FedEx Duty/Tax Dispute Automation

Date: November 21, 2025
Target Application: FedEx Billing Online
Platform: UiPath (Modern Design Experience)
Process Owner: Accounts Payable / Logistics

1. Executive Summary

The goal of this project is to automate the manual dispute process for FedEx "Duty/Tax" invoices. Currently, staff must manually filter the invoice list, open specific invoices, and dispute individual shipments one by one. This automation will autonomously "read" the FedEx Billing Online screen, identify the correct invoices, and execute disputes for all contained shipments without human intervention.

2. Business Objectives

- **Eliminate Manual Effort:** Remove the need for humans to navigate through repetitive invoice details and shipment layers.
- **Ensure 100% Coverage:** Guarantee that *every* shipment inside a Duty/Tax invoice is disputed (preventing missed rows/revenue leakage).
- **Standardize Reason Codes:** Apply the exact same dispute parameters ("Incorrect Charge" / "Duty/Tax") to every claim to ensure consistency.

3. Scope

In Scope:

- **Web Interaction:** Interaction with the FedEx Billing Online (FBO) interface via Google Chrome or Edge.
- **Screen Scraping:** Reading the main invoice grid directly from the screen.
- **Filtering:** Logic to isolate "Duty/Tax" invoices while ignoring "Transportation" or other types.
- **Deep Processing:** Navigating into an invoice, iterating through all shipments, and submitting disputes.

Out of Scope:

- **Authentication:** The bot assumes the user has already logged in (or session is active) to handle 2FA/SSO.

- **External Data Sources:** No Excel or Database inputs are required; the process is driven entirely by the live data on the screen.

4. Success Criteria

- The Bot successfully ignores "Transportation" invoices.
- The Bot enters a "Duty/Tax" invoice, disputes all valid shipments, and returns to the main menu to process the next invoice.
- A "Success" confirmation message is detected for every dispute submitted.

Implementation -TECHNICAL SPECIFICATIONS

Tool: UiPath Studio
Language: VB.Net (UiPath default)
Dependencies: UiPath.UIAutomation.Activities

A. Data Structure

The automation does not use external files. It relies on **DataTables** generated at runtime via Screen Scraping:

1. **dt_AllInvoices**: The raw data scraped from the main FedEx grid.
2. **dt_WorkList**: A filtered subset containing only rows where [Invoice Type] includes "Duty/Tax".
3. **dt_Shipments**: The list of tracking numbers scraped from inside a specific invoice.

B. High-Level Logic Flow

1. **Scrape:** Read the active screen of FedEx Billing.
2. **Filter:** Keep rows where [Invoice Type] == "Duty/Tax".
3. **Outer Loop:** Iterate through the filtered invoices one by one.
4. **Inner Loop:** Open invoice → Iterate through all shipments → Submit Dispute.
5. **Return:** Navigate back to the main grid to pick the next invoice.

C. Detailed Workflow Steps

1. Initialization & Filtering

- **Activity:** Use Application/Browser pointing to the FedEx URL.
- **Action:** Extract Table Data on the main Invoice Grid.
  - *Columns Captured:* Invoice Number, Invoice Type, Status.
-
- **Logic:** Apply Filter Data Table on the extracted data.
  - *Rule:* Keep rows where Column "Invoice Type" contains "Duty/Tax".
  - *Output:* dt_WorkList.

2. The Outer Loop (Invoice Processing)

- **Activity:** For Each Row in dt_WorkList.
- **Variable:** str_InvoiceNum = CurrentRow("Invoice Number").ToString.
- **Navigation:** Click the Invoice Hyperlink using a **Strict Selector** with a variable.
  - *Selector Example:* <webctrl tag='A' aaname='{{str_InvoiceNum}}' />
- **Synchronization:** Wait For Element (Shipment Table Header) to ensure the page has fully loaded.

3. The Inner Loop (Shipment Processing)

- **Action:** Extract Table Data (Shipments Grid).
  - *Output:* dt_Shipments (Columns: Tracking ID, Amount).
- **Activity:** For Each Row in dt_Shipments.
  - **Navigation:** Click the Tracking ID link (aaname='{{str_TrackingID}}').
- **3.1 The Dispute Sequence**
  - **Click:** "Dispute" button.
  - **Type Into:** "Dispute Amount" field → Value from dt_Shipments.
  - **Select Item / Click:**
    - Dispute Type → "Incorrect Charge"
    - Dispute Reason → "Duty/Tax"
  - **Click:** "Submit".
  - **Validation:** Check App State to look for the "Success" toast message.
- **3.2 Reset**
  - **Navigation:** Click "Back" to return to the Shipment List.

- ○ **Delay:** 2 seconds (Essential for list reload).
- ●

4. Return to Main Menu

- ● **Logic:** Once the Inner Loop finishes (all shipments in that invoice are done):
- ● **Navigation:** Click "Back to Invoice List" (Breadcrumb).
- ● **Synchronization:** Wait for the Main Invoice Grid to reappear.
- ● **Loop:** Proceed to the next row in dt_WorkList.

D. Error Handling

- ● **Selector Timeouts:** Default timeout set to 30 seconds.
- ● **Already Disputed Items:**
  - ○ *Logic:* Inside the Inner Loop, check the "Status" column. If it says "Disputed" or "In Review", execute a Continue activity to skip that row.
- ● **Page Load Latency:** Explicit Delays (e.g., 2000ms) added after "Back" navigations to prevent clicking before the table renders

E. Logins

- ● **UiPath**
  it@mymagichealer.com
  mcv_chj4puw*EFP6dmw