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REAL TIME PAYMENT Country SactionsScreening

# BackGround

Cross-border payments are increasing. Banks and other financial institutions are facing an increasingly daunting task of screening real time payments. International compliance mandates banks to comply with stringent sanctions screening regulations. Noncompliance to these regulations exposes the bank to huge financial losses.

Suspicious country List: -

All USD currency transactions should be blocked and Non-USD currency transactions should be flagged for INVESTIGATION.



Every cross-border transaction done in a bank uses a message encoding called swift message.

Below is a sample swift message.

{1:F01DHBKHKH0AXXX0000000000}{2:I103DBSSSGSAXXXXN}{4:

:20:IPE-LRT-103-SINGLE

:23B:CRED

:32A:200418SGD12500,

:50F:/0039456320123

1/Osama Bin laden

2/SA/SAUDI ARABIA

:59F:/4822311091233

1/Pavan Hitesh

2/The Great Banjara Park

3/SY/Syria

:71A:SHA

-}

We only consider **MT103** type messages for this hackathon

You can read more about how to decode these messages here: -

<https://en.wikipedia.org/wiki/MT103>

Useful API to decode MT103

<https://www.paymentcomponents.com/demo/mt>

From the above swift message, we decode

Sender: - Osama Bin laden

Receiver: - Pavan Hitesh

Country Sender: - SAUDI ARABIA

Country Reciever: - Syria

**Hint: Also keep a big eye on the following tags**

**{1:F01DHBKHKH0AXXX0000000000}{2:I103DBSSSGSAXXXXN}**

**Tag 1 and tag 2 contain bank identification codes, which specify where the banks of this transaction reside. This can play a significantly important role.**

## Scenario

### Osama Bin Laden transfers money to Pavan Hitesh, since Osama is in the suspicious person name list this raises an alert.

### Cuba and Siberia are suspicious country so an alert is raised.

# What we are looking for: -

## Looking for a visualization layer showcasing legitimate and flagging fraudulent transactions. This will help DBS compliance to report fraudulent cross border payments to regulators on a real-time basis.

## Use the BIC codes in the swift messages to track down the co-ordinates of the sender and the receiver information and use the same for the visualization.

## Use the sender and beneficiary addresses in the swift messages to track down the co-ordinates of the sender and the receiver information and use the same for the visualization.

# Sample API REFERENCE LINKS: -

<https://bank.codes/api-swift-code/>

<https://www.gisgraphy.com/documentation/user-guide.php#geocodingservice>

# What We will provide?

## Day wise list of country and blacklist accounts list as described above. These lists are dynamic and keep changing every day regularly please keep this in mind.

## 2 Days Swift Data

### Day 1 data [Total 100 swift messages – Consists of:

### Full Country Match:

### **Ex: Cuba is a sanction country. If the payment is going to Sanction country then we need to flag as “BLOCK”**

### **If the beneficiary is in proximity of 100 kilometers of Sanctions country then we need to flag as ‘UNDER INVESTIGATION’**

### **Otherwise “PASS” the transaction.**

### Note: This data is for panel and will not be shared with teams