

Full Stack P3 Setup

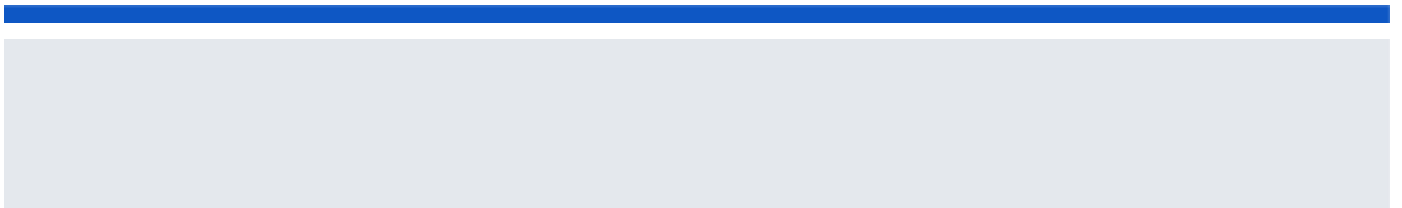


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I. Introduction

I.1 Purpose of the document

The Process Definition Document outlines the Full Stack P3 Setup chosen process for automation using UiPath Robotic Process Automation (RPA) technology.

The document describes the sequence of actions performed as part of the Full Stack P3 Setup 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 with the details required for applying robotic process automation to the selected business process.

I.2 Objectives

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

- Creating GitHub repositories, adding all trainers and trainees, and forking repositories as needed.
- Setting up Zoho boards and adding users to email.

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 actions, context, impact and a set of process exceptions. The details are to be included in the table below.

Role	Name	Contact details (email, phone number)	Notes
Process Owner	Marielle Nolasco	marielle.nolasco@revature.com	
Process Owner	Pushpinder Kaur	pushp.com@gmail.com	
CoE	William Gentry	william.gentry@revature.com	Point of contact until 12/25
CoE	Kenny Davis	kenneth.davis@revature.com	Point of contact from 12/28 onward

I.4 Minimum Prerequisites for automation

1. A filled in Process Definition Document
2. Test Data to support development
3. List of emails/accounts to add for both the GitHub repositories and Zoho boards

II. 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	Full Stack P3 Setup
2	Process Area	Management
3	Department	Training Department
4	Process short description (operation, activity, outcome)	Add all Revature trainers and trainees to a newly created GitHub organization, creating forks for different repositories. Create a new Zoho board and add the same people onto the email list.
5	Role(s) required for performing the process	Batch Trainer(s)
6	Process schedule and frequency	One time
7	# of items processed /reference period	1
8	Process execution time	Estimated 5-10 minutes
9	Peak period (s)	No peak period
10	Transaction Volume During Peak period	N/A
11	Total # of FTEs supporting this activity	1
12	Expected increase of volume in the next reference period	N/A
13	Level of exception rate	No expected exceptions
14	Input data	Login credentials for github. Name of the organization to be created and contact email for that organization. Sheet containing the list of trainers and trainees that should be added to the GitHub repository and Zoho board.
15	Output data	None

II.2. Applications used in the process

The table includes a comprehensive list of all the applications that are used as part of the process to be automated to perform the given actions in the flow.

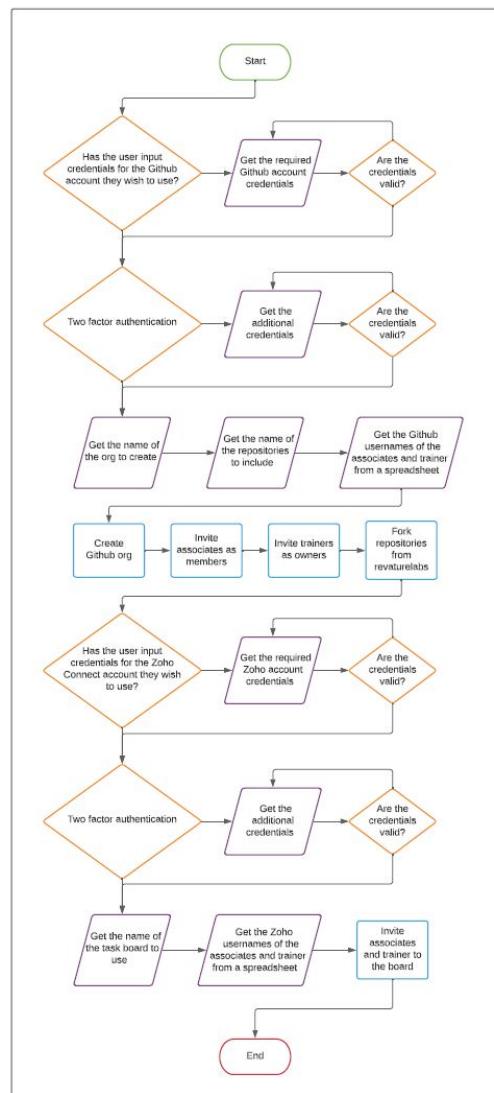
#	Application name & version	System Language	Thin/Thick Client	Environment/ Access method	Comments
1	Microsoft Edge		Thick		

*Add more rows to the table to include the complete list of applications.

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 Process statistics

High level statistics

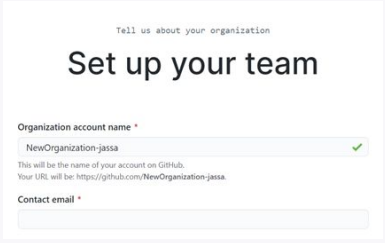
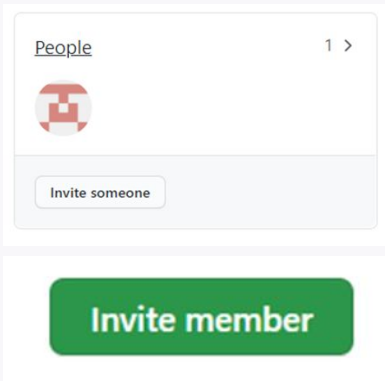
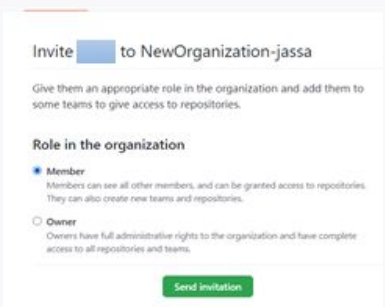
Processes	Windows	Actions	Mouse clicks	Keys pressed	Text entries	Hotkeys used	Time
3	1	30	15	0	7	7	5-10 min.

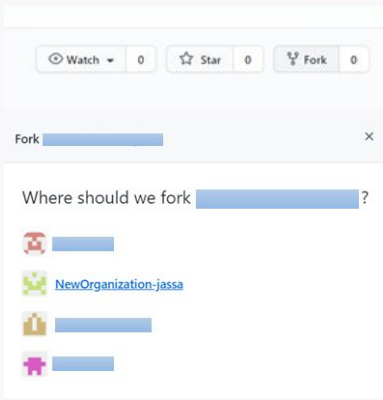
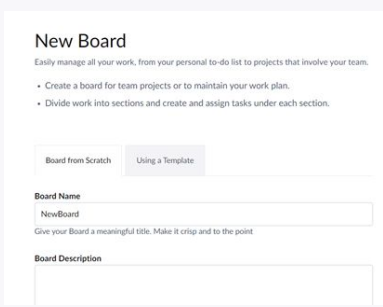
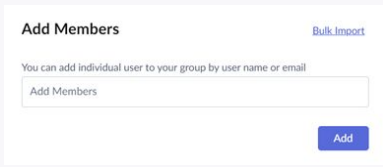
Detailed statistics

Window name	Mouse Clicks	Text entries	Keys pressed
Microsoft Edge	15	7	0

II.5 Detailed As-Is Process Actions

Step #	Step action description	Screenshot	Expected result	Remarks
1.1	Get the name of the organization as user input		Name is saved into string variable	
1.2	Get GitHub usernames from spreadsheet		Usernames are stored into a datatable	
1.3	Get trainer user GitHub credentials		Credentials are stored into secure string variables	Possible Exception: Handle exception if credentials are invalid
1.4	Open browser, login to GitHub, and wait for user to manually handle two-factor authentication		User is logged into github	

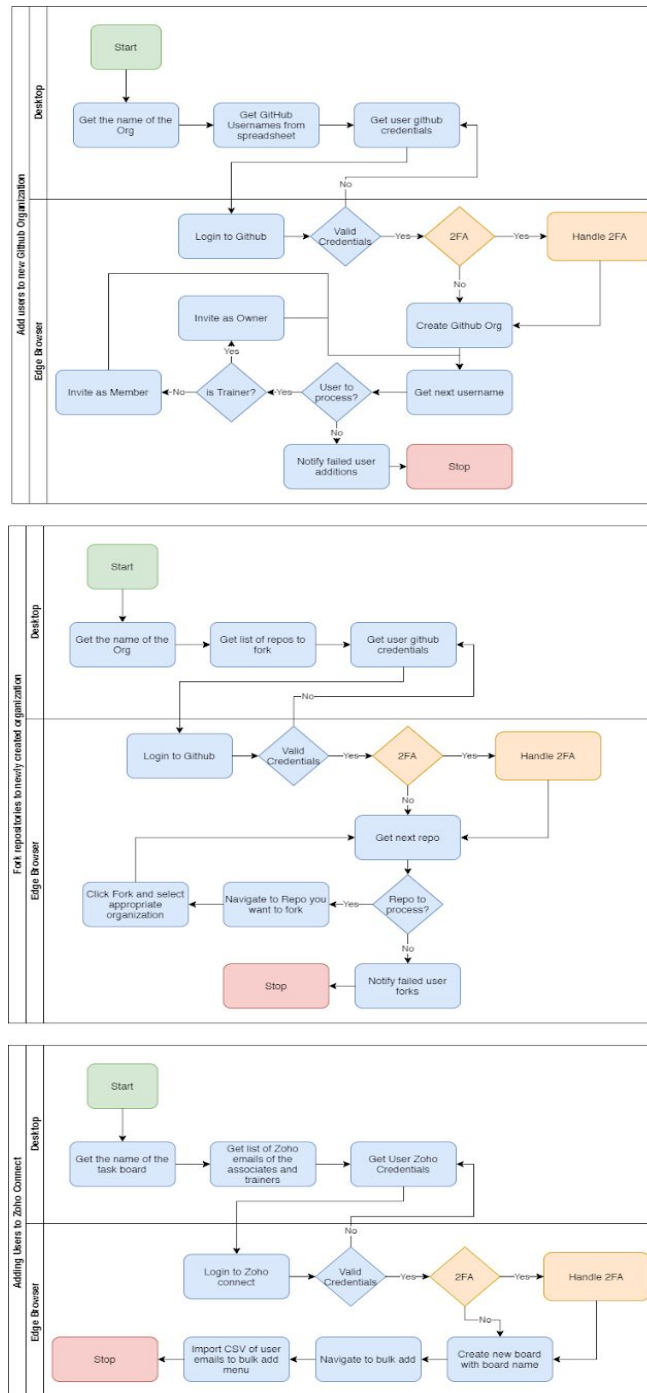
1.5	Create GitHub organization using name and contact email provided as input		P3 organization is successfully created	
1.6	Navigate to the add members page of GitHub organization			
1.7	For each username in the datatable check if they are a trainer or an associate			
1.8	If they are an associate, invite as a member to the organization. If they are a trainer, add as an owner.		Member or owner successfully invited	Possible Exception: Handle exception if username is invalid
1.9	Notify any failed user additions to the logged in user			
2.1	Get list of repos to fork		Repos saved to datatable	
2.2	Get trainer user GitHub credentials		Credentials are stored into secure string variables	Possible Exception: Handle exception if credentials are invalid
2.3	Login to GitHub		User is logged into GitHub	

2.4	For each repo in the datatable navigate to it in GitHub and fork to the organization		Navigate and fork current repo	
2.5	Click fork and select appropriate organization. Repeat step 2.5 until no more repos		Fork current repo to appropriate organization	Possible Exception: Handle exception if repo is invalid
2.6	Notify of any failed user forks		Notifies the user of failed forks	
3.1	Get the name of the task board		Task board name saved to string variable	
3.2	Get list of zoho emails and associates and trainers		Emails saved to data tables	Possible Exception: Handle exception if Zoho email is invalid
3.3	Get trainer user Zoho credentials		Save credentials to secure strings	
3.4	Login to zoho connect with valid credentials		User is signed in	Possible Exception: Handle exception if credentials are invalid
3.5	Create new board with board name		New board is created	
3.6	Navigate to bulk add		Bulk add window appears	

III. To-Be Process Description




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

III.1 To-Be Detailed Process Map



Highlight Bot interventions/ To-Be automated actions with different legend/ icon (purple)

*Mention below if process improvements were performed on the To-Be design and provide details.

Legend	Description
	Action number in the process. Referred to in details or Exceptions and Errors table
	This process action is proposed for automation
	This process action remains manual (to be performed by a human agent)

III.2 Parallel Initiatives/ Overlap (if applicable)

This chapter covers the proposed Business, Process & System changes to be made in the near future and their impact.

S.No	Initiative Name	Process Action(s) where it is identified	Impact on current automation request? How?	Expected Completion Date	Contact person for more details
	n/a				

III.3 In Scope of RPA

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

1. Outside of steps involving 2FA and getting login credentials, the process is entirely automated.

III.4 Out of Scope of RPA

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

Sub-process (if applicable)	Activity (action)	Reasons for Out of scope*	Impact on the To-Be	Possible measures to be taken into consideration for future automation
	Handle 2FA	2FA	After attempting to log into GitHub or Zoho, if 2FA is required then that must be handled accordingly by the user or the process will halt.	

*Add more rows to the table to reflect the complete documentation provided to support the RPA process.

III.5 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.

Known Exceptions

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

BE #	Exception name	Action	Parameters	Action to be taken
1	Invalid GitHub credentials	Login into GitHub	Entered invalid credentials	Notify user of invalid credentials.

2	Invalid Zoho credentials	Login into Zoho	Entered invalid credentials	Notify user of invalid credentials.
3	Invalid 2FA	Login to GitHub and Zoho	Entered invalid 2FA	Notify user of failed login. Retry up to 3 times.

Unknown Exceptions

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

III.6 Application 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, an action plan or a workaround available.	Never encountered before, or may happen independently of the applications used in the process.

Known Errors or Exceptions

The table below reflects all the errors identified 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 where exception is encountered	Parameters	Action to be taken
1	Failed to add user to Github Organization	Add user to organization	Github username was invalid	Ask for username
2	Failed to fork repo	Fork repository to organization	Repo was invalid	Ask for repo
3	Failed to add user to Zoho Connect	Import emails from csv file	Zoho email was invalid	Ask for email

Unknown Errors and Exceptions

For all the other unanticipated or unknown application exceptions/errors, the robot should: recover & retry for maximum 3 times. Close the applications and run the sequence again

III.7 Reporting

#	Report type	Update frequency	Details	Monitoring Tool to visualise the data
1	Process logs	Daily	How many times was this process run since the beginning of the month and what was the average run duration?	Kibana
2	Process logs	Monthly	How many robots worked on this process per month?	Csv file posted daily on share drive
3	Transaction logs	Daily	How many transactions were run by this process since the beginning of the month and what was the average transaction duration?	Kibana
4	Error logs	Daily	Average number of errors by type per day	Kibana
5	Error logs	Daily	All errors per month grouped by type	Csv file posted daily on drive

* For complex reporting requirements, include them into a separate document and attach it to the present documentation

IV. Other Observations

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

Example: Specific Business monitoring requirements (audit and reporting) etc.

V. 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		
Video Recording of the process (Optional)		
Standard Operating Procedure (s) (Optional)		
Business Rules Library (Optional)		
Other documentation (Optional)		

*Add more rows to the table to reflect the complete documentation provided to support the RPA process.