**Journal Vouchers Automation**

Process Design Document (PDD)

|  |  |  |
| --- | --- | --- |
| Date issued: | Dd/MMM/yyyy |  |
| Replaces: | N/A - Initial Document |  |

Table of Contents

[1. INTRODUCTION 6](#_Toc161735792)

[1.1 Purpose 6](#_Toc161735793)

[1.2 Objectives 6](#_Toc161735794)

[1.3 Key Contacts 6](#_Toc161735795)

[1.4 Revision History 7](#_Toc161735796)

[1.5 Minimum Pre-Requisites for Automation 8](#_Toc161735797)

[2. Process Overview – As Is & To Be 8](#_Toc161735798)

[2.1 Process Overview 8](#_Toc161735799)

[2.2 High Level – Automated Process Map 11](#_Toc161735800)

[3. As Is Process Description 11](#_Toc161735801)

[3.1 AS IS Process Map 11](#_Toc161735802)

[3.1.1 High Level Process Map 11](#_Toc161735803)

[4. To Be Requirements & Business Rules 13](#_Toc161735804)

**[Process Screenshots](#_Toc161735805)** [23](#_Toc161735805)

[SCR01 – SAP Login 23](#_Toc161735806)

[SCR02.1 - New JV Form-EN 24](#_Toc161735807)

[SCR02.2 – New JV Form-FR 24](#_Toc161735808)

[SCR03.1 - SI & SA doc type identification- EN 25](#_Toc161735809)

[SCR03.2 - SI & SA doc type identification-FR 25](#_Toc161735810)

[SCR04.1 – Credit/Debit Total & JV Balance-EN 25](#_Toc161735811)

[SCR04.2 – Credit/Debit Total & JV Balance-FR 25](#_Toc161735812)

[SCR05.1 – Mandatory fields in JV form Credit/Debit tables-EN 26](#_Toc161735813)

[SCR05.2 – Mandatory fields in JV form Credit/Debit tables-FR 26](#_Toc161735814)

[SCR06.1 – Optional fields in JV form Credit/Debit tables-EN 27](#_Toc161735815)

[SCR06.2 – Optional fields in JV form Credit/Debit tables-FR 27](#_Toc161735816)

[SCR07 – Navigate to FV50 28](#_Toc161735817)

[SCR07.1 – Enter Company Code in FV50 transaction window 28](#_Toc161735818)

[SCR08 – Enter details in FV50 transaction window 28](#_Toc161735819)

[SCR09 – Select trading partner under the Extras tab 29](#_Toc161735820)

[SCR10 – Enter the trading partner - 3 digits max 29](#_Toc161735821)

[SCR11 – Bypass the soft message by hitting enter 29](#_Toc161735822)

[SCR12 – Enter data in to Credit and Debit Table in SAP 30](#_Toc161735823)

[SCR13 – Click Save as completed in SAP 30](#_Toc161735824)

[SCR14 – Capture SAP status message and error msg in the bottom of the SAP screen 30](#_Toc161735825)

[SCR15 - Click Open a new GUI in SAP 31](#_Toc161735826)

[SCR16 - Capture SAP successful status message, message No & Document Number 31](#_Toc161735827)

[SCR17 - Navigate to FBV3 32](#_Toc161735828)

[SCR18 – Enter Company Code, Doc.Number & Fiscal Year in SAP 32](#_Toc161735829)

[SCR19 – Create Attachment in SAP 33](#_Toc161735830)

[SCR20 – Provide file path and click open to upload to SAP 33](#_Toc161735831)

[SCR21 – Capture the file upload status message from the bottom of SAP screen 34](#_Toc161735832)

[5. To Be Process Description 34](#_Toc161735833)

[5.1 Applications 35](#_Toc161735834)

[5.2 Detailed TO BE Process Map 36](#_Toc161735835)

[5.3 Document Processing Validation & Calculation Rules for Fields 36](#_Toc161735836)

[5.3.1 Validation Rules 36](#_Toc161735837)

[5.3.2 Calculations 39](#_Toc161735838)

[5.4 Document Processing Field to System Field Mapping 39](#_Toc161735839)

[5.5 Input Data Description 40](#_Toc161735840)

[5.6 Parallel Initiatives 41](#_Toc161735841)

[5.7 Out of Scope for RPA 41](#_Toc161735842)

[5.8 Business Exceptions Handling 42](#_Toc161735843)

[5.8.1 Known Business Exceptions 42](#_Toc161735844)

[5.9 Systems Exception Handling 44](#_Toc161735845)

[5.9.1 Known System Exceptions 44](#_Toc161735846)

[5.9.2 Unknown System Exceptions 46](#_Toc161735847)

[5.10 Reporting 46](#_Toc161735848)

[6. Other 48](#_Toc161735849)

[6.1 Referenced Documentation 48](#_Toc161735850)

# INTRODUCTION

## Purpose

The Process Definition Document outlines the business process chosen for automation. The document describes the sequence of steps performed as part of the business process, the conditions and rules of the process prior to automation (AS IS) as well as the new sequence of steps that the process will follow as a result of automating the process partially or entirely (TO BE).

**The PDD is a communication document between:**

* The RPA Business Analyst and the SME/Process Owner. The goal is to ensure that the RPA Business Analyst has the correct understanding of the process and has represented it accurately.
* The RPA Business Analyst and the Development team (represented by the Solution Architect and RPA Development Lead). The goal is to ensure that the process is documented appropriately and to a sufficient level of detail so that the Development team can then create the solution based on the PDD content

## Objectives

The business objectives and benefits expected by the Business Process Owner after automation of the selected business process are:

* increase productivity among members of the CFOB Accounting Operations group (five staff) via automation of journal voucher (JV) requests
* to reduce the risk of human error by minimizing manual entry
* Focus on value-added activities instead of manual data entry

## Key Contacts

This document includes concise and complete requirements of the TO BE process and it is built based on the inputs provided by the process Subject Matter Expert (SME)/ Process Owner.

The Process Owner is expected to review this document and provide signoff for accuracy and completion of the AS IS and TO BE process steps, context, impacts and complete set of process exceptions.

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Contact Details | Notes |
| Process Owner | Duane Wilson | duane.wilson@hc-sc.gc.ca |  |
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| ERPA Manager | Lorna Hart | lorna.hart@hc-sc.gc.ca |  |

## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version | Created by / Role | Notes |
| 2024 Feb 12 | V1 | Dan B, Bhargava S |  |
| 2024 Feb 29 | V2 | Dan B, Bhargava S |  |
| 2024 Mar 03 | V3 | Dan B, Bhargava S |  |
| 2024 Mar 12 | V4 | Dan B, Bhargava S |  |
| 2024 Mar 19 | V5 | Dan B, Bhargava S |  |

## Minimum Pre-Requisites for Automation

Development of Automation Solution will begin only after the following items are provided:

* Filled in Process Definition Document
* Test Data to support development
* User access and user accounts creations (licenses, permissions, restrictions to robot accounts)
* Credentials (user ID and password) required to logon to machines and applications

# Process Overview – As Is & To Be

This section contains an overview of the AS IS and TO BE processes.

## Process Overview

The information provided below is for the AS IS process unless otherwise indicated to be specifically for the automation / TO BE process.

|  |  |
| --- | --- |
| Item | Description/Answer |
| Process Name | **Business Process Name:** Journal Vouchers  **Automation Process Name:** Journal Vouchers Automation |
| Automation Area | Accounting Operations group from CFOB |
| Short Description | **Purpose of the Process**:  CFOB is currently receiving journal voucher (JV) requests on an ongoing basis via email. The frequency of the requests varies during the fiscal year. The JV request form is received in a standardized PDF. In the current process, a staff needs to manually copy paste all information on the received form to SAP. There are two main sections “From (Usually Credit)” and “To (Usually Debit). All values in the columns in each section must be manually entered to SAP.  **Purpose of the Automation**:  We aim to automate the process of copy pasting from the standardized PDF form to SAP using UiPath RPA tool. This will help eliminate input errors by automating the process of copying data from the PDF and pasting them to SAP. |
| Process Frequency | *Daily, M-F*  *Sat and Sunday by exception* |
| Number of times the process is ran by selected frequency | *This is an attended bot; users can run the bot as needed using the UiPath Assistant*  *Note: Attended bots cannot be scheduled* |
| Bot Process Scheduling  (PRD will contain the final schedule) | ***N/A*** |
| Average Volume | *~200 JV per week* |
| Percentage of business exceptions | *30%* |
| Average Handling Time | *1 minute key in per line*  *Full process – 3 to 5 minutes per line* |
| Annual Average Total Time | *This is usually considered to be the time given back to the business for other value-add work, once the automation is in place. \*Indicate here if the automation isn’t expected to save all these hours in the case where human-in-the-loop is still expected.*  ***E.g.,*** *12,000 hours (calculated from above fields, Avg Vol & AHT)* |
| Peak Period | *Every 3 to 4 months (HC - P3, P6, P9, P11 and month of March).*  *PHAC is more likely every 2 months* |
| Peak Volume Approximate Increase | *It is important to understand peaks in order to design a robust and scalable solution.*  ***E.g.,*** *600* |
| Number of persons performing the process | 1-2 dedicated resource + 2-3 others  May need to look at corporate accounting and salary management needs in the future. |
| Expected Volume increase during next periods | *No material increase but there are peaks due to re-organization (for example).* |
| Input Data Description | *Indicate if AS IS and TO BE inputs are different.*  ***E.g.,***   * *JV entry* |
| Output Data description | ***E.g****.,*   * *Files (success posting and failure posting)* * *In the future may want to have an Email stating success/failure of JV (\*New ) – SAP autogenerated email to program based on workflow and signature card – To come* |

## High Level – Automated Process Map

The information provided below is for the AS IS process unless otherwise indicated to be specifically for the automation / TO BE process.

# As Is Process Description

In this section the Business Analyst will document the AS IS process. This section will serve as the starting point for the automation effort.

## AS IS Process Map

## High Level Process Map

This section is useful for the Business Analyst in presentations and discussions with management to underline areas of weakness, inefficiency or to demonstrate which steps could be in scope for automation.

A grid of black rectangles with white text

Description automatically generated

# To Be Requirements & Business Rules

This section captures the requirements and business rules of the TO BE process. The requirements can be a mix of user, system, and non-functional requirements. Any proposed improvements to the process should be captured as requirements here.

**Requirements:** Statements that tell you something the user or system will (or will not) do.

**Business rules:** Statements that tell you whether you may or may not do something or that give you the criteria and conditions for making a decision.

The requirements can be at a higher level but must cover breadth. Requirements will be mapped to business scenarios (features/functionality that will be tested) in the UAT Plan. See UAT Plan template for scenario examples.

Also use this section to capture the business rules as they come up when you are eliciting requirements. Business Rules for the most part will be embedded in the Detailed TO BE process map as decisions.

|  |  |  |
| --- | --- | --- |
| **Step** | **Action** | **Exceptions/Comments/References** |
| 1 | Login to SAP | **Use Bot Credentials as per the business requirements**  **Refer to SCR01** |
| 2 | Read all Emails from the “To be Processed” email folder |  |
| 3 | Save the PDF JV attachment, and the email message in a specified folder for further processing. | There is a possibility of multiple attachments in a email, look for the following text in PDF to identify a new JV form  French JV Form –   * Formulaire de demande de pièce de journal (PJ) - Dix lignes ou moins * D'autres Ministères RI-AM   English JV Form   * Journal Voucher (JV) Request Form - Ten (10) lines or less * Other Government Department (OGD)   **Refer to SCR02.1 & SCR02.2** |
| 4 | Check if the doc type is SI  IF  Other **Government Department (OGD) /D'autres Ministères RI-AM** in FR form check box is selected then the transaction type is SI doc type  **NOTE: Trading Partner/Code AM** in JV forms must be filled out if OGD is selected  IF  **Trading Partner /Code AM** field is left blank, default to SI and record trading partner number as 001.  IF  **Other Government Department (OGD)/D'autres Ministères RI-AM** check box is blank, but Trading **Partner/Code AM** field is entered, the transaction type is SI doc type. | **Refer to SCR03.1 & SCR03.1** |
| 5 | Check if the doc type is SA  IF  **External Vendor/Fournisseur Externe** check box is selected, the transaction type is SA doc type  IF  both Other **Government Department (OGD)/D'autres Ministères RI-AM** and **External Vendor/ Fournisseur Externe** are left blank, doc type should default to SA. | **Refer to SCR03.1 & SCR03.2** |
| 6 | Read and compare Total values in Credit and Debit Tables  The Total values on the Credit and Debit tables should be same  IF the Total values in Credit and Debit tables don’t match, throw business exception, and move the email to “Failed” email folder | **Refer to SCR04.1 & SCR04.2** |
| 7 | Read **JV Balance/PJ BALANCE value** in JV form  Balance should be 0  IF the Balance value is not 0, throw business exception, and move the email to “Failed” email folder | **Refer to SCR04.1 & SCR04.2** |
| 8 | Read **GL Account/Comptedu GLG** value in JV form  IF missing the GL Account value, throw business exception, and move the email to “Failed” email folder | Mandatory Field - Must not be Blank in Credit/Debit Tables  String length - 5 digits  **Refer to SCR05.1 & SCR05.2** |
| 9 | Read **Amount without tax/Montant sans Taxe** value in JV form  IF missing, throw business exception, and move the email to “Failed” email folder | Mandatory Field - Must not be Blank in Credit/Debit Tables  **Refer to SCR05.1 & SCR05.2** |
| 10 | Read **Cost Center/Centrde coûts** value in JV form  IF missing, throw business exception, and move the email to “Failed” email folder | Mandatory Field - Must not be Blank in Credit/Debit Tables  String length - 6 alphanumeric  **Refer to SCR05.1 & SCR05.2** |
|  | Read **Functional Area/Secteur fonctionnel** value in JV form  IF missing, throw business exception, and move the email to “Failed” email folder | Mandatory Field - Must not be Blank in Credit/Debit Tables  String length - 4 alphanumeric  **Refer to SCR05.1 & SCR05.2** |
| 11 | Read **CDO/BMC** in JV value in JV form  IF the JV form doesn’t have the CDO referenced for the bot to input, use cost center to determine CDO, use 2100 for cost centers beginning with 2 and 9000 for all other cost centers | Mandatory Field - Must not be Blank in Credit/Debit Tables in SAP **but can be blank on JV form**  **Refer to SCR05.1 & SCR05.2** |
| 12 | Read **Reason Row/Motif** in JV form | Optional Field  **Refer to SCR06.1 & SCR06.2** |
| 13 | Read **Internal Order Number/ Numéro de commande interne** value in JV form | Optional Field  **Refer to SCR06.1 & SCR06.2** |
| 14 | Read **Commitment (Funds Commitment/ Purchase Order/Card Document) / Engagement(Engagement defonds/Bon de commande/Document de carte)** in JV form  The following type of data is considered as good data for bot data entry   * Funds commitment 110..series * Card document 5000.. * Travel Docs – 9000   If the bot finds the following series, skip them as a business exception and move the email to “Failed” email folder.   * Purchase order 4500../HT../6D../E../R.. series | Optional Field  **Refer to SCR06.1 & SCR06.2** |
| 15 | Read **Enter Text Maximum 50 Characters/Texte Maximum 50 caractères** in JV form | Optional Field  **Refer to SCR06.1 & SCR06.2** |
| 16 | Read **WBSE/ Élémentd'OTP** value in JV form | Optional Field  **Refer to SCR06.1 & SCR06.2** |
| 17 | Read **Fund/Fonds** in JV value in form | Optional Field  This field auto populates unless there is a change referenced on the form  **Refer to SCR06.1 & SCR06.2** |
| 18 | Navigate to FV50 Transaction in  SAP | **Refer to SCR07** |
| 19 | Click on Company Code   * The bot must determine the company code based on the cost centre captured from the pdf. If the cost centre starts with "2", the company code is 1480; otherwise, the company code is 0220. | **Refer to SCR07.1** |
| 20 | Enter the Company code in the “Enter Company code” pop up window and click the Green check mark | **Refer to SCR07.1** |
| 21 | Enter Document Date  Document Date is Current Date in yyyy.mm.dd format | **Refer to SCR08** |
| 22 | **Posting date reset - The posting date should be set to March 31 if the current date is in the range of April 1-22** | **Only if the current date is in the range of April 1-22**  **Refer to SCR08** |
| 23 | IF this is the first bot transaction for the day, enter “CAD” in currency field  Note: After the first JV is entered, the bot will not need to enter the currency until the next day | **Refer to SCR08** |
| 24 | Enter “coding correction” in the Doc.Header text field | **Refer to SCR08** |
| 25 | IF Document Type Identified in is SI, follow the below steps   1. Enter SI and send “Enter” hot key   Note: sending Enter hot key is mandatory if the doc type is SI, else the system will register the doc type as SA   1. Select trading partner under the Extras tab 2. Enter the trading partner  - 3 digits max   Note: It can sometimes have a soft message which can be bypassed by hitting enter | **Refer to SCR08**  **Refer to SCR09**  **Refer to SCR10**  **Refer to SCR11** |
| 26 | Enter **GL Account/Comptedu GLG** value captured from JV form in to G/L acct field in SAP Credit/Debit table | This is a mandatory entry  **Refer to SCR12** |
| Enter Credit for Credit table and Debit for Debit table in to **D/C** field in SAP Credit/Debit table | This is a mandatory entry  **Refer to SCR12** |
| Enter **Amount without tax/Montant sans Taxe** value captured from the JV form in to Amount in do…field in SAP Credit/Debit table | This is a mandatory entry  **Refer to SCR12** |
| Enter **“IO”** in Tax co… field in SAP Credit/Debit table | This is an optional entry  **Refer to SCR12** |
| Enter **“CAON”** in Tax j… field in SAP | This is an optional entry  **Refer to SCR12** |
| Enter **Cost Center/Centrde coûts** value captured from the JV form in to Cost center field in SAP Credit/Debit table | This is a mandatory entry  **Refer to SCR12** |
| Enter **Functional Area/Secteur fonctionnel** value captured from the JV form in to Func. Area field in SAP Credit/Debit table | This is a mandatory entry  **Refer to SCR12** |
| Enter **CDO/BMC** value captured from the JV form in to CD.. field in SAP Credit/Debit table | This is a mandatory entry  **Refer to SCR12** |
| Enter **Commitment (Funds Commitment/ Purchase Order/Card Document) / Engagement(Engagement defonds/Bon de commande/Document de carte)**  value captured from the JV form in to Earmarked funds field in SAP Credit/Debit table | This is an optional entry  **Refer to SCR12** |
| Enter **Enter Text Maximum 50 Characters/Texte Maximum 50 caractères** value captured from the JV form in to Text field in SAP Credit/Debit table | This is an optional entry  **Refer to SCR12** |
| Enter **WBSE/ Élémentd'OTP** value captured from the JV form in to WBS field in SAP Credit/Debit table | This is an optional entry  **Refer to SCR12** |
| Enter **Fund/Fonds** value captured from the JV form in to Fund field in SAP Credit/Debit table | This is an optional entry  **Refer to SCR12** |
| **Repeat these steps for all Credit and Debit rows in JV form in SAP** |  |
| 27 | Press enter and click on Save as completed if no more lines available to enter | **Refer to SCR13** |
| 28 | IF an error message pops up at the bottom of the SAP screen, perform the following steps   1. Double-click on the error message. 2. Capture the error message to report back to the business in the Bot report 3. Move the email to “Failed email” folder 4. Open a new GUI to process the next JV form. | **Refer to SCR14**  **Refer to SCR15 for step 4** |
| 29 | IF no error message pops up at the bottom of the SAP screen, follow the below steps   1. Double-click on the document number at the bottom. 2. Record the document number, company code, and message number. | **Refer to SCR16** |
| 30 | Navigate to FBV3 Transaction window and   1. Enter the company code 2. Enter the document number 3. Enter the fiscal year (computed based on today’s date).   Format is YYYY   1. Press enter | **Refer to SCR17**  **Refer to SCR18** |
|  | Create Attachment   1. Click “Services for Object” icon 2. Click on "Create" and then "Create Attachment” 3. Select the email attachment from the local folder, 4. save attachment as '[document #]-Email.msg' 5. Click Open 6. Capture the file upload status message from the bottom of SAP screen 7. Move the email to “Processed” email folder | **Refer to SCR19**  **Refer to SCR19**  **Refer to SCR20**  **Refer to SCR21** |

## **Process Screenshots**

SCR01 – SAP Login

A screenshot of a computer

Description automatically generated

SCR02.1 - New JV Form-EN

A screenshot of a computer

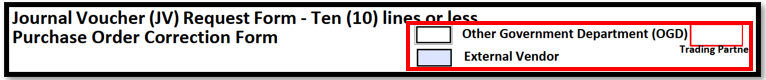
Description automatically generated

SCR02.2 – New JV Form-FR

A screen shot of a computer

Description automatically generated

SCR03.1 - SI & SA doc type identification- EN



SCR03.2 - SI & SA doc type identification-FR

A white sign with black text

Description automatically generated

SCR04.1 – Credit/Debit Total & JV Balance-EN

A close-up of a form

Description automatically generated

SCR04.2 – Credit/Debit Total & JV Balance-FR

A close-up of a table

Description automatically generated

SCR05.1 – Mandatory fields in JV form Credit/Debit tables-EN

A close-up of a form

Description automatically generated

SCR05.2 – Mandatory fields in JV form Credit/Debit tables-FR

A screenshot of a computer

Description automatically generated

SCR06.1 – Optional fields in JV form Credit/Debit tables-EN

A close-up of a form

Description automatically generated

SCR06.2 – Optional fields in JV form Credit/Debit tables-FR

A screenshot of a document

Description automatically generated

SCR07 – Navigate to FV50



SCR07.1 – Enter Company Code in FV50 transaction window

A screenshot of a computer

Description automatically generated

SCR08 – Enter details in FV50 transaction window

A screenshot of a computer

Description automatically generated

SCR09 – Select trading partner under the Extras tab

A screenshot of a computer

Description automatically generated

SCR10 – Enter the trading partner - 3 digits max

A screenshot of a computer

Description automatically generated

SCR11 – Bypass the soft message by hitting enter

A screen shot of a computer

Description automatically generated

SCR12 – Enter data in to Credit and Debit Table in SAP

A screenshot of a computer

Description automatically generated

SCR13 – Click Save as completed in SAP

A screenshot of a computer

Description automatically generated

SCR14 – Capture SAP status message and error msg in the bottom of the SAP screen

A screenshot of a computer

Description automatically generated

SCR15 - Click Open a new GUI in SAP

A screen shot of a computer

Description automatically generated

SCR16 - Capture SAP successful status message, message No & Document Number

A computer screen with a message

Description automatically generated

SCR17 - Navigate to FBV3

A screenshot of a computer

Description automatically generated

SCR18 – Enter Company Code, Doc.Number & Fiscal Year in SAP

A screenshot of a computer screen

Description automatically generated

SCR19 – Create Attachment in SAP

A screenshot of a computer

Description automatically generated

SCR20 – Provide file path and click open to upload to SAP

A screenshot of a computer

Description automatically generated

SCR21 – Capture the file upload status message from the bottom of SAP screen

A screenshot of a computer

Description automatically generated

# To Be Process Description

This section outlines what the process will look like post-automation.

A screenshot of a diagram

Description automatically generated

## Applications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Application Name | Short Description | Web-Based / Desktop | Usage (pertaining to this automation) | Comments |
| SAP | Financial CRM | Desktop | 50 |  |
| Outlook | Email platform | Desktop | RPA will save the Email object and the attachment |  |
| Excel |  | Desktop | RPA will convert the PDF to Excel, and will prepare reports of automation activity |  |
| CFOB shared drive - Sharepoint | Shared drive  **Sharepoint** | Desktop | RPA will store copy of Bot report and JV processed if needed |  |

## Detailed TO BE Process Map

A detailed process map specifying the automation steps and any hand-offs/manual processing will be outlined here.

*The process may be separated into sections/modules for better consumption and should be cross-checked with the Solution Architect and Developer. The type of robot (e.g., attended/unattended), where HITL is involved (Action Center/AARI), and when IDP is used (DU/IQ Bot) will also be indicated in the process map.*

*Process steps should be at click level. See Visio template. Screenshots are to be embedded in each step (zip the Visio, pdf version of the file, and screenshots for dev and clients). Add a screenshot(s) of the whole diagram in this section.*

## Document Processing Validation & Calculation Rules for Fields

This section captures the validations to be performed on document fields.

*This section is for DU/IQ Bot & similar projects where a large number of validations are to be performed on invoices. Remove this section if not using it.*

*Note that these rules are considered business rules (validation rules are operative/behavioral type, and calculations are definitional- computational).*

## Validation Rules

This section describes the process at key-stroke level and is an essential part for the communication with the developers

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Rule ID | Validations to be performed | Next Steps for Failed Validation |
| Government Department (OGD) /D'autres Ministères RI-AM |  | Required field to be added to the JV form – client needs to check off one or the other. This selection will tell the bot to choose JV type SI (OGD check off) or SA (external vendor). Further discussion to be had. |  |
| Trading Partner/Code AM |  | Required if OGD box is selected if OGD box is selected but no trading partner is entered, default to 001, |  |
| Reason Row/Motif in JV form | VR-1 | Optional field |  |
| GL Account/Comptedu GLG in JV form | VR-2 | Must not be Blank in Credit/Debit Tables  Required field – 5 digits | Throw a business Exception |
| Amount without tax/Montant sans Taxe tax in JV form | VR-3 | Must not be Blank in Credit/Debit Tables  Required field | Throw a business Exception |
| IO | VR-4 | Optional field |  |
| CAON | VR-5 | Optional field |  |
| Cost Center/Centrde coûts Center in JV form | VR-6 | Must not be Blank in Credit/Debit Tables  Required field – 6 alphanumeric | Throw a business Exception |
| Functional Area/Secteur fonctionnel in JV form | VR-7 | Must not be Blank in Credit/Debit Tables  Required field - 4 alphanumeric | Throw a business Exception |
| CDO/BMC in JV form | VR-8 | Must not be Blank in Credit/Debit Tables in SAP but can be blank on JV form  Required field – 4 digits – either 9000 or 2100  If the JV form doesn’t have the CDO referenced for the bot to input CDO based on cost. 2100 for cost centers beginning with 2 and CDO 9000 for all other cost centers |  |
| Internal Order Number/ Numéro de commande interne in JV form | VR-9 | Optional field |  |
| Commitment (Funds Commitment/ Purchase Order/Card Document) / Engagement(Engagement defonds/Bon de commande/Document de carte) in JV form | VR-10 | Optional field - 10 alphanumeric max.The following type of data is considered as good data for bot data entry   * Funds commitment 110..series * Card document 5000.. * Travel Docs – 9000   If the bot finds the following series, skip them as a business exception and move the email to exception folder.   * Purchase order 4500../HT../6D../E../R.. series | Throw a business Exception if Purchase order series is found |
| Enter Text Maximum 50 Characters/Texte Maximum 50 caractères in JV form | VR-11 | Optional field |  |
| WBSE/ Élémentd'OTP in JV form | VR-12 | Optional field |  |
| Fund/Fonds in JV form | VR-13 | This field auto populates unless there is a change referenced on the form |  |
| JV Balance | VR-14 | Must not be Blank in JV form  Must equal 0 | Throw a business Exception |
| Total value for Credit and Debit tables is same | VR-15 | Credit Total = Debit Total | Throw a business Exception |

## Calculations

|  |  |
| --- | --- |
|  |  |
| *C1* | Debit and credit must match. |
| *C2* | Totals of both combined must equal 0 |

## Document Processing Field to System Field Mapping

This section specifies which fields in an invoice are to be mapped to which fields in the system for data entry purposes.

*Include screenshots clearly showing the invoice and system UI fields to supplement the below table.*

|  |  |
| --- | --- |
| Field Name on JV | Field Name in the System |
| GL Account/Comptedu GLG | G/L acct |
| credit\debit | D/C |
| Amount without tax/Montant sans Taxe | Amount in doc.curr... |
| “IO” | Tax code |
| CAON | Tax jurisdiction code |
| Cost Center/Centrde coûts | Cost center |
| Functional Area/Secteur fonctionnel | Func. Area |
| CDO/BMC | CDO # |
| Internal Order Number/ Numéro de commande interne | Order |
| Commitment (Funds Commitment/ Purchase Order/Card Document) / Engagement(Engagement defonds/Bon de commande/Document de carte) | Earmarked funds |
| Enter Text Maximum 50 Characters/Texte Maximum 50 caractères | Text |
| WBSE/ Élément d'OTP | WBS element |
| Fund/Fonds | Fund |

## Input Data Description

The following table should contain details regarding the inputs that every step of the process takes.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step # | Input Name | Input Type | Location | Are inputs Natively Digital? | Are the Inputs Structured? |
|  | JV Form | PDF | Saved as email attachments in the local drive | Yes | Yes |
|  |  |  |  |  |  |

\* Native Digital: This is data that was originally created digitally e.g. excel, database or application reports etc. The non-native digital inputs are usually scanned images.

\* Structured Data: has a predictable format and exists in fixed fields (e.g. an excel cell or a field in a form) and is easily detectable via search algorithms.

## Parallel Initiatives

The table below will capture any proposed Business, Process or Application changes that would impact the process at hand.

|  |  |  |  |
| --- | --- | --- | --- |
| Initiative Name | Impact on current Automation Request | Expected Completion Date | Contact Person |
| N/A | N/A | N/A | N/A |

## Out of Scope for RPA

The steps out of scope for RPA should be listed in the table below together with the reasoning.

|  |  |  |  |
| --- | --- | --- | --- |
| Activity/Step | Reason for out of scope | Impact on the TO BE | Possible measures to be taken into account for future automation |
| N/A | N/A | N/A | N/A |

## Business Exceptions Handling

Business exceptions (as compared to Application exceptions) prevent the automation from being able to complete the intended process goal. Regardless of how many times the bot is run, it will follow the same path and not be able to complete the process goal. This may be a result of certain data or conditions being incomplete, missing, or not meeting specific business rules.

**Known exceptions** = Previously encountered. A scenario is defined with clear actions and workarounds for each case.

Unknown exceptions are usually processed by the bot as if they were successful transactions but end in an incorrect outcome.

## Known Business Exceptions

Details regarding how the robot should handle the exceptions are specified below.

*\*Note: If Section 5.3.1 – Validation Rules is utilized, it will contain business exception handling pertaining to failed invoice validations.*

*Parameters, in the table below, are those data items needed for actioning the business exception.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Exception Name | Step # | Parameters | Action to be taken by bot | Action to be taken manually (optional) |
| BRE01  No new JV form attachments found in the email | UC02 | Email Attachments | Mark item as BRE, report to business | Business to verify the email folder and move the required emails with the attachments to the ”To be Processed” folder |
| BRE02 - Total Values do not match in the JV form | UC04 | JV Form | Mark item as BRE, report to business, and move the email to “Failed” folder | Business to verify the JV form, correct the data and move the email back to ”To be Processed” folder if required |
| BRE03 – Total balance is not 0 in the JV form | UC04 | JV Form | Mark item as BRE, report to business, and move the email to “Failed” folder | Business to verify the JV form, correct the data and move the email back to ”To be Processed” folder if required |
| BRE04 - GL Account value missing in JV form (Credit/Debit) table | UC05 | JV Form | Mark item as BRE, report to business, and move the email to “Failed” folder | Business to verify the JV form, correct the data and move the email back to ”To be Processed” folder if required |
| BRE05 - Amount without tax value missing in JV form (Credit/Debit) table |
| BRE06 – Cost Center value missing in JV form (Credit/Debit) table |
| BRE07 – Functional Area value missing in JV form (Credit/ Debit) table |
| BRE08 –Commitment - Purchase Order series data found in JV form (Credit/ Debit) table  Purchase order 4500../HT../6D../E../R.. series  The bot will record the value found in the form in the bot report for reference. |

## Systems Exception Handling

A comprehensive list of all errors, warnings or notifications should be consolidated here together with the action to be taken for each by the Robot. There are 2 types of exceptions/errors:

**Known** = Previously encountered and action plan or workaround available for it (e.g., SAP unresponsive during peak times)

**Unknown** = these are exceptions and errors that cannot be anticipated but for which the robot needs to have a rule so that the RPA solution is sustainable.

## Known System Exceptions

Similar to business exceptions, the systems exceptions also prevent the automation from being able to complete the intended process goal however they are rooted in a technical issue. Unlike business exceptions, if the automation is re-run, it may successfully proceed. Application exceptions are commonly the result of an unresponsive application.

Details regarding how the robot should handle the exceptions are specified below and should be verified with the Development team.

*Specify below under ‘Action to be taken’ whether the automation should proceed with other steps, e.g., retrieve information from other applications; proceed with other transaction items if this makes sense to do, or stop entirely.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Exception Name | Step # | Parameters | Action to be taken by bot | | |
| SE01 Navigation to SAP login page failed | UC01 | Application unresponsive | Recover and retry 2 time. Email Bot Ops with access error message. Automation to halt.  Manually verify if the bot accounts have the required access | | |
| SE02- Failed to login to SAP with bot credentials | UCO1 | Invalid Credentials | Recover and retry 2 time. Email Bot Ops with access error message. Automation to halt.  Manually verify if the bot accounts have the required access | | |
| SE03-Failed to access outlook application | UC02 | Application unresponsive | | Recover and retry 2 time. Email Bot Ops with access error message. Automation to halt. |
| SE04 – Unable to access the storage location | UC02 | File system access denied | | Email Bot Ops with access error message. Automation to halt | | |
| SE05 - Navigation to FV05 Transaction window failed | UC06 | Access Denied  Mark item as System Exception,   * Bot retries navigating to the transaction   Exception to be populated in Bot Processing report sent by the bot to the user group | | Recover and retry 2 time. Email Bot Ops with access error message. Automation to halt.  Manually verify if the bot accounts have the required access. | | |
| SE05 - Navigation to FBV3 Transaction window failed | UC09 | Access Denied  Mark item as System Exception,   * Bot retries navigating to the transaction   Exception to be populated in Bot Processing report sent by the bot to the user group | | Recover and retry 2 time. Email Bot Ops with access error message. Automation to halt.  Manually verify if the bot accounts have the required access | | |

## Unknown System Exceptions

An umbrella rule that includes a notification needs to be designed for all other exceptions that could happen and cannot be anticipated.

Details regarding how the robot should handle the exceptions are specified below and should be verified with the Development team.

## Reporting

In this section all the reporting requirements of the business should be detailed so that when the RPA solution is moved to production the administrators can track the performance of the solution.

*Data points need to be specified in the table below, or in a report mockup.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Report Type | Update frequency | Details | Data Points | Monitoring Tool to visualize the data |
| BOT Report | Per Bot run | Summary of all the transaction processed by the Bot | Number of emails submitted to SAP | Email, Excel |

# Other

## Referenced Documentation

|  |  |  |
| --- | --- | --- |
| Documentation Type | Description | Document Link |
| Process Design Document |  |  |
| Standard Operating Procedure |  |  |
| Work Instructions (Training doc/’how to guide’) |  |  |
| Input Files |  |  |
| Output Files |  |  |