

Auto Categorization of Spend Transactions Guide
Oracle Banking Digital Experience
Patchset Release 22.2.2.0.0

Part No. F72987-01

December 2023

ORACLE®

Auto Categorization of Spend Transactions Guide
December 2023

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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=acc&id=docacc>.

1.3 Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=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 describes following details:

- Introduction
- Preferences & Database
- Configuration / Installation.

1.5 Related Information Sources

For more information on Oracle Banking Digital Experience Patchset Release 22.2.2.0.0, refer to the following documents:

- Oracle Banking Digital Experience Installation Manuals

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:

```
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:

```
utl_raw.cast_to_raw('{
"@class" : "
com.ofss.digx.app.spendanalysis.dto.rule.SpendCategorizationExpressionFactValueDTO
",
"keyword" : "Big Bazaar"
}')
```
 - d. OUTCOME_OBJECT value should contain the corresponding Category & Subcategory ID as follows (Subcategory is NOT mandatory):

```
utl_raw.cast_to_raw('{
"@class" : "
com.ofss.digx.app.spendanalysis.dto.rule.SpendCategorizationOutcomeFactValueDTO",
"category" : "10",
"subCategory" : "101"
}')
```
 - e. OPERATOR value should be 'CONTAINS' (No other operators are supported out of the box)
- Sample script:

```

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.spendanalysis.dto.rule.SpendCategorizationOutcomeFactVa
lueDTO",

"category" : "10",

"subCategory" : "101"

}')), utl_raw.cast_to_raw('{

"@class" :
"com.ofss.digx.app.spendanalysis.dto.rule.SpendCategorizationExpressionFac
tValueDTO",

"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)
 - d. SPEND_DEFAULT_CATEGORY_ID → This property is used for maintaining default category, if no keyword is match from all maintained rules.

Below attached screenshot entry is required for setting default category. We need to update the entry from day one configuration screen. We have to maintain the Category ID in this configuration value.

Note: If below entry is not maintain and no rule is matched, then no category is set against the spend transaction.

futura bank

What would you like to do today ?

ALU

OBCLM token expiry time in seconds	60	Months for SCF Limit Expiry	2
Host Server IP for Oracle Financial Lending and Leasing	10.184.132.101	OBTF Port	
Document upload maximum allowed size in bytes.	5242880	OBCLPM Application Id - Amend facility	FCLTYP
OBCL Source Code	EXTSYS	OBVAM User Id	OBDXUSER
SCF Finance App Id	SCFFIN	OBSCF Maintenances Application Id	OBSCFCMMMAINT
Oracle Live Experience Cloud User ID	oraclefsgbuobdx	Maximum Days To Setup Cash Flow	180
OBSCF Port	<PORT>	IPM Host application name	
Receivables/Payables Management User Id	SWETA	OBTF Entity Id	47AFFTF1
Invoice Image Upload Use Case Name	corplm/OBDX	ASP token expiry time in seconds	60
Default Spend Transaction Category	25		

Edit

Cancel

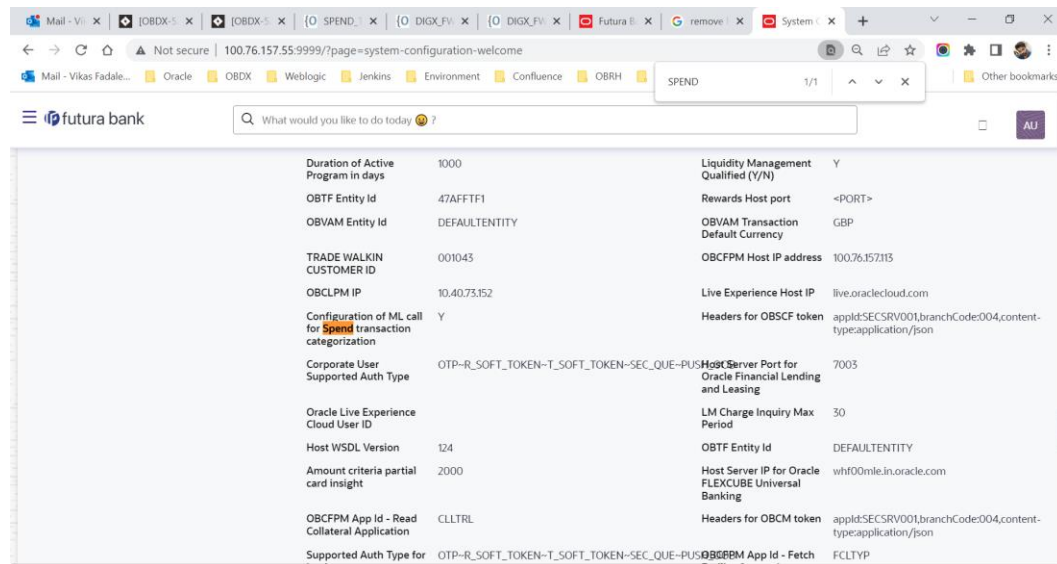
[Home](#)

3. Categorization Of Spend Transactions Using ML Engine

ML Engine will do the auto categorization on user spend expenditure. It will auto map the category base on transaction description. If in case category does not exist in the system, then first it will create it and then map it to the transaction.

To activate the ML engine call, we have to set “**Configuration of ML call for Spend transaction categorization**” flag as **Y**. If in case, we don't set this value then by default ML engine service is in inactive state.

We can be able to update the flag with the help of “**System configuration**” screen with Admin Type Role.



Below entry are required to activate ML engine interface call.

```
Insert into DIGX_FW_CONFIG_ALL_O
(PROP_ID,PREFERENCE_NAME,PROP_VALUE,DETERMINANT_VALUE,CREATED_BY,CREATION_DATE,
LAST_UPDATED_BY, LAST_UPDATED_DATE) values
('<<ENTITY_ID>>.com.ofss.digx.extxface.spendanalysis.adapter.transaction.ISpendUncategorizedTransactionAdapter.getSpendTransactionCategory','ExtxfaceAdapterPreference','com.ofss.digx.extxface.spendanalysis.impl.SpendDDATransactionAdapter','01','ofssuser',to_timestamp(sysdate,'DD-MON-RR HH.MI.SSXFF AM'),'ofssuser',to_timestamp(sysdate,'DD-MON-RR HH.MI.SSXFF AM'));
```

```
Insert into DIGX_FW_CONFIG_ALL_O
(PROP_ID,PREFERENCE_NAME,PROP_VALUE,DETERMINANT_VALUE,CREATED_BY,CREATION_DATE,
LAST_UPDATED_BY, LAST_UPDATED_DATE) values
('SPEND_DDA_TRANSACTION_CATEGORIZATION','ExtXfaceConfig','com.ofss.digx.extxface.impl.endpoint.OBRHEndPoint','<<ENTITY_ID>>','ofssuser',to_timestamp(sysdate,'DD-MON-RR HH.MI.SSXFF AM'),'ofssuser',to_timestamp(sysdate,'DD-MON-RR HH.MI.SSXFF AM'));
```