

Auto Categorization of Spend Transactions Guide
Oracle Banking APIs
Patchset Release 22.2.2.0.0

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ORACLE®

Auto Categorization of Spend Transactions Guide

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Oracle Financial Services Software Limited

Oracle Park

Off Western Express Highway

Goregaon (East)

Mumbai, Maharashtra 400 063

India

Worldwide Inquiries:

Phone: +91 22 6718 3000

Fax:+91 22 6718 3001

www.oracle.com/financialservices/

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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

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<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 APIs Patchset Release 22.2.2.0.0, refer to the following documents:

- Oracle Banking APIs Installation Manuals
- 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:

```
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.

Auto Categorization Of Spend Transactions

futura bank

What would you like to do today?

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	OBCLM Application Id - Airmet 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>	IBM Host application name	
Receivables/Payables Management User Id	SWE TA	OBTF Entity Id	47AFF1F1
Invoice Image Upload Use Case Name	corp/iv/OBDX	ASP token expiry time in seconds	60
Default Spend Transaction Category	25		

Edit Cancel

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.

Duration of Active Program in days	1000	Liquidity Management Qualified (Y/N)	Y
OBTF Entity Id	47AFFTF1	Rewards Host port	<PORT>
OBVAM Entity Id	DEFAULTENTITY	OBVAM Transaction Default Currency	GBP
TRADE WALKIN CUSTOMER ID	001045	OBCFPM Host IP address	100.76.157.113
OBCLPM IP	10.40.73.152	Live Experience Host IP	live.oraclecloud.com
Configuration of ML call for Spend transaction categorization	Y	Headers for OBSCF token	applId:SECSRV001,branchCode:004,content-type:application/json
Corporate User Supported Auth Type	OTP-R_SOFT_TOKEN-T_SOFT_TOKEN-SEC_QUEUE-PUS	Host Server Port for Oracle Financial Lending and Leasing	7003
Oracle Live Experience Cloud User ID		LM Charge Inquiry Max Period	30
Host WSDL Version	124	OBTF Entity Id	DEFAULTENTITY
Amount criteria partial card insight	2000	Host Server IP for Oracle FLEXCUBE Universal Banking	whf00mle.in.oracle.com
OBCFPM App Id - Read Collateral Application	CLLTRL	Headers for OBCM token	applId:SECSRV001,branchCode:004,content-type:application/json
Supported Auth Type for OBCFPM App Id - Fetch	OTP-R_SOFT_TOKEN-T_SOFT_TOKEN-SEC_QUEUE-PUS	OBCFPM App Id - Fetch	FCLTYP

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'));
```

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