**Technical Design Document**

**Monthly Base UNP and Long Leave Report**

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# **1 Introduction**

Monthly Base UNP and Long Leave Report

# **2 Purpose of this document**

This is a Technical Design Document that explains the technical aspects of the robot designed and developed using UiPath in detail. This will give an overview of the design of the bot and can be used by developers or other stakeholders to understand the prerequisites and requirements to execute the bot successfully.

# **3 Scope**

**The scope of this document includes:**

• Environment Specification  
• System Requirements  
• Prerequisites  
• UiPath Enterprise  
• File Folder Structure  
• Robot Design  
• Issues and Risks

**The scope of this document does not include:**

• Availability of Systems  
• System Changes  
• Changes to Input Files or Data Format  
• Process Changes

*Note – this is a Technical Design Document which only covers the technical aspects. Please refer to the Business Requirements Document for any other information about business processes*

# **4 System Requirements**

The Developer System (specifications below) was used to develop this Technical Design Document. It is important to note that the system the robot is migrated to should also have similar specifications to ensure a proper functioning of the robot.  
The system specifications for Monthly Base UNP and Long Leave Report process:

|  |  |
| --- | --- |
| **Operating System** |  |
| **Processor** |  |
| **RAM** |  |
| **Hard Disk** |  |
| **Components** |  |

# **5 Prerequisites**

The prerequisites for the robot to successfully run are as follows:

a. The following applications are installed in the system:  
 • UiPath 22.4.4.0  
b. The system has a valid studio and back office robot licence for UiPath  
c. Robot has access to all required applications  
d. Files are located in the system following the File Structure indicated below (Section 7).

# **6 UiPath Enterprise**

UiPath version 22.4.4.0 is the software used for developing the Technical Design Document.

# **7 File/Folder Structure**

**• Temporary Folder:**

Path at which all the temporary files are stored.

**• Input Folder:**

Path at which all the input files are stored.

**• Output Folder:**

Path at which all the output files are stored.

**• Code Repository**

Path at UiPath process workflows are be stored.

**• Config File Path**

Path at config files are be stored.

|  |  |
| --- | --- |
| File/Folder | File/Folder Location |
| Temporary Folder |  |
| Input Folder |  |
| Output Folder |  |
| Code Repository |  |
| Config File Path |  |

# **8 Bot Design**

8.1 Main.xaml

***Location: \Main.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Proceed | InOutArgument(x:Boolean) |  |

8.2 UNP\_Report\_Filtering.xaml

***Location: \UNP\_Report\_Filtering.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Arg\_Status | InOutArgument(x:Boolean) |  |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |

8.3 Read\_Excel.xaml

***Location: \Excel Module\Read\_Excel.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| out\_DataTable | OutArgument(sd:DataTable) |  |
| in\_WorkbookPath | InArgument(x:String) |  |
| in\_SheetName | InArgument(x:String) |  |
| in\_AddHeaders | InArgument(x:Boolean) |  |
| in\_CellAddress | InArgument(x:String) |  |

8.4 InitAllSettings.xaml

***Location: \Init Module\InitAllSettings.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| in\_ConfigSheets | InArgument(x:String) |  |
| in\_ConfigFile | InArgument(x:String) |  |
| Arg\_Status | InOutArgument(x:Boolean) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Today\_Date | InOutArgument(x:String) |  |

8.5 Error\_Mail.xaml

***Location: \Report\_Module\Error\_Mail.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Arg\_Status | InOutArgument(x:Boolean) |  |

8.6 Folder\_Path.xaml

***Location: \Report\_Module\Folder\_Path.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Arg\_Status | InOutArgument(x:Boolean) |  |

8.7 Formatting\_Report.xaml

***Location: \Report\_Module\Formatting\_Report.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Arg\_Status | InOutArgument(x:Boolean) |  |

8.8 Long\_Leave\_Report.xaml

***Location: \Report\_Module\Long Leave Report.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Arg\_Status | InOutArgument(x:Boolean) |  |

8.9 Send\_Mail.xaml

***Location: \Report\_Module\Send\_Mail.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Arg\_Status | InOutArgument(x:Boolean) |  |

8.10 UNP\_Report.xaml

***Location: \Report\_Module\UNP\_Report.xaml***

***Parameters:***

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| Out\_Config | InOutArgument(scg:Dictionary(x:String, x:Object)) |  |
| Folder\_path | InOutArgument(x:String) |  |
| Arg\_Status | InOutArgument(x:Boolean) |  |

# **9 Workflows**

|  |  |  |
| --- | --- | --- |
| Name | Invoked Workflow | Invoked In |
| \Main.xaml | •Init Module\InitAllSettings.xaml •Report\_Module\Folder\_Path.xaml •Report\_Module\UNP\_Report.xaml •Report\_Module\Long Leave Report.xaml •UNP\_Report\_Filtering.xaml •Report\_Module\Error\_Mail.xaml •Report\_Module\Send\_Mail.xaml |  |
| \UNP\_Report\_Filtering.xaml |  | •Main.xaml |
| \Excel Module\Read\_Excel.xaml |  | •Init Module\InitAllSettings.xaml |
| \Init Module\InitAllSettings.xaml | •Excel Module\Read\_Excel.xaml | •Main.xaml |
| \Report\_Module\Error\_Mail.xaml |  | •Main.xaml |
| \Report\_Module\Folder\_Path.xaml |  | •Main.xaml |
| \Report\_Module\Formatting\_Report.xaml |  |  |
| \Report\_Module\Long Leave Report.xaml |  | •Main.xaml |
| \Report\_Module\Send\_Mail.xaml |  | •Main.xaml |
| \Report\_Module\UNP\_Report.xaml |  | •Main.xaml |

# **10 Dependencies**

• BalaReva.Excel.Activities: [2021.0.0]  
• UiPath.Database.Activities: [1.7.1]  
• UiPath.Excel.Activities: [2.16.0]  
• UiPath.Mail.Activities: [1.18.1]  
• UiPath.System.Activities: [22.10.3]  
• UiPath.UIAutomation.Activities: [22.10.3]  
• UiPathTeam.Documents.TDDGenerator: [1.4.7221.18964]

# **11 Issues and Risks**

Below are the issues and risks identified during development and testing