

**Robotic Process Automation**

Daily placement input file csv and Generate excel file & compare data

Development Specifications Document (DSD)

Elements Blue

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Document History

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Version Control

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## Document Overview

The **Daily placement input file csv and Generate excel file & compare data - Development Specifications Document (DSD)** Provides a brief overview of the Process.

It also provides the details about the process flows, activities used to build the process, Asset Names, Project Details, Environment Setup, Configurations etc.

## Automated Master Project details

|  |  |  |
| --- | --- | --- |
| # | Item | Details |
| **1** | **Master project name and version** | **Daily placement input file csv and Generate excel file & compare data** |
| **2** | **Robot type** | Mix (FOR/BOR) |
| **3** | **Is Orchestrator used?** | Yes |
| **4** | **Scalable?** | Yes |

## Runtime Guide

### List of packages

|  |  |  |
| --- | --- | --- |
| # | Package name | High Level description |
| 1 | BalaReva.DataTable.Activities | Provides activities for working with DataTable. |
| 2 | Microsoft.Activities | Provides activities for working with expressions and data types, messaging, communications, and building the logic of workflow applications. |
| 3 | Microsoft.Activities.Extensions | Provides useful extension methods, alternate Task based API and activities. |
| 4 | UiPath.Database.Activities | Provides SQL Activities Pack. |
| 5 | UiPath.Excel.Activities | Provides Execute Excel related operations using the Open Office XML format (XLSX) or Excel.Interop. |
| 6 | UiPath.Mail.Activities | Provides activities for Retrieve and send mail using POP3, IMAP, SMTP and Exchange protocols. |
| 7 | UiPath.System.Activities | Provides core activities which enable the robots to manipulate data tables and collections, work with files and folders, communicate with Orchestrator. Package also contains workflow operators, dialog forms, debugging and invoking methods. |
| 8 | UiPath.UIAutomation.Activities | Provides core activities which enable the robots to simulate human interaction such as mouse, keystrokes and image recognition. Package also contains activities for event monitoring, image, browser and window manipulation. |

### Master Project Runtime details

|  |  |  |
| --- | --- | --- |
| # | Item | Details |
| **1** | **Production environment details** | Production Env |
| **2** | **Prerequisites to run** | • Changes in Config.xlsx File as per changes document. • Update Config File Path in UiPath Orchestrator. |
| **3** | **Input Data** | • XTEND Placement Acknowledgement Report for 12.06.18.xlsx  • XTEND REPORT.csv |
| **4** | **Expected Output (output data)** | XTEND CsvOutput.xlsx |
| **5** | **How to start the automated process?** | Hit the RUN Button on UiPath Studio |
| **6** | **Resuming the process from a particular step** | NA |
| **7** | **Reporting** | NA |
| **8** | **Manual Error Handling** | NA |
| **8 a. How to resume the process in case of error** | NA |
| **8 b. How to manually fix transactions with error** | NA |
| **9** | **Use of Orchestrator** | Yes |
| **Password policies** | NA |
| **Stored Credentials:** | NA |
| **List of Asset Names:** | MHRPABot1\_ConfigFilePath  MHRPABot1\_InputFolderPath  MHRPABot1\_ReqNo  MHRPABot1\_ProcessMaster  MHRPABot1\_ProcessOutput  MHRPABot1\_TableName  MHRPA\_Datasource  MHRPA\_DBName  MHRPA\_FromMailId  MHRPA\_DisplayName  MHRPA\_MailBody  MHRPA\_Subject  MHRPA\_Port  MHRPA\_Server  MHRPA\_ToMailId |
| **List of Queues Names** | NA |
| **Schedule details:** | NA |
| **10** | **Multiple resolutions supported** | NA |
| **Recommended resolution** | NA |

## Project details

* Getting All the Orchestrator assets
* Setting the next request number in orchestrator
* By using the Orchestrator Assets Configuring the Database Connections
* Extracting the client name from the input file name
* Inserting Request into Process Master Table in Database for each process
* Writing logs for each step into Database.
* Reading Config.xlsx file to get the file path
* Generating **MH File** Sheet in CsvOutput.xlsx Output File
* Generating **Xtend File** Sheet in CsvOutput.xlsx Output File
* Generating **Xtend Summary** Sheet in CsvOutput.xlsx Output File
* Generating **MH Not Xtend** Sheet in CsvOutput.xlsx Output File
* Generating **Xtend Not MH** Sheet in CsvOutput.xlsx Output File
* Sending Email Notifications for process completion
* Moving the input file to Successfully/Failed Processed Folder

### Project Name: MHRPA

|  |  |  |
| --- | --- | --- |
| # | Item name | Details |
| **1** | **Environment used for development** | Windows Env |
| **2** | **Environment prerequisites** | OS: Windows OS  Database: SQL Server  Tools: SQL Server Management Studio  UiPath Studio 2019.1.0 or above  .Net Framework v4.7.2 or above |
| **3** | **Logging level** | Windows Logging |
| **4** | **Details about automation** | NA |
| **5** | **In case of FOR, can the user operate the computer while the robot is running?** | Yes |
| **6** | **Repository for project** | NA |
| **7** | **List of reused components** | WriteLog.xaml, GenerateSummary.xaml |
| **8** | **Custom logs defined in the workflows** | NA |
| **9** | **Frequent errors found in the development phase** | NA |
| **10** | **Workarounds used in the automation phase** | NA |
| **11** | **Configuration method** | Orchestrator Assets, Config.xlsx File |
| **12** | **Configuration details** | Orchestrator Assets  Config File Path: MHRPA/Config/Config.xlsx |
| **13** | **Workflow File Export List** | NA |

#### Workflows specific to Daily placement input file csv and Generate excel file & compare data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Workflow file name | Description | Input Argument | | Output Argument |
| 1 | GetSetRequestNumber | Generating request No for each process. | | NA | • reqNo |
| 2 | InsertRequestIntoProcessMaster | Inserting Request into Process Master Table in Database for each process. | | •connectionObj  •ReqNo  •Config | NA |
| 3 | GetOrchestratorAssets | Getting Assets from orchestrator. | | NA | • Config |
| 4 | ReadConfigFile | Reading Config.xlsx file. | | • configSheets  • config  • FileName | • config |
| 5 | GenerateOuputfileMHSheet | Generating Sheet (MH File) in CsvOutput.xlsx Output File. | | • config | NA |
| 6 | GenerateSheet2ForOutputFile | Generating Sheet2 (Xtend File) in CsvOutput.xlsx Output File. | | • config | NA |
| 7 | GenerateSummary | Generating Sheet (Xtend Summary) in CsvOutput.xlsx Output File. | | • config | MHSheetDT |
| 8 | GenerateMHNotExtendSheet | Generating Sheet (MH Not Xtend) in CsvOutput.xlsx Output File. | | • Config | NA |
| 9 | GenerateXtendNotMHSheet | Generating Sheet (Xtend Not MH) in CsvOutput.xlsx Output File. | | • Config | NA |
| 10 | MovetoProcessedFolder | Moving the input file to Successfully/Failed Processed Folder. | | • Config | NA |
| 11 | SendEmail | Send Email Notification for process completion. | | • Config | NA |
| 12 | WriteLog | Writing logs for each step into Database. | | • connectionObj  • dataArray  •ReqNo  •Config | NA |

## Other Details

### Future improvements:

### Debugging tips:

### Other Remarks:

## Post UAT specifications

**Average duration per transaction**: (varies depending on the Test environment) :

**Recommended number of robots for the specified volumes**:

**Specified schedule**:

## Glossary

**Master project** - the overall output of the development, containing one or multiple projects that together cover the scope of the robotic process automation.

**Project** - an UiPath Studio project containing one or multiple workflow files. A project can be converted to a package and run independently, covering a particular scope within the master project. The project is used when defining the development and support phase of the automation.

**Package** - the output of compiling a project. A package can be deployed on the robot machine and be executed by the robot service. Only one package can be executed at a given time by a robot. The package is used when defining the running phase of the automation

**Workflow** - a component of the package, the workflow encapsulates a part of the project logic. The workflow can be of type: sequence, flowchart or state machine. a workflow is saved as an .xaml file inside the project folder. A workflow file can be invoked from another workflow and by default there is an initial workflow file that will run when executing the package.

**Activity** - an action that the robot executes.

**Sequence** - a workflow where activities are executed one after another, in a sequential order

**Flowchart** - a workflow where activities are connected by arrows and the logic of the workflow can be easily followed in a visual manner. The flowchart can also be exported as an image from UiPath studio

**State machine** - a more advanced way of organizing a workflow, similar to a flowchart.

**BOR** - Back office robot

**FOR** – Front office robot

**Orchestrator** – Enterprise architecture server platform supporting: release management, centralized logging, reporting, auditing and monitoring tools, remote control, centralized scheduling, queue/robot workload management, assets management.