off 1](#_Toc75789067)

[Review and sign-offs History 1](#_Toc75789068)

[2 Introduction 3](#_Toc75789069)

[3 Process Overview 3](#_Toc75789070)

[3.1 Process Description 3](#_Toc75789071)

[3.2 Process Scorecard 4](#_Toc75789072)

3.3 Application Used……………………………………………………………………………………………………………………………….....4

[3.4 “As**-**Is” Process 4](#_Toc75789073)

[3.5 “To-Be” Process 5](#_Toc75789074)

[4 Solution Designs 6](#_Toc75789075)

[4.1 Robotic Resource Requirement 6](#_Toc75789076)

[4.2 Solution Description 7](#_Toc75789077)

[4.2.1 About Robotic Enterprise Framework 7](#_Toc75789078)

[4.2.2 Solution Description 9](#_Toc75789079)

[4.3 BOT Structure 9](#_Toc75789080)

[4.4 Activities Used 9](#_Toc75789081)

[4.5 Orchestrator Queues 10](#_Toc75789082)

[4.6 Operational Control and Alerting 10](#_Toc75789083)

[4.6.1 Alerting 10](#_Toc75789084)

[4.6.2 Business Exceptions 10](#_Toc75789085)

[4.6.3 System Exceptions 11](#_Toc75789086)

[4.6.4 Special Case 11](#_Toc75789087)

[4.7 Data Security and Credentials 11](#_Toc75789088)

[4.7.1 Data Storage 11](#_Toc75789089)

[4.7.2 Credentials 12](#_Toc75789090)

[5 Key Assumptions 12](#_Toc75789091)

[5.1 Business Assumptions 12](#_Toc75789092)

[5.2 Technical Assumptions 12](#_Toc75789093)

[6 RPA Business Handover 13](#_Toc75789094)

[6.1 Process Release Information 13](#_Toc75789095)

[6.2 Deployment Pre-requisites Details 13](#_Toc75789096)

[6.3 BOT execution 13](#_Toc75789097)

[6.3.1 Pre-requisites before executing the BOT 13](#_Toc75789098)

[6.3.2 Steps To Run BOT 14](#_Toc75789099)

[6.4 Troubleshooting 14](#_Toc75789100)

[Appendix A 17](#_Toc75789101)

[A.1. References 17](#_Toc75789102)

[Given below are the references for this document: 17](#_Toc75789103)

# Introduction

The Process Design Document outlines the business process chosen for automation. It describes business process, solution design to be developed within UiPath , the conditions and rules of the process prior to automation **(AS IS)** as well as the new sequence of actions that the process will follow as a result of preparation for automation **(TO BE)**.

Once agreed as the basis for the automation of the target process, the flowchart and assumptions will be used as a platform from which the automated solution will be designed.

Changes to this business process may constitute a request for change and will be subject to the agreed agility program change procedures.

# Process Overview

## Process Description

{Section contains general information about the process before automation}

|  |  |
| --- | --- |
| Item | Description/Answer |
| Process Full Name | {Title} |
| Department |  |
| Short Description (operation, activity, outcome) | {Process Description} |
| Input data description |  |
| Output Data description |  |
| Number of times the process is ran by selected frequency |  |
| Process execution time |  |
| Process Restrictions | Example: The applications can be used only between 7 AM-8PM during work days and not allowed to be used during weekend. |
| Peak Period (s) | To understand peaks in order to design a robust and scalable solution.  Example:  Beginning of month, usually from 28th to 30th day of each month |
| Number of person performing the process |  |
| Expected Volume increase during next periods | To understand peaks in order to design a robust and scalable solution.  Example: 10-20% |
| SLA |  |

\*Add more rows to the table to include relevant data for the automation process. No fields should be left empty. Use “N/A” for the items that don`t apply to the selected business process.

## Process Scorecard

|  |  |  |  |
| --- | --- | --- | --- |
| Frequency | Total Time Elapsed | FTE Involved | ROI |
|  |  |  |  |

## 

## Applications Used

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Application Name | Application Version | Description |
|  | {Application name for automation} |  |  |

**\*Add rows if required**

## “As-Is” Process

#### Steps Description

{Mention process steps with screenshots if available }

* **Detailed Level Process Map**

{This section describes the process at key-stroke level}

#### Flow Diagram

|  |
| --- |
| **Flow Diagram – “As-Is”** |
| {%AsIs\_FlowDiagram} |
| {%LucidChart\_Link} |

**\*Flow Diagram should be designed using Lucid Chart**

## “To-Be” Process

#### Steps Description (Automation Specific)

{Mention automation process steps with screenshots if available }

**Sample Email Format:** Success Scenario

{%attachmail\_screenshot}

**Sample Email Format:** Business Exception Scenario

{%attachmail\_screenshot}

**Sample Email Format:** System Exception Scenario

{%attachmail\_screenshot}

#### Flow Diagram

|  |
| --- |
| **Flow Diagram – “To-Be”** |
| {%ToBe\_FlowDiagram} |
| {%LucidDiagram\_Link} |

**\*Flow Diagram should be designed using Lucid Chart**

#### Files/Folders Details

|  |  |
| --- | --- |
| File\Folder Name | Path |
| Config.xlsx | DEV - Data\Config\Config-DEV.xlsx  UAT – Data\Config\Config-UAT.xlsx  PROD - Data\Config\Config-PROD.xlsx |
| I/P files | Data\Input\ |
| O/P files | Data\Output\ |
| Screenshots | Exception\_Screenshots\ |

**\*file path can be modified or changed according to use case if required**

#### Schedule

|  |  |  |
| --- | --- | --- |
| Process/Sub-process | Schedule Day | Schedule Time |
|  |  |  |

# Solution Designs

## Robotic Resource Requirement

|  |  |  |
| --- | --- | --- |
| **Requirements** | **Estimation** | **Remarks** |
| **Number of concurrent robots per request** |  |  |
| **Total number of concurrent robots required** |  |  |
| **BOT Type** |  |  |

## Solution Description

### About Robotic Enterprise Framework

The framework is meant to be a template that helps the user design processes that offers a way to store, read, and easily modify project configuration data blended with robust exception handling scheme and event logging for all exceptions and relevant transaction information. Further, the framework also includes strong features like to store & extract the credentials in an e Moreover, this framework has an effective logging enabled with options of customized logs designed for the business exceptions where the BOT redirects the transaction item to the manual workbasket.

### Solution Description

{This section contains steps of solution design for automation}

## BOT Structure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Workflow Name** | **Input Variable(s)** | **Output Variable(s)** | **Description** |
| 1 | CloseAllApplications.xaml | NA | NA | It logs out and closes all the applications opened during the process. |
| 2 | GetAppCredentials.xaml | in\_Credential | out\_Username  out\_Password | This workflow securely fetches or creates and uses a set of credentials defined at its input. It first tries to fetch them from Orchestrator. Failing that, it tries to fetch them from the Windows credential manager. If they do not exist, it creates them and then outputs them |
| 3 | GetTransactionData.xaml | in\_TransactionNumber  in\_Config out\_TransactionItem  io\_TransactionData | io\_TransactionData  out\_TransactionID  out\_TransactionField1  out\_TransactionField2 | Get data from spreadsheets, databases, email, web API or UiPath server queues. If no new data, set out\_TransactionItem to Nothing. For a linear process (not repetitive), set out\_TransactionItem only for in\_TransactionNumber 1 - first and only transaction. |
| 4 | InitAllApplications.xaml | in\_Config | NA | Open and initialize all applications involved which specific to the process. |
| 5 | InitAllSettings.xaml | in\_ConfigFile  in\_ConfigSheets | in\_Config | This workflow outputs a settings Dictionary with key/value pairs to be used in the project. Settings are read from local config file then fetched from Orchestrator assets. Assets will overwrite the config file settings |
| 6 | KillAllProcesses.xaml | in\_Config | NA | It kills all the applications that are open before/after the execution of the process. |
| 7 | SetTransactionStatus.xaml | in\_Config  in\_SystemException in\_BusinessRuleException  in\_TransactionItem  in\_Result io\_TransactionNumber  io\_RetryNumber  in\_TransactionField1  in\_TransactionField2  in\_TransactionID | io\_RetryNumber  io\_TransactionNumber | This workflow sets the TransactionStatus and Logs that status and details in extra Logging Fields. The flowchart branches out into the three possible Transaction Statuses: Success, Business Exception and Application Exception( for Both system and business exceptions, the status of the transaction is set to failed) |
| 8 | TakeScreenshot.xaml | in\_Folder  io\_FilePath | io\_FilePath | This workflow captures a screenshot and logs its name and location. It then saves it. If io\_FilePath is empty, it will try to save the picture in in\_Folder. It uses .png extension. |

**\*Add rows specific to use case**

## Activities Used

|  |  |  |
| --- | --- | --- |
| **#** | **Activity Name** | **Version** |
| 1 | Credentials Activities | 1.1.6479.13204 |
| 2 | Database Activities | 1.2.6863.32528 |
| 3 | Excel Activities | 2.5.3 |
| 4 | Outlook Activities | 1.1.1 |
| 5 | Webservices Activities | 2.2.0 |
| 6 | System Activities | 19.3.0 |
| 7 | CyberArk Activities | 0.1.6852.24230 |
| 8 | Web Activities | 1.4.1 |

**\*Update version numbers & add activities if required**

## Orchestrator Queues

|  |  |  |
| --- | --- | --- |
| **#** | **Queue Name** | **Description** |
|  | {Orchestrator Queue Name} |  |

## 

## Operational Control and Alerting

### Alerting

The alerting refers to the activity of notifying the start and end of a session

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Method** | **Recipient(s)** |
| Robot start up | No notification is going to inform about the successful start of the robot | {Mail Id} |
| Robot completion | Summary Email to be sent | {Mail Id} |
| System Exception | Robot will retry to process the failed item once. If the transaction fails even after retrying, it will send an email to SME and exit the process | {Mail Id} |
| Business Exception | Robot will send an exception email to SME | {Mail Id} |

### 

### Business Exceptions

{This section refers to the activity of notifying the users in case of any business exception}

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Method** | **Recipient(s)** |
|  |  |  |

## \*Add rows if required

### System Exceptions

{This section refers to the activity of notifying the users in case of any system exception - system hang/ changes to application behavior will be retried once using the UiPath Retry mechanism and if the transaction encounters any system exception even after retry attempt, it will send an email to the Owner}

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Method** | **Recipient(s)** |
|  |  |  |

## \*Add rows if required

### Special Case

{This section refers to the scenario and activity of notifying the users in case of any special exception}

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Method** | **Recipient(s)** |
|  |  |  |

## Data Storage and Credentials

### Data Storage

{This section contains process database details}

|  |  |
| --- | --- |
| Item | Description/Answer |
|  |  |
|  |  |

## \*Add rows if required

### Credentials

|  |  |  |
| --- | --- | --- |
| Application | Credential Location | CyberArk Object Name |
| {Credentials used by BOT} |  |  |

## \*Add rows if required

### Assets

|  |  |  |
| --- | --- | --- |
| Asset Name | Asset Type | Asset Value |
| (Orchestrator Asset) |  |  |

## \*Add rows if required

## Business Assumptions

{This section contains process specific Business assumptions}

* The structure present in the Configuration template should not be changed.
* The format for all the folder structure and file naming conventions should not be changed

## \*Add more process specific business assumptions

## Technical Assumptions

{This section contains process specific Technical assumptions}

* No substantial changes to the user interface of process specific applications
* The production environment (access to all applications, screen resolution, privileges created to the Bot ID’s) is an exact replica of the UAT & development environment.
* All the folder path’s, file structure and naming conventions remains same in development, UAT and production environment.
* Robot access rights and privileges to all the process specific applications must be an exact replica as to that of business users.
* Any scenario/exception not being discussed or captured in this document will not be handle by Bot.
* Excel will be used for configuration of variable and its values.

## \*Add more process specific Technical assumptions

***Note: - If any of the above business/technical assumptions are changed there will be an impact on the BOT run hence immediately the BOT needs to be stopped, thus we need to configure the changes accordingly and make the necessary changes in the code if required, after a thorough testing phase & sign-offs from the business then we can restart the BOT run/Schedule it once again.***

# RPA Business Handover

## Process Release Information

|  |  |  |
| --- | --- | --- |
| Process Release Date |  | |
| Orchestrator Process Name |  | |
| Deployment Zone | Production Environment | |
| Production VM ID |  | |
| # of BOTs |  | |
| Orchestrator BOT Name |  | |
| BOT ID | **UAT** | **PROD** |
|  |  |

## Deployment Pre-requisites Details

|  |  |
| --- | --- |
| **Operating System** | Windows 2016 Server |
| **Microsoft Office version** |  |
| **Screen resolution** | 1440\*900 (This should not be changed) |

## Git Repository Path

{Path of Git Repository}

## BOT execution

### Pre-requisites before executing the BOT

1. Do not work on the system while the task is running as it may affect the task.
2. Please do not touch keyboard and mouse while the task is running as it may affect the task.
3. Before running the BOT please ensure the input files listed below are present in the correct network.
4. All the browsers and excel files must be closed.

#### Environment Set-Up

|  |  |
| --- | --- |
| **UiPath Settings** | Installation of UiPath studio in the VM and connecting the studio to the Production instance of the Orchestrator |
| **Credential Manager/CyberArk Settings** |  |
| **Application Settings** | Enable Chrome extensions, configure SAP connections (RS2,PROD) if required |
| **Configuration Settings** |  |

#### Do’s and Don’ts

* Do not work on the system while the task is running as it may affect the task.
* Please do not touch keyboard and mouse while the task is running as it may affect the task.
* Before running the BOT please ensure the input files listed below are present in the correct network shared folder.
* All the browsers and excel files must be closed.
* Production m/c should not be open without core team approval.

### Steps To Run BOT

[Click Here](https://wiki.corp.adobe.com/display/RPA/How+to+run+BOT)

## Troubleshooting

Once the BOT is developed, the To-Be Process flow will be owned by respective developer until the PAT stage, post Go-live of the process the To-Be Process flow will be owned by RPA-Core team members (assigned to the respective core team member)

**Point of Contact if there are issues with regards to BOT post GO-Live:-**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Issue occurrence** | **Point of Contact -Team** | **Email IDs** | **Contact** | **Procedure followed** |
| 1 | Issue with BOT maintenance | RPA Core Team | rpa-core@adobe.com | 91-80-4193-9241 | Raise a JIRA ticket and assign to core team. |
| 2 | CyberArk Password related issues | RPA Core Team | rpa-core@adobe.com | 91-80-4193-9241 | Raise Security request and raise JIRA assigning it to core team. |
| 3 | Issue related to Development/Change Requests/Enhancements | RPA Core Team | rpa-core@adobe.com | 91-80-4193-9241 | Raise change request in JIRA ticket assign it to core team |
| 4 | Package Deployment in to Production | RPA Core Team | rpa-core@adobe.com | 91-80-4193-9241 | Raise a JIRA ticket assign it to core team |

**BOT Maintenance: -**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Applications involved** | **Password maintenance** | **Point of Contact -Team** | **Frequency** | **Email IDs** | **Contact** |
| 1 | Virtual Machine Login/Login to console | Password maintenance/Autorotation in CyberArk | RPA Core Team | 30 days | rpa-core@adobe.com | 91-80-4193-9241 |
| 2 | Power BI/ Kafka Database | Password maintenance/changes to be made in CyberArk | RPA Core Team | 90 days | rpa-core@adobe.com | 91-80-4193-9241 |

***Note: - Follow up’s for all the above mentioned BOT maintenance issues will be taken care by RPA core team and will send out follow up emails whenever the issue needs to be addressed by the respective point of contact members.***

**On call support Details: -**

RPA on-call and steps to launch CSO are published here:

<https://wiki.corp.adobe.com/display/RPA/Robotic+Process+Automation#RoboticProcessAutomation-On-callSupport>.

***Pager Duty*** queue name of RPA platform is: **Platform Engineering - RPA**

Support information for RPA Core team members is [compiled here.](https://wiki.corp.adobe.com/display/RPA/On-call+Instructions+for+RPA+Core)

#### Opening a CSO

A CSO can be opened by calling the TDM Team:

* **Primary - Internal:** x67093
* Primary - External: 1-408-536-7093
* Secondary: x67094
* Secondary - External: 1-408-536-7094
* **Email:** [tdmteam@adobe.com](mailto:tdmteam@adobe.com)

Or by calling the **Operations Center**:

* **Internal: x65550**
* External: 1-800-285-1203
* **Email:**[noc@adobe.com](mailto:noc@adobe.com)

A CSO will be launched based on one or more of the following criteria:

* Revenue is at stake
* Adobe brand could be negatively impacted
* Significant number of users/customers affected
* Any financial impact on Adobe's operations
* A service loss directly impacting external customers or vendors
* A service loss impacting the Information Management platform
* A site wide Infrastructure outage at a major site (San Jose, Seattle, Lehi, etc.)
* A pre defined alert is triggered (potentially having one of the impacts above)

**If there is any doubt as to the impact of a particular outage, a CSO will be launched as a precaution.**

**To request a CSO, please CALL, do NOT email the Operations Center.**CSOs can also be reported by the Service Desk or Vendors or be detected by Service Monitoring.

Please have as much detail as possible when contacting the Operations Center.  Details the Operations Center needs include:

* **Problem Statement - What is the issue?**
* Start Time - When did the issue begin?
* Service Impact - Which services are impacted?
* Customer Impact - How are customers impacted? How many customers? Are they internal or external?

**More info on CSO process:**[**https://adobe.sharepoint.com/sites/incident/CSO-Process/SitePages/Home.aspx**](https://adobe.sharepoint.com/sites/incident/CSO-Process/SitePages/Home.aspx)

For any Production issues related to the BOTs, please raise tickets with the Production support team on [RPA Core Team](mailto:rpa-core@adobe.com).

***Appendix A***

***A.1.* References**

Given below are the references for this document:

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Reference Name** | **Reference Location** | **Reference Document** |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |