

Auto Categorization of Spend Transactions Guide
Oracle Banking Digital Experience Cloud Service
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Auto Categorization of Spend Transactions Guide

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1. Preface

1.1 Purpose

Welcome to the User Guide for Oracle Banking Digital Experience. This guide explains the operations that the user will follow while using the application.

1.2 Audience

This manual is intended for Customers and Partners who setup and use Oracle Banking Digital Experience.

1.3 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>.

Access to Oracle Support

Oracle customers that have purchased support 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 Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

1.5 Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>Italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1.6 **Screenshot Disclaimer**

The images of screens used in this user manual are for illustrative purpose only, to provide improved understanding of the functionality; actual screens that appear in the application may vary based on selected browser, theme, and mobile devices.

1.7 **Acronyms and Abbreviations**

The list of the acronyms and abbreviations that you are likely to find in the manual are as follows:

Abbreviation	Description
OBDX	Oracle Banking Digital Experience

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.SpendCategorizationOutcomeFactValueDTO",

"category" : "10",

"subCategory" : "101"

}')), utl_raw.cast_to_raw('{

"@class" :
"com.ofss.digx.app.spendanalysis.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)
 - 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 Spent Transaction Category	25		

Edit

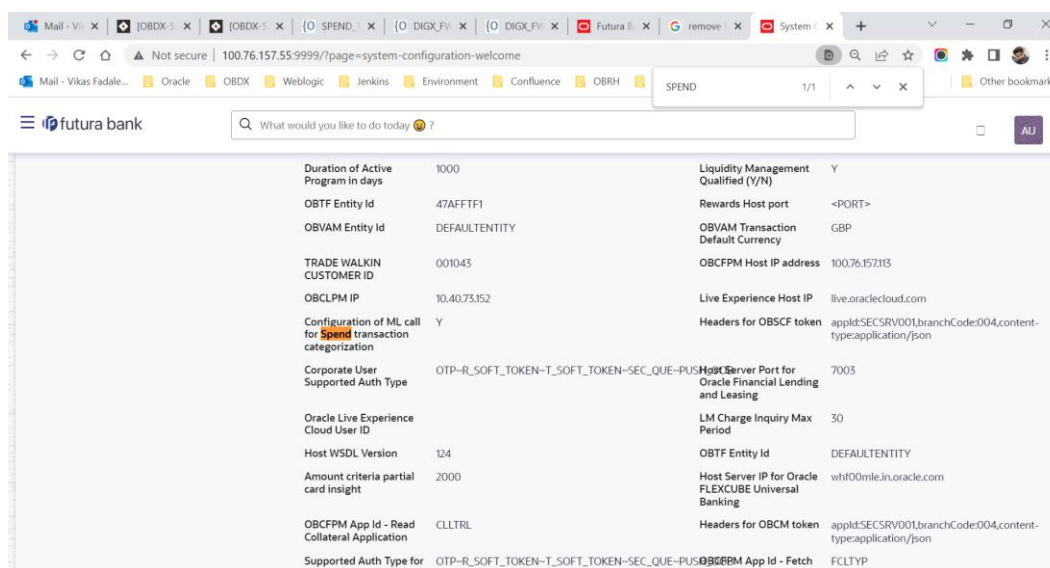
Cancel

3. Categorization Of Spend Transactions Using ML Engine

Bank must use their own Third-party ML Engine provider and customized adapter. If they don't have ML engine provider, then they have to disable the ML Engine call using "Configuration of ML call for Spend transaction categorization" flag as mentioned ahead. If in case categories provided by ML engine does not exist in the system, then system will create those categories.

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',
<<Fully qualified packagename and class name of customized adapter class>>
','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,CRE
ATION_DATE,LAST_UPDATED_BY,LAST_UPDATED_DATE) values ('<< Key used in OBRH to
map ML call
>>','ExtXfaceConfig','com.ofss.digx.extxface.impl.endpoint.OBRHEndPoint','<<ENTITY_ID>>','ofs
suser',to_timestamp(sysdate,'DD-MON-RR HH.MI.SSXFF
AM'),'ofssuser',to_timestamp(sysdate,'DD-MON-RR HH.MI.SSXFF AM'));
```