

Oracle® Banking Digital Experience

Auto Categorization of Spend Transactions



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Purpose

This guide is designed to help acquaint you with the Oracle Banking application. This guide provides answers to specific features and procedures that the user need to be aware of the module to function successfully.

Pre-requisites

Specify **User ID** and **Password**, and login to **Home** screen.

Audience

This document is intended for the following audience:

- Customers
- Partners

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>.

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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.

Related Resources

For more information on any related features, refer to the following documents:

- Oracle Banking Digital Experience Installation Manuals
- Oracle Banking Digital Experience Licensing Manuals

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.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes; actual screens that appear in the application may vary based on selected browser, theme, and mobile devices.

Acronyms and Abbreviations

The list of the acronyms and abbreviations used in this guide are as follows:

Table 1 Acronyms and Abbreviations

Abbreviation	Description
OBDX	Oracle Banking Digital Experience

Post-requisites

After finishing all the requirements, please log out from the **Home** screen.

1

Spend Transaction Configuration

This topic provides information on **Spend Transaction Configuration**.

Spend Module Transaction Flow:

Overview:

The system fetches spend transactions from the core system and saves them locally in the `digx_sp_categorized_txns` table. To activate the Spend module features, you need to set up the necessary OBRH entries. Please note that the Spend module is supported exclusively when using the OBRH adapter.

Data Capture Timing:

The Spend module collects and stores transaction data until the day before the current calendar day, which OBDX bases on the current date (i.e., one day prior to the OBDX system date). As a result, the Spend module will make transactions completed on the OBDX current date accessible the next day.

Fetch Criteria on User Login:

Every/Each time a retail user signs in, the system makes an asynchronous request to get spending data for the appropriate time frame.

1. **From Date:** The user's last login date.
2. **To Date:** The OBDX current date minus one day.

This method guarantees that the system captures every transaction made from the user's last login until the day before the current OBDX date in the Spend module. As a result, users can see their latest spending activities up to the most recently processed day.

For a seamless Spend flow experience, ensure that:

1. The correct OBRH entries for the Spend module are configured as per requirements.
2. All entity-specific values (such as `%ENTITY_ID%`) are accurately updated before deployment.
3. The OBRH adapter is tested and verified for integration with the Spend module in your environment.

```
Insert into DIGX_FW_CONFIG_ALL_O
(PROP_ID,PREFERENCE_NAME,PROP_VALUE,DETERMINANT_VALUE,CREATED_BY,CREATION_D
ATE,LAST_UPDATED_BY,LAST_UPDATED_DATE) values
('%ENTITY_ID%.com.ofss.digx.extxface.spendanalysis.adapter.transaction.ISpe
ndUncategorizedTransactionAdapter.getUncategorizedTransactions','ExtxfaceAd
apterPreference','com.ofss.digx.extxface.spendanalysis.impl.SpendDDATransac
tionAdapter','01','ofssuser',sysdate,'ofssuser',sysdate);
```

Note

Replace %ENTITY_ID% with the actual entity ID for your deployment.

2

Auto Categorization Of Spend Transactions

This topic provides information on **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.SpendCategorizationOutcomeFact
ValueDTO", "category" :
    "10", "subCategory" :
    "101" }'),
    utl_raw.cast_to_raw('{ "@class" :

"com.ofss.digx.app.spendanalysis.dto.rule.SpendCategorizationExpressionF
actValueDTO", "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_CFG_CONFIG_ALL_B where prop_id like '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.

Figure 2-1 “System configuration” screen with required entry for setting default category

Entity ID: OBDX_BU
Entity Name: UBS 14.8

Entity Configuration

Origination

Payments

Personal Finance Management

Security Management System

Supply Chain Finance

Supply Chain Finance and Cash Management

Spend Analysis

Is rule evaluation required	Y
Spend default category ID	30
Spend rule name	SpendRule
Administrator spend category max limit	7
Administrator spend subcategory max limit	4

Edit

Cancel Back

3

Categorization Of Spend Transactions Using ML Engines

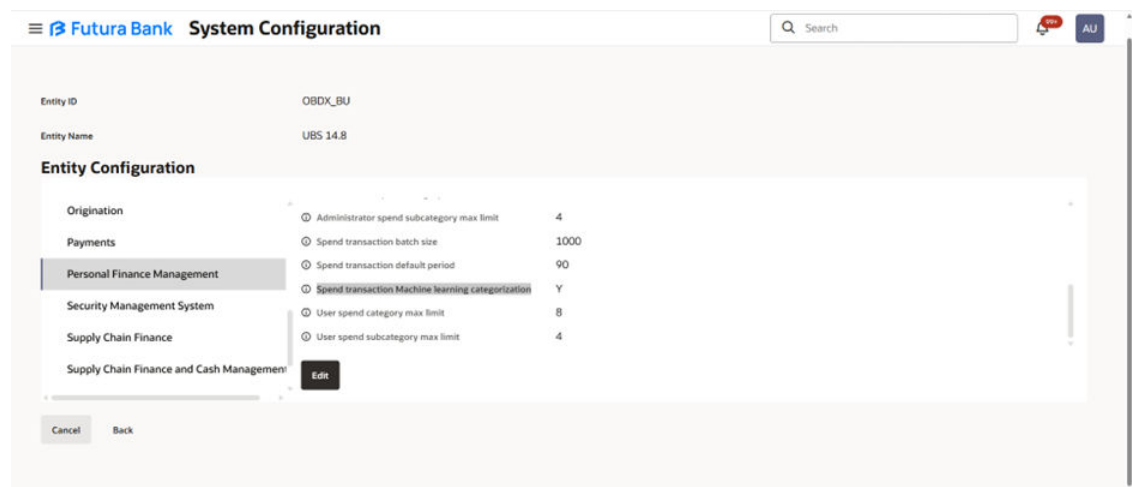
This topic provides information on **Categorization Of Spend Transactions Using ML Engines**.

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 enable the ML engine call, we need to set the **Spend transaction Machine Learning** categorization flag to **Y**. If user do not set this value, the ML engine service will remain inactive by default.

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

Figure 3-1 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>>.ofss.digx.extxface.spendanalysis.adapter.transaction.ISpen
dUnCategorizedTransactionAdapter
.getSpendTransactionCategory', 'ExtxfaceAdapterPreference',
<<Fully qualified package name 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'));
```

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