1. **Solution Name:**

Operational Process Automation – Reporting.

1. **Objective**:

Build a code based solution using Python and SQL to help automate the process of importing data, preparing reports, and delivering reports on/at scheduled days/times, to designated stakeholders.

1. **Client Name**:

Klasko Immigration Law Partners, LLP

1. **In-Scope Processes:**
   * **Source Report Generation** 
     + Delivered by Case Management Vendor to a destination location (**to be provided by Client**)
     + The following files will be delivered by the Case Management Vendor:
       - beneficiary
       - process
   * **Data Import into SQL DB (GT Datawarehouse)**
     + beneficiary
     + process
   * **Scheduled Report Generation**
     + Charter - Weekly NetOps - P&T Transfer Report (Weekly)
     + Charter - PERM Report
     + Charter - Active Employee Report
     + There are more reports that would have to be configured
   * **Scheduled Delivery** 
     + **Designated Stakeholders (via e-mail)**
     + **Destination Folder** (**to be provided by Client**)
2. **ETA for Delivery:**

By EOD Monday, April 25th. A demo is due to the client on Wednesday, April 27th.

1. **Requirements**

Client will provide a destination folder with the sub-folders listed below.

* Source Data Folder
* Processed Reports Folder

1. **Process Workflow**

**Step 1**: **Data Import**

**To be discussed –**

1. **Backup of DB to be taken**
2. **Only delta changes to be imported and new records inserted**

**1. a.** Go to “**Source Data Folder**” and open the “**beneficiary”** report for the current date, and import the data into the SQL DB/Data Warehouse. See attached Excel file “**KILP Reports-Field Mapping Table and Field Name Chart\_041522**” (**Tab 1** - mapping details for importing data *from Report to SQL DB*).

**1. b.** Then, open the “**process**” report for the current date, and import the data into the SQL DB/Data Warehouse. See attached Excel file “**KILP Reports-Field Mapping Table and Field Name Chart\_041522**” (**Tab 2** - mapping details for importing data *from Report to SQL DB*).

**Data Import Conditions –**

* **Step 1:** Import “**Organization**” data from Tab 1 into the SQL DB (Organization Xref, Organization Name).
* **Step 2:** Import “**Petitioner**” data from Tab 1 into the SQL DB (Petitioner Xref, Petitioner Name) using the “**Organization Id (Xref)**” as the Foreign Key.
* **Step 3:** Import “**Beneficiary**” data from Tab 1 into the SQL DB using the “**Petitioner Xref**” as the Foreign Key.

**Notes:**

1. The Beneficiaries listed in this tab include both **ACTIVE and INACTIVE** Beneficiaries.
2. Import “**0100-01-01**” values as “**Null**”
3. If Organization Xref does not exist start with the Petitioner information.
4. **To be discussed –** 
   1. **Logic for importing Dependents’ data.** 
      1. The “**primary\_beneficiary\_id**” will be blank for the “**Primary**” Beneficiary (beneficiary\_type). So, the following step would need to be completed first, before importing the respective Dependent’s data:

Where “**beneficiary\_type = Primary**” populate the “**primary\_beneficiary\_id**” field with the Beneficiary’s “**beneficiary\_id**”.

* + 1. Then, link each Dependent to the Primary Beneficiary using the “**primary\_beneficiary\_id**”, and import the data accordingly.

.

* **Step 4:** Import “**Process Data**” data from Tab 2 into the SQL DB using the “**Beneficiary Xref**” as the Foreign Key.

**Notes:**

1. The Beneficiaries listed in this tab could include both **ACTIVE and RETIRED (INACTIVE)** Beneficiaries.
2. Import “**0100-01-01**” values as “**Null**”
3. **To be discussed –** 
   1. **Logic for importing Dependents’ data.** 
      1. The “**primary\_beneficiary\_id**” will be blank for the “**Primary**” Beneficiary (beneficiary\_type). So, the following step would need to be completed first, before importing the respective Dependent’s data:

Where “**beneficiary\_type = Primary**” populate the “**primary\_beneficiary\_id**” field with the Beneficiary’s “**beneficiary\_id**”.

* + 1. Then, link each Dependent to the Primary Beneficiary using the “**primary\_beneficiary\_id**”, and import the data accordingly.

**Step 4**: **Report Generation**

**Standard Report Output Conditions –**

**Overall:**

* File Type: .XLSX
* Table Format - Blue, Table Style Medium 2
* Format Cells - Text Alignment
* Horizontal = Justify
* Vertical - Justify
* Font Type: Calibri (Body)
* Font Style: Regular
* Font Size: Header - 12; Rest - 11
* Column Width: 14
* Border: All Borders
* Freeze Pane: Cell B2

The following reports have to be generated:

* + 1. **Charter - Weekly NetOps - P&T Transfer Report**

**Tab Name:**

Weekly NetOps - P&T Transfer Report

**Business Logic:**

Condition 1: "*Beneficiary Record Status = Active*"

Condition 2: "*Process Status = Open*"

Condition 3: "*Process Reference = Change of Employer or New Hire Assessment*"

**Criteria for sorting records:**

Criteria 1: Beneficiary Full Name

**Report Output Fields:**

See attached sample report template **“Charter - Weekly NetOps - P&T Transfer Report Template”**

**Output Report Name:**

Charter - Weekly NetOps - P&T Transfer Report

* + 1. **Charter – PERM Report**

**Tab Name:**

PERM Report

**Business Logic:**

Condition 1: "*Beneficiary Record Status = Active*"

Condition 2: "*Process Status = Open*"

Condition 3: "*Process Type = Labor Cert PERM (Process Petition Id =* *100003008)*"

**Criteria for sorting records:**

Criteria 1: Beneficiary Full Name

**Report Output Fields:**

See attached sample report template **“Charter – PERM Report Template”**

**Output Report Name:**

Charter – PERM Report

* + 1. **Charter – Active Employee Report**

**Tab Name:**

Active Employee Report

**Business Logic:**

Condition 1: "*Beneficiary Record Status = Active*"

**Criteria for sorting records:**

Criteria 1: Beneficiary Full Name

**Report Output Fields:**

See attached sample report template **“Charter – Active Employee Report Template”**

**Output Report Name:**

Charter – Active Employee Report

* + 1. **Other Reports – Waiting for Client Input**

**Business Logic:**

Condition 1:

Condition 2:

Condition 3:

Condition 4:

**Criteria for sorting records:**

Criteria 1:

Criteria 2:

Criteria 3:

Criteria 4:

**Report Output Fields:**

See attached sample report template **“**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**”**

**Output Report Name:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Notes / Q&A**
2. Backup of DB to be taken.
3. Only delta changes to be imported and new records inserted.
4. Discuss Dependent data updates..

\*\*\*\*\*\*\*\*\*\*\*\* END \*\*\*\*\*\*\*\*\*\*\*\*