

Process Design Document (PDD)

Topic: **OPEN SHIPMENT**

Document Name: **Danone-NorAm-PDD-OPEN SHIPMENT**



NOTE:

This document and its current content cover the proposal of robotic process automation for creating open shipment report for each origin.

**Document History**

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**Document Approval Flow**

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Contents

[**I.** Introduction 4](#_Toc110437788)

[I.1 Purpose of the document 4](#_Toc110437789)

[I.2 Objectives 4](#_Toc110437790)

[I.3 Process key contact 4](#_Toc110437791)

[I.4 Minimum Prerequisites for automation 4](#_Toc110437792)

[II. AS IS process description 5](#_Toc110437793)

[II.1 Process Overview 5](#_Toc110437794)

[II.2. Applications used in the process 5](#_Toc110437795)

[II.3 AS IS Process map 6](#_Toc110437796)

[II.4 Detailed AS IS Process Steps 7](#_Toc110437797)

[II.5 Input data description 9](#_Toc110437798)

[III. To BE Process Description 10](#_Toc110437799)

[III.1 TO BE Detailed Process Map 10](#_Toc110437800)

[III.2Detailed To Be Process Steps 11](#_Toc110437801)

[IV. Parallel Initiatives/ Overlap (if case) 14](#_Toc110437802)

[IV.1 In Scope for RPA 14](#_Toc110437803)

[IV.2 Out of Scope for RPA 14](#_Toc110437804)

[V. Business Exceptions Handling 14](#_Toc110437805)

[V.1 Known Exceptions 14](#_Toc110437806)

[V.2 Unknown Exceptions 15](#_Toc110437807)

[V.3Application Error and Exception Handling 15](#_Toc110437808)

[V.4 Known Errors or Exceptions 15](#_Toc110437809)

[VI. Functional Test Scenarios 15](#_Toc110437810)

[VII. Process Outputs/Logs 16](#_Toc110437811)

[VIII. Other Observations 16](#_Toc110437812)

[IX. Additional sources of process documentation 16](#_Toc110437813)

[X. PDD Version Details 16](#_Toc110437814)

# Introduction

## I.1 Purpose of the document

The Process Definition Document outlines the business process chosen for automation using UiPath Robotic Process Automation (RPA) technology.

The document describes the sequence of steps performed as part of the business process, the conditions and rules of the process prior to automation and how they are envisioned to work after automating it, partly or entirely. This specifications document serves as a base for developers, providing them the details required for applying robotic automation to the selected business process.

## I.2 Objectives

The process that has been selected for RPA is part of the larger project DAN-IBS conducted within the Danone global organization.

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

* To create report for each origin containing load consolidation details.

## I.3 Process key contact

The specifications document includes concise and complete requirements of the business 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 it and provide signoff for accuracy** and completion of the steps, context, impact, and complete set of process exceptions. The names have to be included in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| *Role* | *Name* | *Contact details*  *(email, phone number)* | *Notes* |
| **Business System Analyst** | James Ruane | james.ruane@danone.com |  |
| **Product Owner** | Marie Casamissima | Marie.casamissima @danone.com |  |
| **Process Owner** | Edward Jutte | ed.jutte@danone.com |  |

## I.4 Minimum Prerequisites for automation

1. Filled Process Definition Document – *Completed*
2. Test Data to support development*– In Progress*
3. User access and user accounts creations (licenses, permissions, restrictions to create accounts for robots)*–In Progress*
4. Credentials (user ID and password) required to login to machines and applications*– In Progress*
5. Dependencies with other projects on the same environment *– NA*

# AS IS process description

## II.1 Process Overview

General information about the process selected for RPA prior to automation.

|  |  |  |
| --- | --- | --- |
| # | Item | Description |
| 1 | **Process full name** | *OPEN SHIPMENT* |
| 2 | **Process Area** | *IBS* |
| 3 | **Department** | *IBS* |
| 4 | **Process short description**  (operation, activity, outcome) | *To create report for each origin containing load consolidation details.* |
| 5 | **Role(s) required for performing the process** | Open\_Shipment.xlsx |
| 6 | **Process schedule and frequency** | *Daily* |
| 7 | **# of items processes /reference period** |  |
| 8 | **Average handling time per item** |  |
| 9 | **Peak period (s)** |  |
| 10 | **Transaction Volume During Peak period** |  |
| 11 | **Total # of FTEs supporting this activity** |  |
| 12 | **Expected increase of volume in the next reference period** |  |
| 13 | **Level of exception rate** |  |
| 14 | **Input data** | Business master spreadsheet “Open\_Shipment.xlsx” |
| 15 | **Output data** | *Report containing load consolidation details created and sent for each origin.* |

## II.2. Applications used in the process

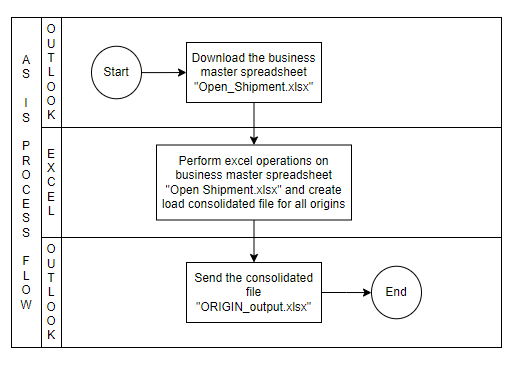
The table includes a comprehensive list all the applications that are used as part of the process automated, at various steps in the flow.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Application name & version | System  Language | Thin/Thick Client | Environment/  Access method | Comments |
| 1 | Outlook | EN | Thin Client | Application | Application to receive business master spreadsheet “Open\_Shipment.xlsx” and to send load consolidated file |
| 2 | Excel | EN | Thin Client | Application | Applications to perform excel operations. |

## II.3 AS IS Process map

**High Level As-Is Process Map:**

This chapter depicts the As Is business process at a High Level to enable developers to have a high-level understanding of the current process.



## II.4 Detailed AS IS Process Steps

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Detailed As-Is Process Steps | | | |
| Step | Input | Description | Screenshots | Comments |
| 1 | Download the business master spreadsheet “open\_Shipment.xls” | 1. Open outlook.  2. Login with credentials.  3. Search and open the mail with following subject :  Advanced Report – Open Shipment  4. Download the business master spreadsheet  Name :  Open\_Shipment.xls  Path: | 1.PNG |  |
| 2 | Perform excel operations on business master spreadsheet “Open\_Shipment.xls | 1. Open the downloaded business master spreadsheet  Open\_Shipment.xlsx  Convert this file to .xlsx format.  2. Apply filters on column L (Load/ Consolidation) and keep rows with value “LOAD”  Note: We are not considering “CONSOLIDATION” and blank values.  3. Apply filters on column T (Origin Name) and filter out all the origins one by one.  4. Apply filters on column AC (Destination Name) and filter out all the destinations one by one.  5. Also we will apply filters in column AD (Destination City). We will check both destination name and destination city for consolidation.  Note: We will calculate days between Pick Date (column P) and Drop Date (column Y). We will consider only 2 days gap.  E.g. if pick date in column P is 10-08-2022 then maximum drop date can be 12-08-2022.  6. Apply filters on column N (Carrier Reference) and exclude the rows having values “KNIM”, SCTB”, “GOSH”, FCFS”, “INCJ”, “ZZ18”, “CXDD”, “PRQI”, “HWLS”, “ESCR”, “KRCL”, “RBLT”, “NRRF”, “BOOD”  7. Now we will consolidate the entries using following conditions:   * Maximum weight (column G) should be” 42500” * Maximum pallets (column J) should be 30   Note: We will not consider single weight entries in consolidation files.  8. After consolidation of all entries, copy all the data.  9. Open new excel file.  10. Paste all the previously copied data.  11. Add new column at last i.e. col AI and name it as Id. We will assign IDs sequentially for all consolidation datasets.  Note: We will be keeping blank rows after every consolidation data sets.  12. After that we will save the file using below nomenclature and path:  Path:  Name:  ORIGIN.\_output.xlsx  e.g. if origin is MT CRAWFORD DC then file will be saved as “MT CRAWFORD DC.\_output.xlsx  Note: We will repeat this procedure for all origins to create separate files.  Note 2: For every bot execution, bot will erase last created output files of folders and will create new one of present day. | 2.PNG  3.PNG  6.PNG  7.PNG  4.PNG  5.PNG |  |
| 3 | Send the output file “ORIGIN.\_output.xlsx | 1. Open outlook  2. Login with credentials.  3. Select new mail  4. Update following details:  Subject:  To:  CC:  Text:  5. Add attachment of output file.  “ORIGIN.\_output.xlsx  6. Click on send. |  |  |

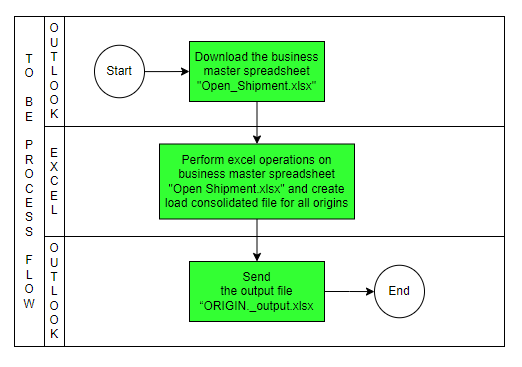
## II.5 Input data description

Already covered in above section.

# To BE Process Description

This chapter highlights the expected design of the business process after automation.

## III.1 TO BE Detailed Process Map



|  |  |
| --- | --- |
|  | This process step will be performed by the Robot |
|  | This process step will be performed by the Requestor/human agent |

## III.2Detailed To Be Process Steps

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Detailed To-Be Process Steps | | | | |
| Step | Input | Description | Comments | Performed By |
| 1 | Download the business master spreadsheet “open\_Shipment.xls” | 1. Open outlook.  2. Login with credentials.  3. Search and open the mail with following subject :  Advanced Report – Open Shipment  4. Download the business master spreadsheet  Name :  Open\_Shipment.xls  Path: | As-Is Process | Robot |
| 2 | Perform excel operations on business master spreadsheet “Open\_Shipment.xls | 1. Open the downloaded business master spreadsheet  Open\_Shipment.xlsx  Convert this file to .xlsx format.  2. Apply filters on column L (Load/ Consolidation) and keep rows with value “LOAD”  Note: We are not considering “CONSOLIDATION” and blank values.  3. Apply filters on column T (Origin Name) and filter out all the origins one by one.  4. Apply filters on column AC (Destination Name) and filter out all the destinations one by one.  5. Also we will apply filters in column AD (Destination City). We will check both destination name and destination city for consolidation.  Note: We will calculate days between Pick Date (column P) and Drop Date (column Y). We will consider only 2 days gap.  E.g. if pick date in column P is 10-08-2022 then maximum drop date can be 12-08-2022.  6. Apply filters on column N (Carrier Reference) and exclude the rows having values “KNIM”, SCTB”, “GOSH”, FCFS”, “INCJ”, “ZZ18”, “CXDD”, “PRQI”, “HWLS”, “ESCR”, “KRCL”, “RBLT”, “NRRF”, “BOOD”  7. Now we will consolidate the entries using following conditions:   * Maximum weight (column G) should be” 42500” * Maximum pallets (column J) should be 30   Note: We will not consider single weight entries in consolidation files.  8. After consolidation of all entries, copy all the data.  9. Open new excel file.  10. Paste all the previously copied data.  11. Add new column at last i.e. col AI and name it as Id. We will assign IDs sequentially for all consolidation datasets.  Note: We will be keeping blank rows after every consolidation data sets.  12. After that we will save the file using below nomenclature and path:  Path:  Name:  ORIGIN.\_output.xlsx  e.g. if origin is MT CRAWFORD DC then file will be saved as “MT CRAWFORD DC.\_output.xlsx  Note: We will repeat this procedure for all origins to create separate files.  Note 2: For every bot execution, bot will erase last created output files of folders and will create new one of present day. | As-Is Process | Robot |
| 3 | Send the output file “ORIGIN.\_output.xlsx | 1. Open outlook  2. Login with credentials.  3. Select new mail  4. Update following details:  Subject:  To:  CC:  Text:  5. Add attachment of output file.  “ORIGIN.\_output.xlsx  6. Click on send. | As-Is Process | Robot |

# Parallel Initiatives/ Overlap (if case)

This chapter captures the proposed Business, Process & System changes in near future and its impact: NA

## IV.1 In Scope for RPA

The activities **in scope of RPA**, are listed here:

* *All the activities identified as Bot tasks in To-Be process map*

## IV.2 Out of Scope for RPA

* *NA*

# Business Exceptions Handling

The Business Process Owner and Business Analysts are expected to document below all the business exceptions identified in the automation process. These can be classified as:

|  |  |
| --- | --- |
| Known | Unknown |
| *Previously encountered. A scenario is defined with clear actions and workarounds for each case.* | *New situation never encountered before. It can be caused by external factors. Cannot be predicted with precision, however if it occurs, it must be communicated to an authorized person for evaluation.* |

## V.1 Known Exceptions

The table below reflects all the business process exceptions captured during the process evaluation and documentation. These are **known exceptions,** met in practice before. For each of these exceptions, define a corresponding expected action that the robot should complete if it encounters the exception.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BE #** | **Exception name** | **Step** | **Parameters/Details** | **Action to be taken** |
| 1 | Attachment is missing | 1 | Attachment of business master spreadsheet “Open\_Shipment” is not available | Bot will send notification to the P2P team. |
| 2 | Data is missing in business master spreadsheet | 3 | Data is not available in business master spreadsheet “Open\_Shipment” | Bot will send notification to the P2P team. |

## V.2 Unknown Exceptions

For all the other **unanticipated or unknown business (process) exceptions**, the robot should:

Send an email notification to the RPA Support Team and error message screenshot attached.

## V.3Application Error and Exception Handling

A comprehensive list of all errors, warnings or notifications should be consolidated here with the description and action to be taken, for each, by the Robot.

Errors identified in the automation process can be classified as:

|  |  |  |
| --- | --- | --- |
| Area | Known | Unknown |
| ***Technology/***  ***Applications*** | *Experienced previously, action plan or workaround available for it.* | *New situation never encountered before or may happen independent of the applications used in the process.* |

## V.4 Known Errors or Exceptions

The table below reflects all the errors identifiable in the process evaluation and documentation.

For each of these errors or exceptions, define a corresponding expected action that the robot should complete if it is encountered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Error name** | **Step** | **Parameters** | **Action to be taken** |
| 1 | Outlook application is down | 1,3 | Outlook Application system is down/not accessible | An email notification will be sent to the RPA support team for necessary action. |
| 2 | Password for Outlook user id is expired | 1,3 | Bot not able to access Outlook in case password expires | An email notification will be sent to the RPA support team for necessary action. |

# 

# Functional Test Scenarios

The below attached excel contains the currently evaluated functional test scenarios. We would require the test data from the business end to test the mentioned test cases on or before the completion of development. The test case information might change as per the scenarios experienced during the process.

 [Functional Test Cases](https://percipereco-my.sharepoint.com/:x:/g/personal/abhishek_vernekar_percipere_co/EcL2QFJRjppMicTeA6KUVj4BrEcWx3lxhvu88eHQKd8O1g?e=bO3a3x)

# Process Outputs/Logs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Report type | Update frequency | Details | Monitoring Tool to visualize the data |
| 1 | Output | On every run | On every run the Bot will create and send report of load consolidation for each origin | Shared Folder |

# Other Observations

Include below any other relevant observations you consider needed to be documented here – NA

# Additional sources of process documentation

If there is additional material created to support the process automation please mention it here, along with the supported documentation provided.

|  |  |  |
| --- | --- | --- |
| Additional Process Documentation | | |
| **User guide for Process understanding** | *This guide provides step by step details for Open Shipment* | NA |
| **Video Recording** | *Detailed process/meeting video recording done by business for all the process tasks* | NA |

# 

# PDD Version Details

|  |  |  |
| --- | --- | --- |
| Version | Enhancement Received Date | Details |
| - | - | *-* |