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 (KILP)

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 Report (Active Beneficiary) Report**
     + **Charter New Hire Report**
     + **Charter PERM Report**
     + **Charter Extension Report**
   * **Scheduled Delivery** 
     + **Designated Stakeholders (via e-mail)**
     + **Destination Folder** (**to be provided by Client**)
2. **ETA for Delivery:**

By EOD Wednesday, Tuesday, October 18th. A report is due to the client on Wednesday, October 19th.

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, and import the data into the SQL DB/Data Warehouse (already set up and mapping completed).

**1. b.** Then, open the “**process**” report, and import the data into the SQL DB/Data Warehouse (already set up and mapping completed).

**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. Logic for importing Dependents’ data (already established).
   * 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 (already established).

**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. Logic for importing Dependents’ data (already established).
   * 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:** Logic for updating “Petitioner of Primary Beneficiary”

1. The “**Petitioner\_of\_Primary\_Beneficiary**” will be blank for the “**Primary**” Beneficiary (beneficiary\_type). So, the following step would need to be completed first, before importing the data into the DB/DW:

Where “**beneficiary\_type = Primary**” populate the “**petitioner\_of\_primary\_beneficiary**” field with the Primary Beneficiary’s “**petitioner\_name**”.

* **Step 5**: **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 report(s) have to be generated:

* + 1. **Charter Report (Active Beneficiary Report) -- Output Report Name:**

Charter Report – Active Beneficiary Report

**Report Output Fields:**

Use “**Comcast Status Report**” template (Tab 1: Active Beneficiary List)

See attached sample report template **“Charter Report (Active Beneficiary) Report Template”**

**Primary Condition**:Where –

Petitioner of Primary Beneficiary ***=*** Charter Communications, Inc.

Organization Xref ***=***10000059

**Business Logic:**

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

Condition 2: “*Beneficiary Type* ***=*** *Primary*"

Condition 3: *Exclude records where “Current Status* ***=*** *CPR, LPR, Permanent Residence”*

Condition 4: *Where “Current Status* ***=*** *TN-1; TN-2; TN Visa; TN-Canada, TN-Mexico ” – replace value with “TN”*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name
   * 1. **Charter New Hire Report**

**Output Report Name:** Charter New Hire Report

**Report Output Fields:**

Use “**Comcast Status Report**” template (Tab 2: Open Cases Non-PERM)

See attached sample report template **“Charter New Hire Report Template”**

The report contains the following 3 tabs:

Tab 1: H-1B COE & Amendment Report

Tab 2: TN Report

Tab 3: Pre-Hire Assessment Report

**Primary Condition**:Where –

Petitioner of Primary Beneficiary **=** Charter Communications, Inc.

Organization Xref ***=***10000059

**Tab 1: H-1B COE & Amendment Report**

**Business Logic:**

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

Condition 2: *"Process Status* ***=*** *Open"*

Condition 3: *"Process Type* ***=*** *H-1B Professional (Process Petition ID* ***=*** *100003034)”*

Condition 4: *"Process Reference* ***=*** *Change of Employer; Amend; Amendment (with Extension);*

*Amendment (Without Extension); H-1B; H-1B Amend; H-1B Change of ER; \*Please Select; “****Null****”; ”*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name

**Tab 2: TN Report**

**Business Logic:**

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

Condition 2: *"Process Status* ***=*** *Open "*

Condition 3: *"Process Type* ***=*** *TN POE/Consular (Process Petition ID* ***=*** *100003043)”*

Condition 4: *"Process Reference* ***=*** *Amendment (with Extension); Change of Employer; Initial; \*Please Select; TN Border; TN/Canada; TN/Mexico; “****Null****”; ”*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name

**Tab 3: Pre-Hire Assessment Report**

**Business Logic:**

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

Condition 2: *"Process Status* ***=*** *Open "*

Condition 3: *"Process Type* ***=*** *Consultation-Pre Hire Assessment (Process Petition ID* ***=*** *610010137)”*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name
   * 1. **Charter Extension Report**

**Output Report Name:** Charter Extension Report

**Report Output Fields:**

Use “**Charter New Hire Report**” template

See attached sample report template **“Charter New Hire Report Template”**

The report contains the following 2 tabs:

Tab 1: H-1B Extensions Report

Tab 2: TN Extensions Report

**Primary Condition**:Where –

Petitioner of Primary Beneficiary **=** Charter Communications, Inc.

Organization Xref ***=***100000590

**Tab 1: H-1B Extensions Report**

**Business Logic:**

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

Condition 2: *"Process Status* ***=*** *Open"*

Condition 3: *"Process Type* ***=*** *H-1B Professional (Process Petition ID* ***=*** *100003034)”*

Condition 4: *"Process Reference* ***=*** *Extension”*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name

**Tab 2: TN Extensions Report**

**Business Logic:**

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

Condition 2: *"Process Status* ***=*** *Open"*

Condition 3: *"Process Type* ***=*** *TN POE/Consular (Process Petition ID* ***=*** *100003034); or TN Extension (Process Petition ID* ***=*** *100003044)”*

Condition 4: *"Process Reference* ***=*** *Extension*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name
   * 1. **Charter PERM Report**

**Output Report Name:** Charter PERM Report

**Report Output Fields:**

Use “**KILP Internal PERM Report**” template

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

**Primary Condition**:Where –

Petitioner of Primary Beneficiary **=** Charter Communications, Inc.

Organization Xref ***=***100000590

**Business Logic:**

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

Condition 2: *"Process Status* ***=*** *Open"*

Condition 3: "*Process Type* ***=*** *Labor Cert PERM (Process Petition ID* ***=*** *100003008) or Process Type* ***=*** *Labor Cert Special Handling (Process Petition ID* ***=*** *610004807) ”*

**Criteria for sorting records:**

Criteria 1:

1. Beneficiary Type **=** Primary
2. Beneficiary Full Name
3. **Notes / Q&A**

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