**Demo for Money Mule Activities**

1. The main script is “generate\_Data\_Main” which then calls the various scripts inside the Scripts folder to generate customers, bank accounts, mobiles, devices, addresses and national Ids. For the “India” region it also generates PAN card data.
2. Upon execution of the generate\_Data\_Main script, you can input the region (1 to 5) and the number of customers. As you increase the number it will take longer. For 5,000 customers it should take around 5 mins to complete. 100k customers in about 30 min.
3. The scripts will also generate approx. 50 transactions (ranging over 3 months) per account mimicking common payments like salaries, utility bills, payments and so on. It also generates fraud transactions and creates mule account scenarios for a randomly chosen set of customers.
4. All data will be regionalized using the Python Faker library.
5. The script will need some work for Israel as the names it generates are in Hebrew.

**Fraud rules:**

1. The fraud transactions generated will have a label ‘suspicious\_transaction’ to easily find them. The idea is for fraud rules to set them for a given risky activity to be analyzed subsequently for mule activity.
2. In addition, the description column also identifies the scenario as follows:

|  |  |
| --- | --- |
| Description | Meaning |
| fraud\_scenario\_a | Multiple credits followed by a single debit draining the funds over a short time period. |
| fraud\_scenario\_b | Single credit followed by multiple debits draining the funds over a short time period. |
| fraud\_scenario\_c | Multiple large atm withdrawals over a short time period |
| fraud\_scenario\_d | Multiple debit and credit transactions over short time (high velocity) |
| fraud\_scenario\_e | Income (turnover) drained out |
| fraud\_scenario\_f | Dormant account large credit followed by debits |
| fraud\_scenario\_g | Multiple transactions originating from high risk places |
| fraud\_scenario\_h | Multiple transactions originating from high risk places (India) |

**gdotv**:

1. Use the bulk loader to load the dataset folder data into Aerospike Graph
2. Use the stylesheet ‘Mule Detection - Generated Stylesheet.json’ on gdotv for a pre-configured graph display or use your own settings.
3. Since each time you run the scripts, new data will be generated, so you would have to play around a bit to figure out good demo use cases. Start with looking for fraud transactions.
4. Another way is to run the Python script “Structured\_Mule\_Activity”. This script runs through the data generated and checks for fraud scenario a and b and prints those bank accounts.