

## **Simetrik's external remediation agent – case study for prompt engineers**

This document includes the following content:

- 1) **Context:** remediation agent rationale
- 2) **Aggregate system:** Simetrik's external remediation agent: overall agent's capabilities and remediation protocols per [remediation query type]
- 3) **Acceptance criteria:** Acceptance criteria and deliverables

### **1) Context:**

The Simetrik platform can identify transactions in need of external remediation, requiring interaction with third parties to be resolved

- There are two categories of [remediation query types]
  - [2B: Transactions Pending due to missing documents]
  - [3C: Transactions pending reimbursement]
- Each [remediation query type] has it's own [remediation protocol] and designated communication channel (i.e. whatsapp or email)

### **2) Simetrik's external remediation agent (aggregate system)**

The External Remediation Agent is designed to autonomously execute external remediation protocols and associated processes. It can:

- **Interact with its [Company operator, agent owner],** execute remediation instructions and report on the [remediation status] of transactions, when asked
  - Includes status reports for total transactions, [remediation query type] categories and individual transactions
- **Remediate:** Receive and analyze a transaction list table and activate remediation protocols and processes for all transactions
  - Individually contact all third parties associated to each transaction ([transaction owners])
  - Execute remediation protocols associated to each transaction by interacting with [transaction owners] and requesting missing documents
- **Resolve remediation queries**
  - Update [remediation status] per transaction
  - Upload received documents to Simetrik's drive

## **Remediation Protocol [2B: Transactions pending due to missing documents]**

The following steps must be executed for each transaction of type [2B: Transactions Pending Due to Missing Documents]:

1. **Identify TX's:** Identify the transactions that must be remediated referring to the [remediation query type] column in the [Transaction table] file
2. **Identify TX owners:** Identify the [transaction owner contact] associated with each transaction number
  - a. This will be a phone number to be contacted via WhatsApp

3. **Contact owners:** For each transaction of type [2B: Transactions Pending Due to Missing Documents], message the [transaction owner]
  - a. “Dear client, we inform you that the transaction [ID TX] is pending due to missing documentation. Please be so kind as to reply to this message by attaching a copy of your personal ID.  
Best regards, Simetrik team”
4. **Interact with owners:** Wait for a response from [transaction owner]
  - a. If they attach the requested document:
    - i. Validate if the attachment is the document in question. If it is, you can assume that the transaction has been remediated
    - ii. Proceed to update the [remediation status] column for that transaction in the [transaction table], label it as “Remediated”
    - iii. Inform the owner the transaction has been successfully remediated
    - iv. Upload the missing document to Simetrik’s drive
  - b. If they reply something else or don’t attach the requested document
    - i. Explain the necessity of the missing document, and process step 4a if the attachment is received
    - ii. If they definitely choose not to cooperate
      1. Proceed to update the [remediation status] column for that transaction in the [transaction table], label it as “Unsuccessful”
      2. Inform the [transaction owner] the transaction remediation has been unsuccessful

### **Remediation Protocol [3C: Transactions pending reimbursement]**

The following steps must be executed for each transaction of type [3C: Transactions pending reimbursement]:

1. **Identify TX’s:** Identify the transactions that must be remediated referring to the [remediation query type] column in the [Transaction table] file
2. **Identify TX owners:** Identify the [transaction owner contact] associated with each transaction number
  - a. This will be an email address to be messaged
3. **Contact owners:** For each transaction of type [3C: Transactions pending reimbursement], email the [transaction owner]
  - a. “Dear client, we inform you that the transaction [ID TX] is pending a reimbursement. Please be so kind as to reply to this email by attaching a copy of reimbursement confirmation.  
Best regards, Simetrik team”
4. **Interact with owners:** Wait for a response from [transaction owner]
  - a. If they attach the requested document
    - i. Validate if the attachment is the document in question. If it is, you can assume that the transaction has been remediated
    - ii. Proceed to update the [remediation status] column for that transaction in the [transaction table], label it as “Remediated”
    - iii. Inform the owner the transaction has been successfully remediated

- iv. Upload the missing document to Simetrik's drive
- b. If they reply something else or don't attach the requested document
  - i. Explain the necessity of the missing document, and process step 4a if the attachment is received
  - ii. If they definitely choose not to cooperate
    - 1. Proceed to update the [remediation status] column for that transaction in the [transaction table], label it as "Unsuccessful"
    - 2. Inform the [transaction owner] the transaction remediation has been unsuccessful

### 3) Acceptance criteria

- **Agent system and workflow design:** workflow structures are sound and are efficiently and effectively designed
- **Structural/functional tests:** workflow functional tests work (i.e. integrations, inputs/outputs, send/receive messages, send/receive/upload files, triggers, tool activation, LLM calls)
- **Agentic interactions: your agent can:**
  - Interact with its [Company operator, agent owner], execute remediation instructions and report on the [remediation status] of transactions, when asked
  - **Interact with [transaction owners]** and execute Remediation Protocol [2B: Transactions pending due to missing documents]
  - **Interact with [transaction owners]** and execute Remediation Protocol [3C: Transactions pending reimbursement]
- **Agentic communications behavior:** prompts and workflow structure allow agent to handle communications with third parties when they go out of script
  - **Example:** agent requests a document to resolve a remediation query and the user refuses
- **Accuracy of the executions:** agent does not diverge from prompts and protocols
- **Innovation in the use of technologies:** Creativity in the application of tools and LLMs
- **Explanation:** Clarity in presenting the tools and methods used, agent workflow design and obtained results

### Deliverables

- **Workflow project:** Implementation of the agent workflows
- **Demonstration:** Remediation demonstration of the full workflow for all transactions included in the attached transaction table
- **Results Report:** evaluation of the agent's performance.