Oracle Banking APIs
Auto Categorization of Spend Transactions
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1. Preface

1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

1.2 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=accandid=docacc.

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http://www.oracle.com/pls/topic/lookup?ctx=accandid=info or visit

http://www.oracle.com/pls/topic/lookup?ctx=accandid=trs if you are hearing impaired.

1.4 Structure

This manual is organized into the following categories:

Preface gives information on the intended audience. It also describes the overall structure of the User Manual.

The subsequent chapters describe following details:

- Purpose
- Configuration / Installation.

1.5 Related Information Sources

For more information on Oracle Banking APIs Release 18.3.0.0.0, refer to the following documents:

- Oracle Banking APIs Licensing Guide
2. Auto Categorization Of Spend Transactions

Scenario:
If a Spend transaction description contains keyword “Big Bazaar” then that transaction should get auto-categorized as follows:
Category --> Shopping
Subcategory --> Groceries

Maintenance steps:

1. Create a Category and a Subcategory as required after login as an Admin user.
2. Note the CATEGORY_ID column value of the newly created Category & Subcategory from the table DIGX_SP_SPEND_CATEGORY (Eg: 10 and 101 respectively).
3. Insert a row in table DIGX_RL_SPEND as below (Note the ID column value which is ‘10001’ in this example).
Sample script:

```sql
insert into DIGX_RL_SPEND (ID, CREATED_BY, CREATION_DATE, LAST_UPDATED_BY, LAST_UPDATED_DATE, OBJECT_STATUS, OBJECT_VERSION_NUMBER, NAME, DESCRIPTION, DETERMINANT_VALUE)
values ('10001', '', sysdate, '', sysdate, '', 1, 'SpendRule', 'SpendDTODesc', 'OBDX_BU');
```
4. Insert a row in table DIGX_RL_CONDITION as below:
   a. ID as any unique value
   b. RULE_ID as provided in the DIGX_RL_SPEND table above
   c. EXPRESSION_OBJECT value should contain the keyword as follows:
      ```sql
      utl_raw.cast_to_raw('{
          "@class": "com.ofss.digx.app.common.dto.rule.SpendCategorizationExpressionFactValueDTO",
          "keyword": "Big Bazaar"
      })
      ```
   d. OUTCOME_OBJECT value should contain the corresponding Category & Subcategory ID as follows (Subcategory is NOT mandatory):
      ```sql
      utl_raw.cast_to_raw('{
          "@class": "com.ofss.digx.app.common.dto.rule.SpendCategorizationOutcomeFactValueDTO",
          "category": "10",
          "subCategory": "101"
      })
      ```
   e. OPERATOR value should be ‘CONTAINS’ (No other operators are supported out of the box)
   Sample script:

```sql
insert into DIGX_RL_CONDITION (ID, RULE_ID, OPERATOR, OUTCOME_OBJECT, EXPRESSION_OBJECT, CREATED_BY, CREATION_DATE, LAST_UPDATED_BY, LAST_UPDATED_DATE, OBJECT_STATUS, OBJECT_VERSION_NUMBER, DETERMINANT_VALUE)
```
values ('103', '10001', 'CONTAINS', utl_raw.cast_to_raw('{
  "@class": "com.ofss.digx.app.common.dto.rule.SpendCategorizationOutcomeFactValueDTO",
  "category": "10",
  "subCategory": "101"
}), utl_raw.cast_to_raw('{
  "@class": "com.ofss.digx.app.common.dto.rule.SpendCategorizationExpressionFactValueDTO",
  "keyword": "Big Bazaar"
}), '', null, '', null, '', 1, 'OBDX_BU');

5. Insert such rows in table DIGX_RL_CONDITION for each keyword & Category-Subcategory combination as required by the Bank.

6. Verify the following properties (select * from DIGX_FW_CONFIG_ALL_B where category_id = 'ruleconfig'):
   a. IS_RULE_EVALUATION_REQUIRED --> Y
   b. SPEND_EVALUATOR --> com.ofss.digx.app.spendanalysis.ruleengine.evaluator.SpendRuleEvaluator (out of the box Spend rule evaluator)
   c. SPEND_RULE_NAME --> SpendRule (As per the value of NAME column in DIGX_RL_SPEND table)