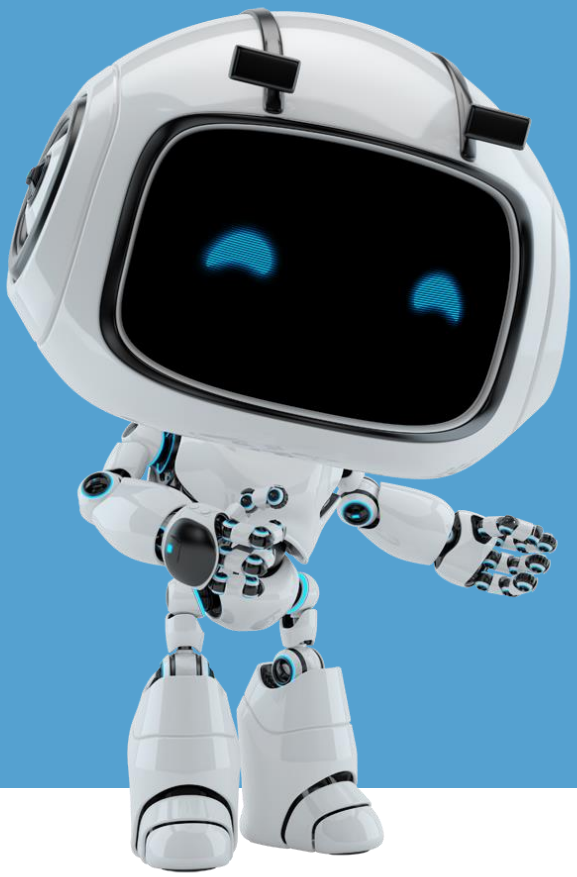
Robotic Process Automation



UIPath Automation

Process design document

Process Design Document History

Date	Version	Role	Name	Organization	Function	Comments
28.09.2017	1.0	Draft	*Olfa Ben Taarit*	*ACME Systems Inc.*	*SME*	Creation v 1.0
28.09.2017	1.2	Reviewer	*Vrabie Stefan*	*Ui Path*	*BA*	Approved v 1.0

Table of Contents

1. Introduction

1.1 Purpose of the document

The Process Design Document describes the business processes chosen for automation using UIPath Robotic Process Automation (RPA) technology.

The document describes the sequence of steps performed as part of the process, the conditions and rules of the process prior to automation. This design document serves as a base documentation for developers to collect the details required for robotic automation of the same business process.

1.2 Objectives

The process has been selected for RPA as part of the larger project initiative conducted within ACME Systems Inc., the Finance and Accounting department.

The objective of this process automation is linked to the project business case and it is mainly intended to:

- Deliver faster processing
- Reduce duration of time-consuming activities
- Leverage automation to improve the department`s overall performance and reliability.

1.3 Process key contacts

The design document includes concise but complete requirements of process and it is built based on the inputs provided by the process Subject Matter Expert (SME).

For escalation points, please review the table below:

Role	Name	Date of action	Notes
Process SME	Aurel Vlaicu	TBD	Point of contact for questions related to business exceptions and passwords
Reviewer / Owner	Sergiu Celibidache	tBD	POC for process exceptions.
Approval for production	Nicoale Herlea	TBD	Escalations, Delays,

2. AS IS Process Description

2.1 Process overview

General information about the process selected for RPA, prior to automation:

AS IS process details	
Process full name	Calculate Client Security Hash
Function	Security
Department	Finance and Accounting
Process short description (operation, activity, outcome)	Generate the Security Hash for each Client based on their personal information.
Role required for performing the process	System 1 User
Process schedule	Monthly
# of items processes /month	7 – 15 Clients
Average handling time per item	2 min / Client
Peak period (s)	No peak period
# of FTEs supporting this activity	1
Level of exception rate	No expected exceptions

Input data	Client Data
Output data	Client Security Hash

2.1.1 In scope for RPA

The activities and exception in of scope for RPA, in this automation workflow/sequence are listed here:

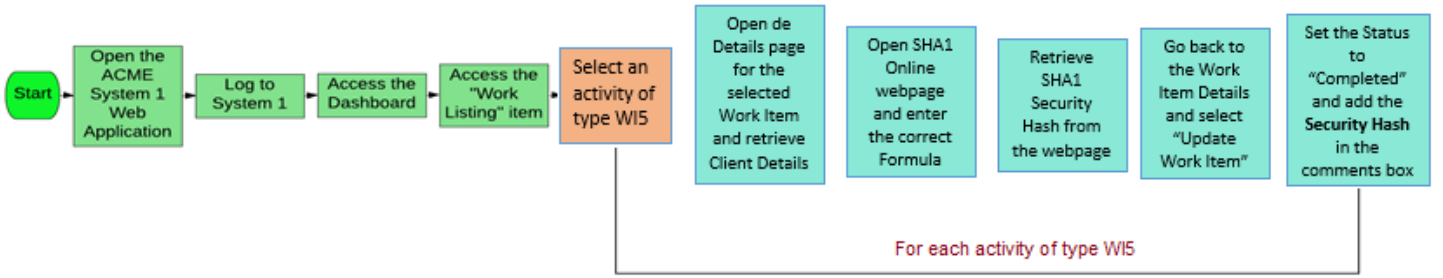
- *Full Scope of the process for RPA - to be 100% automated*

2.1.2 Out of scope for RPA

There are no activities out of scope for RPA

2.2 Detailed Process map

This chapter presents the chosen process in detail, which enables the developer to build the automated process.

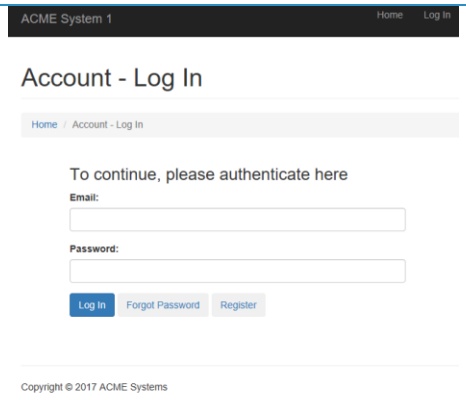
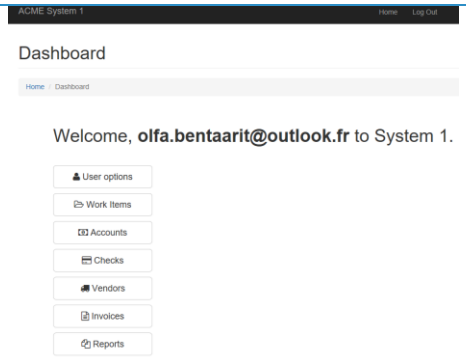
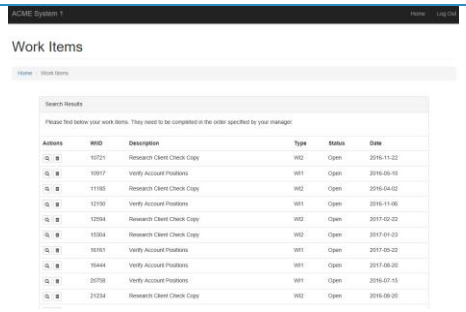


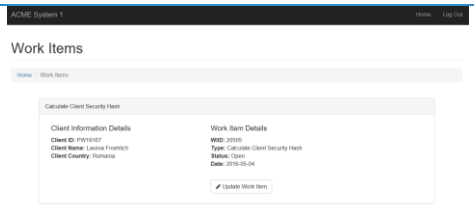
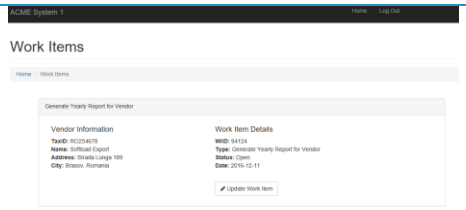
Step	Short Description
1.1	Open the ACME System 1 Web Application
1.2	Log in to System 1 (input data : email and password)
1.3	Access the Dashboard, it's the central location where the user can pick a specific menu item
1.4	Access the Work Items Listing to consult all the available tasks to perform (Output data: Work Items)
1.5	**For each activity** of the type WI5 perform the following steps
1.5.A	Open the Details page for the selected activity and retrieve the Client Details
1.5.B	Open the SHA1 Online Webpage - http://www.sha1-online.com/ and enter the Correct Formula: **[ClientID]-[ClientName]-[ClientCountry]** Replace all variables with the corresponding value and use dashes between them, as shown.

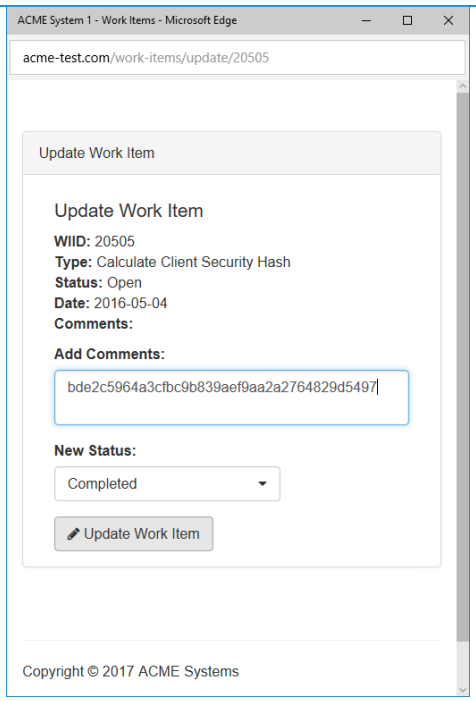
1.5.C	Retrieve Client Security Hash from the Webpage
1.5.D	Go back to the Work Item Details and open the “Update Work Item”
1.5.E	Set the status to Completed and the Comment to the obtained **[SecurityHash]**
1.6	Continue with the next WI5 Activity

2.4 Detailed Process Steps

Complete and concrete process steps at keystroke level or clicks to be defined with screenshots. (If there are any data restrictions, mask important data like Policy Number, Customer ID, bank account etc).

#	Step action description	Screenshot	Expected result	Remarks
1.1	Open the ACME System 1 Web Application		Opening of a screen: System 1 Web App	**Possible exception:** - Handle exception if *Web app not available*
1.2	Log in to System 1 (input data : email and password)		Access to the dashboard	**Possible exception:** - Handle exception if *Incorrect email or Password*
1.3	Access the Dashboard, it's the central location where the user can pick a specific menu item			
1.4	Access the Work Items Listing to consult all the available tasks to perform (Output data : task)		List of tasks	

1.5	**For each activity** of the type WI5 perform the following steps			**Possible exception:** Handle exception if *no task* of type WI5 *exist*
1.5.A	Open the Details page for the selected activity and retrieve the Client Details			
1.5.B	Open the SHA1 Online Webpage - http://www.sha1-online.com/ and enter the Correct Formula: **[ClientID]-[ClientName]-[ClientCountry]** Replace all variables with the corresponding value and use dashes between them, as shown.			
1.5.C	Retrieve Client Security Hash from the Webpage			
1.5.E	Go back to the Work Item Details and open the “Update Work Item”			

1.5.F	Set the status to Completed and the Comment to the obtained **[SecurityHash]**			
1.6	Continue with the next WI5 Activity			

2.5. Exceptions handling

Exceptions identified in the automation process can be classified as:

Area	Known	Unknown
Business	Previously encountered. A scenario is defined with clear actions and workarounds for each case.	New situation never encountered before – it should not really happen. It can be caused by external factors.

Based of the above criteria the table below should reflect all exceptions identifiable in the process and map the expected action the robot needs to take for each exception.

Below are the exceptions captured during the process study. These are known exceptions, met in practice before. For each exception an action is defined.

Insert as many rows as required in the table, to capture all exceptions in a comprehensive list.

#	Exception name	Step where exception is encountered	Parameters	Action to be taken
1	Web app not available	Step # **1.1**	If Web app is not available	Send email to exceptions@acme-test.com *"Hello,* *System 1 web App could not be open because the web app is not available"*
2	*Incorrect email or password*	Step # **1.2**	If *message for incorrect username or password exist*	Send email to exceptions@acme-test.com *"Hello,* *The username or the email is incorrect. Please check and restart* *Thank you"*
3	No task of type WI5 exists	Step # **1.5**		Wait 30 min and retry

For all the other unanticipated or unknown exceptions, the robot should send an email notification at exceptions@acme-test.com with the original email and error message screenshot attached.

2.6 Error mapping and handling

A comprehensive list of all the errors or warnings or notification 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	Experienced previously, action plan or workaround available for it.	New situation never encountered before, or may happened independent of the applications used in the process.

Based of the above criteria the table below should reflect all errors identifiable in the process and map the expected action the robot needs to take for each error.

Insert as many rows as required in the table, to capture all errors in a comprehensive list.

*Feel free to insert an additional error mapping table for more complete explanation.

E #	Error name	Step where error is encountered	Parameters	Action to be taken
	Application Crash / Internal Server Error	Any step	Error message	Refresh / Retry Send email with screenshot to exceptions@acme-test.com Close application and run the sequence again
	Application unresponsive / page not loading	Any step	No response / blank page	Wait 5 minutes and retry 2 times. Close application and run the sequence again

2.7 In-Scope application details

The table below lists all the applications that are used as part of the process automated, at various steps in the flow.

#	Application name & Version	System Lang.	Login module	Interface	Environment/ Access method	Comments
1	ACME System 1	EN	Web	Web	Web Browser	

3. Development details

3.1 Prerequisites for development

- Development or testing environment will be provided for development.
- Development/testing environment is an exact replica of production environment.
- Dedicated system and application access are given to developers with adequate permission.

3.2 Password policies

Users manage their own passwords. There are no special policies in place.

3.3 Credentials and asset management

Log on details (user IDs and passwords) should be stored under “Windows Credential Manager” or “UIPath Orchestrator Assets”

4. Testing preliminary details

Below are the various stages in testing. Update each item with Testing plan.

Testing	Owner	Start date	End date	# of test cases	% of Success	Status
Alpha	RPA Project Lead					
User Acceptance Testing	Process SME					
Regression Testing	Process Owner					
Security Testing	Client IT / Info Sec Team					

4.1 Alpha testing

Alpha and Beta Testing: Alpha testing is the testing done by RPA developers and RPA project lead after development.

4.2 User Acceptance Test

Business operations team creates test cases and provides test data for development and testing. This is due to be provided by POC.

5. Annexure

5.1 UIPATH automated process details

Note: this step is to be filled in after automation process is complete

Automation overview: (time to dev, test, etc)

Robots type: Back Office Robot

Level of human intervention required:

Use of Orchestrator:

Exceptions recorded in automation process:

Errors identified in the automation process:

Challenges identified in the automation process:

Lessons Learned:

Any adjustments done in the automation process to facilitate (steps tweaked from the human way of working to an automatic programing way of working).All activities which have been performed to tweak the as is process to enable higher rates of automation on the process.

- Process Assumption
- Input data assumption
- Number or types of input to be received
- Skip logon interface and collect back end details
- Extract data from backend without opening the file…
- Data conversion / formatting

Reporting: The details and format of the logging available in the workflow must be specified here. (Whether it is creating local log reports or Orchestrator logs).

The format should be specified by the business users.

Workflow and scripts: A brief of each workflow and the sequence in which are executed should be described here.