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| <Organization> |
| <Process Name>  Functional Requirements Analysis |
| <DELIVERABLE ID>  <Deliverable ID is the unique identification the document will have as a record for traceability purpose. It is also vital information for any configuration management practices that may apply to the project. Please, refer to the ‘identifying project work products’ guideline in order to define the Deliverable ID.  This field can be deleted in case any other equivalent mechanisms are in place to uniquely identify records. This decision should involve the Compliance / Validation Lead for regulated systems.>  VERSION: 0.0 |

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| --- | --- | --- |
| Role | Name and title | Signature and Date |
| Author: | | |
| [As Per The Compliance Plan] |  |  |
| Review and approval: | | |
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# Purpose

The Functional Requirements Analysis (FRA) is a critical element in the Discovery and Initiate phase of RPA projects. The FRA captures important details critical to implementation, and upon which the functional and technical user stories are based.

This document details production information about the process and environment which may be relevant during development. It captures all inputs, outputs, environmental factors, schedules, SLAs, alert structures, reporting targets, and any other requirements of the business process in sufficient detail to be able to ensure that all requirements at all levels are met.

# Scope

1. The scope of the automation is to be able to extract reports out of QAAD, a legacy audit reporting system which has been out of support and is in the process of being decommissioned. Automation needs to extract close to 28000 reports and save those audit reports to a more secured and standard documentum based Rnd Docs.
2. Automation also needs to be able to QC (quality check) on the reports by opening these documents in ensuring documents are saved correctly by selecting few of the key fields. There are five business areas that we need to work against in order to retrieve the documents. Login process is different based on each Business area.
3. Automation needs to be able to keep track on successful completion and the exceptions for those to be acted manually.

# Definitions

<List any definitions/acronyms/abbreviations, specific to this document, used in this document that may not be familiar to reviewers and approvers of this document.>

| Term/Acronym | Definition |
| --- | --- |
| TS | Technical services |
| RPA | Robotic Process Automation |
| QC | Quality check |
|  |  |
|  |  |

# References

<List the approved and controlled documents that are being referred in this document with their unique document identifier.>

| Document ID | Title |
| --- | --- |
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# Overview

## 

## Manual Process Description

Manual process involves logging into QAAD and searching for the audit reports being asked by regulatory agencies for compliance. Agencies are looking for the same exact reports that were shared during any audit findings/or reviews from few years back. QAAD is currently not in use for hosting any new documents. It has been out of support from the application side for some time, and as a result will be decommissioned soon.

Manual effort required to migrate all document (reports) close to 28K from QAAD to secured location is quite substantial that will take close to year and a half as per some preliminary calculations done. Business SME today logs into QAAD and fetches the same exact report e.g. from 2015 audit and provides that to federal regulatory agencies as requested. These reports thus must be maintained for any future reference.

## 

## Target Systems

|  |  |  |
| --- | --- | --- |
| System Name | Bot Access Profile / Access Type | Description |
| QAAD | Needs read access to QAAD | Bot needs to log into QAAD and be able to view, print and save pdf reports. |

# Impacted Business Areas

Impacted business area will be BQRC team that manages the audit reports and work with federal regulatory agencies for compliance.

Any exceptions found during an automated process should be well communicated to the business to be handled manually or to be retried by the bot.

# Process Diagram

<Melissa> can you add video and the process flow here

<Provide the detailed business process flow depicting each stage of the business process. This section may refer to or embed existing process documentation. >

# Process Details

< This section should contain a detailed explanation of the manual process. Each stage depicted in the Process Diagram should have a separate detailed section below. Preferably this should be at key stroke level so that this document can be used to configure the automated Blue Prism process. Screenshots of the target systems at each stage highlighting the fields or buttons are also useful.>

### <Process stage 1>

### <Process stage 2>

# Exceptions

<Describe the various exceptions that should be accommodated in the solution. An Exception occurs when the process does not flow through the ‘happy path’ to success on the first pass. Exception examples include: No data available, incorrect data provided, amount exceeds threshold, etc.>

## Log in Exception

|  |
| --- |
| Describe the exception and the trigger? It will be sent out if bot not able to log into QAAD after retrying for 3 times. |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “Not able to log into QAAD. Need to check for credentials access.” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: login exception  Exception Detail: Unable to login into QAAD |
| When will they be sent? This exception will be sent out at the start of the process Process will terminate for further investigation. |
| Where will they be sent? It will be sent out to business mailbox. |

## Launch Exception

|  |
| --- |
| Describe the exception and the trigger? It will be sent out if bot not able to launch QAAD after retrying for 3 times. |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “Not able to launch QAAD.” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: launch exception.  Exception Detail: Unable to launch QAAD |
| When will they be sent? This exception will be sent out at the start of the process , process will terminate for further investigation. |
| Where will they be sent? It will be sent out to business mailbox. |

## Invalid data Exception

|  |
| --- |
| Describe the exception and the trigger? If there is an error in the input template bot needs to mark that as an exception and be able to alert business. |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “Invalid data format/or Data not available” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: Invalid data exception  Exception Detail: Invalid or missing data |
| When will they be sent? This exception will be send out during processing. Bot will continue to the next record in the template for processing. |
| Where will they be sent? It will be sent out to business mailbox. |

## Invalid template exception

|  |
| --- |
| Describe the exception and the trigger? If there is an error in the input template bot needs to reject the request. |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “Invalid input template” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: Invalid template  Exception Detail: Invalid template not able to process |
| When will they be sent? This exception will be sent out to business informing of invalid template so it can be fixed and sent again for processing. |
| Where will they be sent? It will be sent out to business mailbox. |

## “No Data” exception

|  |
| --- |
| Describe the exception and the trigger? If there is no data for the input request bot needs to capture that in the report. |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “No input data for request e.g. Activity type: and Activity number:” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: Invalid template  Exception Detail: No data for Activity type: <US activity> ; Activity Number: <12141444> |
| When will they be sent? This exception will be sent out to business during processing of the template. Bot needs to continue to the next request from the template. |
| Where will they be sent? It will be sent out to business mailbox. |

## Unable to save the report exception

|  |
| --- |
| Describe the exception and the trigger? It will be sent out when bot is not able to save the report. |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “Unable to save the report <xyz>” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: Invalid template  Exception Detail: Unable to save the report <xyz> for the Activity type: <abc> and Activity Number: <1244544> |
| When will they be sent? This exception will be sent out to business once all the pending requests from the template have been completed. |
| Where will they be sent? It will be sent out to business mailbox. |

## QC exception

|  |
| --- |
| Describe the exception and the trigger? It will be sent out when bot is not able to open/or read PDF for QC that has been saved on R&D docs . |
| How will exception be sent back to the Business? Email to be sent out to business with the exception details e.g. “Unable to QC the report <xyz>” |
| What will be the file structure or message format used for exceptions?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Exception Type: Invalid template  Exception Detail: Unable to QC the report <xyz> |
| When will they be sent? This exception will be sent out to business at the time of QC processing. Bot needs to continue on to the next pending request for QCing. |
| Where will they be sent? It will be sent out to business mailbox. |

# Alerts

<Describe the various Alerts that should be accommodated in the solution. Alerts are notifications about the state of the process. For example: Process completed, process started, process failed, process stopped, etc.>

## Processing completed

|  |
| --- |
| Describe the alert scenario and the trigger? It will be sent out once all the processing has been completed. |
| How will alert be sent back to the Business? It will be sent out in an email with the name of the input file that was processed. |
| What will be the file structure or message format used for the alert?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Alert Type: Input file processed  Alert Detail: Input file processed , ready for your review <xyz> |
| When will they be sent? It will be sent out once all the records processed in the input file. |
| Where will they be sent? It will be sent out to business mailbox. |

# Process Control

## Operating Hours

|  |  |
| --- | --- |
| **Will the solution run outside normal working hours?** | Yes and No |
| **What time will the solution start?** | It will start at as per the availability of the business SME to be able to create the input file and be ready to perform QC |
| **Will the solution work to a stop time?** | No |
| **What days of the week will the solution run?** | Varies as it depends on the availability of SME |
| **Are there any days or times when the solution must not run?** | It needs to be manually controlled to run . |

## Business Interaction

|  |  |
| --- | --- |
| **What part will the Business play within the end-to-end process?**  Business will prepare the input template for bot consumption. It will also review the exceptions sent to them with details. They will also need to perform check and validate if bot performed all tasks as expected. Any issues found they need to communicate those back to R&D RPA team for analysis. | |
| **Will the Business supply new work to the solution?** | Yes |
| **Will the Business resubmit exception cases to the solution?** | Yes |

# Execution

## Restrictions

|  |  |
| --- | --- |
| Are there any business thresholds that must be adhered to?  E.g. payments below a certain value | No |
| What are they?  <describe the business thresholds> | |
| Are there any time windows or periods when any of the target systems are unavailable? | No |
| List the systems and when they are unavailable.  QAAD <<Need to check on unavailability >> | |

# Data Management

## Data Input

|  |
| --- |
| Describe the data that will serve as an input to the automated solution:   * It will be a structured template that bot will use to process requests |
| Where will the work come from?  It will be provided by the business . |
| What time and frequency will the work arrive?  As needed. |
| Is it possible that no work will arrive? What should happen then?  Process needs to be check for input file for processing. If no work bot needs to just exit and check in the next cycle. |

## Identification

|  |  |
| --- | --- |
| Can cases be uniquely identified? | Yes |
| What field or combination of fields will be used as the identifier?  Activity Type and Activity Number | |
| Is it possible that the solution could be supplied with duplicate cases?  No | |
| What would be the consequence of working a case more than once?  It should trigger an exception that work for this has already been completed. | |
| Once detected, how should duplicates be dealt with?  Bot needs to update the input file with the results stating “ files already exist” | |
| Is it possible that a case can legitimately reappear at a later date? | Yes |
| How will a legitimate reoccurrence be distinguished from an unwanted duplicate?  Bot needs to update the input file with the results stating “ files already exist” for any duplicates. Any unwanted duplicate with the invalid data format needs to be rejected. | |

## Management Information and Additional Output

|  |  |
| --- | --- |
| Apart from exceptions, will the solution create any additional output or management information? | Yes , running report with how many cases have been completed. |
| What will be the file structure or message format used?  Bot ID: R02020202  Resource PC: <resource name.  Process Name: <process name>  Attachment: status report | |
| How will it be created?  It will be created as a cumulative report for all the files processed to date. | |
| When will it be created?  It can be created after each process run when the processing completes. | |
| Where will it be sent?  It will be sent to business mailbox. | |

## Preservation

Complete the following items where the Blue Prism solution should purge aged data.

|  |
| --- |
| How long should input data be kept for?  Until all the validation has been completed business all data must be preserved |
| How long should work queue data be kept for?  Same as above |
| How long should output data be kept for?  Same as above |

# Business Continuity

## Blue Prism Unavailability

|  |
| --- |
| If this solution became inoperable and the current DR strategy was unable to ensure availability how continuity should be achieved?  <Describe how the business would retain continuity if the platform was not available.> |
| How would the Business like to be informed of Blue Prism unavailability?  R&D RPA team to notify business if BP is unavailable |
| What is the business effect of the process not running for one hour?  minimal |
| What is the business effect of the process not running for four hours?  minimal |

## Excessive Workload

|  |  |
| --- | --- |
| Is it possible that the solution could be overwhelmed by an excessive workload? | Yes |
| Is this solution required to detect such an event? | No |
| Quantify an overload threshold  More than 250 records | |
| Is this solution required to respond to such an event? | No |
| How would this be achieved?  <How should the system respond to excessive workload> | |
| How should the Business be informed?  <Provide details> | |
| How should the Business deal with the situation?  Business needs to provide file containing records for less than or up to 250 | |

# Metrics

## Workload

|  |  |
| --- | --- |
| How many cases is the solution expected to handle?  Include frequency e.g. 1000 cases per week, 50 cases per hour | 250 per day |
| What is the maximum expected volume? | 250 |
| What is the minimum expected volume? | 1 |
| Are there any periods when a higher workload is anticipated? | No |
| What are they?  <describe the time periods of when higher workload is expected> | |

## 

## Manual Resource Effort

|  |  |
| --- | --- |
| How many FTE are currently required to perform the process manually? | 1 |
| What is the average case handling time? | 23 minutes |

## 

## Service Level Agreements

|  |  |
| --- | --- |
| Are there any SLAs this solution must conform to? | No |
| What are the SLAs?  NA | |
| Should the solution be expected to recognise an SLA breach? If so how?  NA | |

# Revision History

<Use the table below to track changes made to the document. Be sure to include the date the document was created/updated. Be sure to sufficiently define changes to facilitate version review and document update approvals.>

| Version | Date | Author | Change Descriptions |
| --- | --- | --- | --- |
| 1.0 | 8/22/2019 | Pankaj Walia | Initial |