# **Process Design Document (PDD)**

Criminal Justice Information Service (CJIS)

BouncerBot

# **Document History**

Date	Version	Role	Name	Office	Function	Comments
04/29/2020	1.0,	Author	James	SCXP	Business	Created document
05/04/2020	2.0		Newbrough		Analyst	v 1.0, v 2.0
08/07/2020	3.0	Author	James	SCXP	Business	
			Newbrough		Analyst	

# **Document Approval Flow**

Version	Flow	Role	Name	Office	Signature and Date:
	Document	Business	James	SCXP	
	prepared by	Analyst	Newbrough		
	Document	Process	Shawn	SCOO	
	Approved by:	Owner	SilvaCosgrove	(CSC)	
	Document	CoE	Justin Daneill	SCOK	
	Approved by:	Manager			

# **Table of Contents**

#### I. Introduction

- I.1 Purpose of the Document
- I.2 Objectives
- I.3 Key Contacts
- I.4 Minimum Prerequisites for Automation

# **II. As-Is Process Description**

- **II.1 Process Overview**
- II.2 Applications Used in the Process
- II.3 As-Is Process Map
- II.4 Process Statistic
- II.5 Detailed As-Is Process Steps
- II.6 Input Data Description

# **III. To-Be Process Description**

- III.1 To-Be Detailed Process Map
- III.2 Parallel Initiatives / Overlap (if applicable)
- III.3 In Scope for RPA
- III.4 Out of Scope for RPA
- III.5 Business Exceptions Handling
- III.6 Application Error and Exception Handling
- **III.7 Reporting**
- IV. Other Observations
- V. Additional Sources of Process Documentation

#### I. 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 the proof of concept selected by 66 ABG/SC for utilization and support of allied unit Security Forces (SFS). It is a quick win for Security Forces to automate processing of CJIS back ground checks and creating a time stamped data base of checks.

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

- > Automate CJIS processing to eliminate tedious manual data transfer
- Reduce processing time per item by 50-75%

#### I.3 Key Contacts

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
Process SME	Adrianna Williams		Point of contact for questions related to process details & exceptions
Process Reviewer	Christine Tuatoo		Point of contact for questions related to process details & exceptions
Process Owner/ Approver for production	Martin Garland		Escalations, Delays etc.

#### I.4 Minimum Prerequisites for Automation

- 1. Filled in Process Design Document
- 2. Test Data to support development

- 3. User access and user accounts creations (licenses, permissions, restrictions to create accounts for robots)
- 4. Credentials (user ID and password) required to logon to machines and applications
- 5. Dependencies with other projects on the same environment

# 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	Criminal Justice Information Service (CJIS)/BouncerBot
2	Process Area	Visitors Center
3	Department	Security Forces
4	Process short description (operation, activity, outcome)	Security Forces inserts key data from IDs, Passports and other forms of identification into CJIRs to retrieve personnel background information to authorize base access.
5	Role(s) required for performing the process	Security Forces Officer
6	Process schedule and frequency	Daily, Monday to Friday, 0800 - 1700
7	# of items processes /reference period	50-100/ day business as usual
8	Average handling time per item	10 minutes
9	Peak period (s)	When events, ceremonies or otherwise coordinated events occur.
10	Transaction Volume During Peak period	30-50% volume increase
11	Total # of FTEs supporting this activity	2 Officers
12	Expected increase of volume in the next reference period	unknown
13	Level of exception rate	Determined when a degradation or outage of CJIS.  Varies by need of information required and IDs requiring check.
14	Input data	ID, Passport or other identification method
15	Output data	CJIS report; Excel Backlog of who has been run.

<sup>\*</sup>Add more rows to the table to include relevant data for the automation process. No fields should be left empty. Use "n/a" for the items that don't apply to the selected business process.

# II.2. Applications Used in the Process

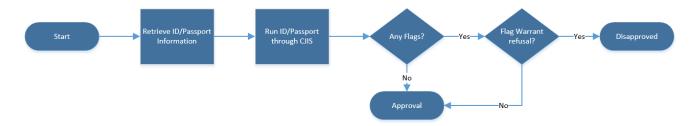
The table includes a comprehensive list all the applications that are used as part of the process automated, at various steps in the flow.

#	Application name & version	System Language		Environment/ Access method	Comments
1	CJIS	EN	Thick Client	Web Browser	

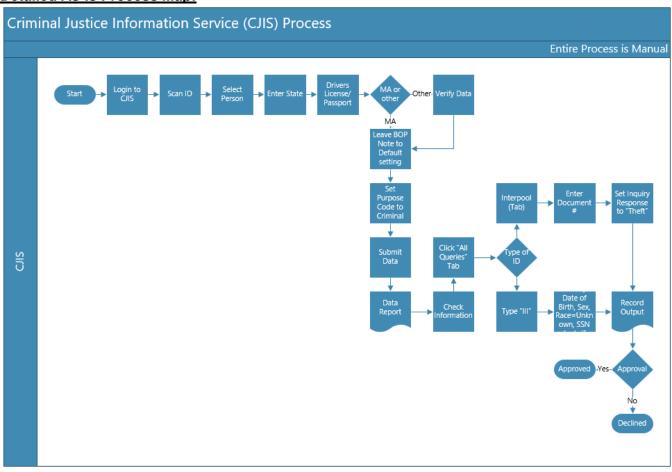
\*Add more rows to the table to include the complete list of applications.

# II.3 As-Is Process Map

<u>High Level As-Is Process Map:</u>
This chapter depicts the As Is business process at a High Level to enable developers to have a highlevel understanding of the current process.



### **Detailed As-Is Process Map:**



# II.4 Process statistics

#### **High level statistics**

Processes	Windows	Steps	Mouse clicks	Keys pressed	Text entries	Hotkeys used	Time
1	1	11	12	40	5	0	180.0 sec.

# **Detailed statistics**

Window name	Mouse Clicks	Text entries	Keys pressed
Internet Explorer	12	5	40

# II.5 Detailed As-Is Process Steps

This chapter depicts the As-Is business process in detail to enable the Developer to build the automated process.

	Detailed As-Is F	Detailed As-Is Process Steps					
Step	o Input	Description	Details (Screen/ Document/ Video recording Index)	Exception Handling	Possible Actions	Business Rules Library Index	

See doc attached



# **II.6 Input Data Description**

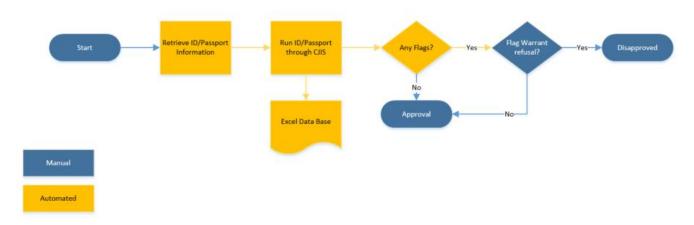
Step	Sample (Print- screen)	Input type	Location	Inputs are standard? (Yes/ NO)	Inputs are structured?	Data to be used from
4	See WI5_ Detailed Process	Screen	CJIS Data Box	YES	YES	State
12	See WI5_ Detailed Process	Screen	CJIS Data Box	YES	YES	Name Date of Birth Sex Social Security Number

<sup>\*</sup> Inputs are **standard** if the content is positioned in the same place even if the input types are different.

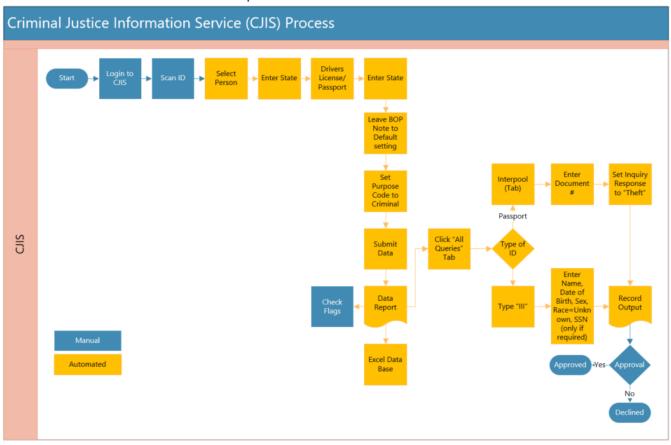
E.g. a process that uses at each transaction the same template, so fields to be extracted are always fixed. Inputs are **structured** if it is machine readable and digital. Scanned PDF Images/ Free flow texts in Emails are unstructured inputs

# **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 steps with different legend/ icon (orange)

#### III.2 Parallel Initiatives/ Overlap (if applicable)

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

S. No	Initiative Name	Process Step(s) where it is identified	Impact on current automation request? How?	Expected Completion Date	Contact person for more details
2	Scanner Addition	Scan ID	It'll be the starting point where all the information is collected by the automation	As soon as possible.	Martin Garland

#### III.3 In Scope for RPA

The activities in scope of RPA, are listed here:

- 1. Scan ID
- 2. Select Person
- 3. Enter State ID
- 4. Drivers License or Passport select
- 5. Leave BOP Note Default
- 6. Purpose Code set to criminal
- 7. Submit Data
- 8. Check info
- 9. Go to "All queries Tab"
- 10. Type III
- 11. Type in Personnal Data
- 12. Record Data Retrieved

#### III.4 Out of Scope for RPA

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

Sub- process (if case)		Reasons for Out of Scope*	Impact on the To-Be	Possible measures to be taken into consideration for future automation
1.1	NA			

<sup>\*</sup>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	Currently no automation process has been attempted for this on
is defined with clear actions and	Hanscom AFB. Business exceptions will be identified as they come
workarounds for each case.	up.

#### 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	Action to be taken
1	Multiple persons with same name	9, 12	Name	Input SSN to clarify correct person

#### Unknown Exceptions

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

Pop up an error box that notifies the user that something went wrong with the process and the automation stops mid process.

#### 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	1 27 1	New situation never encountered before or may happened independent of the applications used in the process.

#### Know 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	Application Crash / Internal Server Error	Any step	Error message	Close the applications and run the sequence again

#### Unknown Errors and Exceptions

For all the other unanticipated or unknown application exceptions/errors, the robot should:

Pop up an error box that notifies the user that something went wrong with the process and the automation stops mid process.

# **III.7 Reporting**

#	Report type	Update frequency	Details	Monitoring Tool to visualize the data
1	Excel	After every ID run	TBD	Manual Review
2				

<sup>\*</sup> 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				

<sup>\*</sup>Add more rows to the table to reflect the complete documentation provided to support the RPA process