

Oracle Financial Services

Data Model Extension User Guide



Release 24A
F94251-01
March 2024

ORACLE®

Copyright © 2022, 2024, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

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>.

Contents

1 About This Guide

2 Data Model Extension

2.1	Registering Dimensions	2-2
2.1.1	Register a Simple Dimension	2-2
2.1.1.1	View a Simple Dimension	2-3
2.1.1.2	Edit a Simple Dimension	2-3
2.1.1.3	Delete a Simple Dimension	2-4
2.1.2	Register a Key Processing Dimension	2-4
2.2	Registering Columns	2-6
2.3	Registering a Management Ledger	2-9
2.3.1	Adding a Management Ledger	2-10
2.4	Approving or Rejecting the Registrations	2-11

1

About This Guide

This guide provides the information for Oracle Financial Services Cloud Services Data Model Extension module.

Audience

This guide is intended for anyone who maintains the Cloud Service Data Base.

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.

Related Resources

See these Oracle Financial Services resources:

- [Profitability and Balance Sheet Management Cloud Service](#)
- [Accounting Standards for Banking Cloud Service](#)
- [Climate Change Analytics](#)

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.

2

Data Model Extension

Customization of Physical Data Model is restricted in the Cloud Service. However, there may be a need to extend the Data Model to meet multiple business requirements. For this purpose, the Cloud Service provides OOTB placeholder Columns and Tables that can be configured to use as custom Columns, Custom Dimensions, and Custom Management Ledger Tables as suitable to the business requirements.



Note:

The Management Ledger tables are applicable only to Profitability and Balance Sheet Management Cloud Services.

These placeholder Columns and Tables must be registered before use. The Data Model Extension Module allows you to do the following types of registrations:

- Dimensions Registration
- Columns Registration
- Management Ledger Registration
- Pending Registration

After registration, you can start loading the data in the selected placeholder Columns and Tables and use them to define the Rules and Assumptions for further processing and reporting.

Appropriate user roles must be created and maintained for the users to perform the registration and registration approval processes.

To register the placeholder Columns and Tables, from the LHS Menu, select **Data Management Tools**, and then select **Data Model Extension** to display the DataModel Extension summary screen.

The Data Model Extension summary screen displays the following tiles:

- Dimensions
- Columns
- Management Ledger
- Pending Registration

Using this UI, you do the registration of Dimensions, Columns, and Management Ledger Tables. After the registration is done, the detail will be sent to the Supervisor or Approver User who either approves or rejects the registration.

2.1 Registering Dimensions

Through the Dimension Registration UI, you register two types of Dimensions; Simple Dimensions and Key Processing Dimensions that are explained in the following topics.

Dimensions are the Placeholder Columns and Tables. The column names appear in the Instrument Tables as Physical Column Names. The Data Model Extension UI allows you to define the Logical Layer with details Name, Description, and the purpose of the column. After these columns are defined, they appear in the drop-down lists in the application screens as UDPs (User Defined Properties) that you can use. This process of defining the Dimensions is called Registering.

2.1.1 Register a Simple Dimension

Simple Dimensions are list of values that support neither attributes nor hierarchies.

Simple Dimensions are list of values that support neither attributes nor hierarchies. Their three key uses are:

- Reserved for use within the Analytical Application Engines
- Stratifying your data for process or report filtering purposes
- Serving as list of values when used as attributes

The Cloud Service Data Model comes with a set of placeholder Simple Dimensions for configuration and use. The member details of simple dimensions are stored in two tables:

- A code table (For example, FSI_SIMPLE_DIM_01_CD)
- A Multi-Language Support table (for example, FSI_SIMPLE_DIM_01_MLS)

To register a Simple Dimension:

1. Navigate to the summary screen, and click the **Simple Dimensions** tile to display the **Simple Dimension** summary screen.

Figure 2-1 Simple Dimension summary screen

Physical Column Name	Name	Description	Registration Status	Dimension ID	Actions
PLC_01_SIMPLE_DIM_CD	SimpleDimension_01	SimpleDimension_01	Approved	2001	***
PLC_01_SIMPLE_DIM_CD	SimpleDimension_01_E	SimpleDimension_01_E	Approved	2003	***
PLC_02_SIMPLE_DIM_CD	SimpleDimension_02	SimpleDimension_02	Approved	2002	***

The Simple Dimension summary screen displays the summary of existing Simple Dimensions with the Physical Column Names, Name, Description, Registration Status, Dimension ID details, and Actions icon.

2. Click **Add New Dimension** to collapse the Dimension Details summary and to display the dimension details.

When you click **Add New Dimension**, the UI displays **Save** and **Submit for Approval** buttons.

3. Enter the following details:

- **Name** (mandatory): Specify the required logical name of the dimension.
- **Description** (mandatory): Specify the required description of the dimension.
- **Comment**: Specify the required maker/checker comment. Note that special characters *, newline, and double quotes are not allowed.
The **Details** section displays the Physical Column and Data Type information that the dimension uses for user reference. As and when a registration takes place successfully and the physical column is utilized, the next registration process proceeds to take the next-in-numerical-order physical column available for registration.

4. Click **Save**. The details are saved as a Draft and displayed on the summary screen. You can change the Name, Description, and Comments later by double clicking the details.
5. Click **Submit for Approval** to send the Dimension Details for approval. Or select a Name from the list and click the Actions icon to View, View, Edit, Submit for Approval or Delete the simple dimension.

Or

Select a Name from the list and click the Actions icon to View, View, Edit, Submit for Approval or Delete the simple dimension.

 Note:

- You can delete a registration when it is in Draft state.
- If the selected Dimension is in Approved state, then the Actions menu displays only View, Edit, and Submit for Approval actions.

2.1.1.1 View a Simple Dimension

To view a Simple Dimension, perform the following steps.

To view a Simple Dimension, perform the following steps:

1. Click the **Actions** Icon against the selected Simple Dimension to expand the Actions Menu.
2. Click **View** to see the details of the selected Simple Dimension.

2.1.1.2 Edit a Simple Dimension

To edit a Simple Dimension, perform the following steps:

1. Click the **Actions** Icon against the selected Simple Dimension to expand the Actions Menu.
2. Click **Edit** to display the selected Dimension details in edit mode.
3. Edit the following details:

- a. **Name:** This is mandatory.
 - b. **Description:** This is mandatory.
 - c. **Comment:** Specify the required maker/checker comment. Note that special characters *, newline, and double quotes are not allowed.
4. Click **Save** to save the details as a draft.
 5. Click **Submit for Approval** to send the Dimension Details for approval.

 Note:

- When you edit an already approved Dimension, the Dimension must be submitted for approval again. You cannot delete or edit the Dimension again.
- Additionally, if you edit an approved Dimension, then the Actions Icon displays only the View option for the Dimension.

2.1.1.3 Delete a Simple Dimension

To delete a Simple Dimension, perform the following steps:

1. Click the **Actions** Icon against the selected Simple Dimension to expand the Actions Menu.
2. Click **Delete** to delete the Dimension.

 Note:

You can only delete a Dimension that is in Draft stage. The Actions Menu does not display the Delete action for an approved dimension.

2.1.2 Register a Key Processing Dimension

Key Processing Dimensions have the following features:

- Accessible as modeling dimensions for all of the Cloud Service Analytical Engines.
- Expressed as columns in nearly all of your Business Fact Tables.
- Support both attributes and hierarchies.

Metadata for Key Processing Dimensions is stored in four tables:

- A base table (For example, **DIM_<Dimension Name>_B**)
- A translation table (For example, **DIM_<Dimension Name>_TL**)
- An attribute table (For example, **DIM_<Dimension Name>_ATTR**)
- A hierarchy table (For example, **DIM_<Dimension Name>_HIER**)

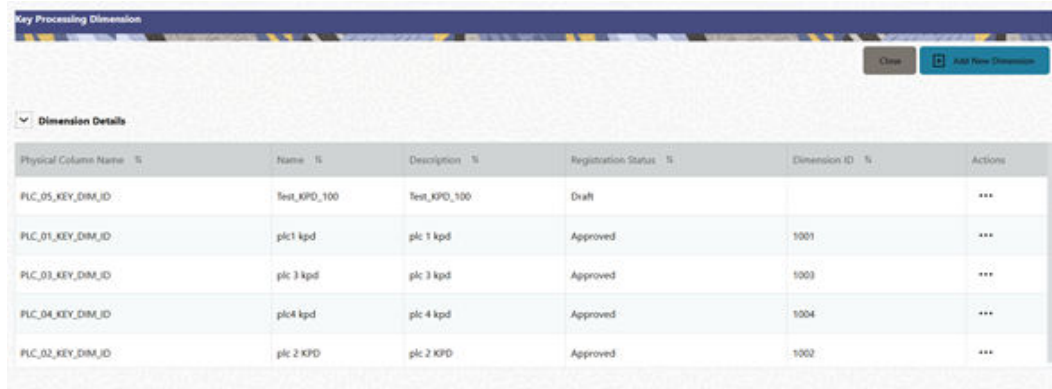
Base tables store basic information about each Dimension Member and Translation Tables store names and descriptions for each Dimension Member in multiple languages.

Attribute Tables store one or many attribute values for each Dimension Member. Hierarchy Tables store one or more hierarchies for each dimension (you may define as many hierarchies as you wish for any dimension that supports hierarchies).

The DM Extension Module enables you to create Custom Dimensions as required by the business. To register a Key Processing Dimension:

1. Navigate to the summary screen, and click the **Key Processing Dimension** tile to display the Key Processing Dimension summary screen.

Figure 2-2 Key Processing Dimensions summary screen



Physical Column Name	Name	Description	Registration Status	Dimension ID	Actions
PLC_05_KEY_DIM_ID	Test_KPD_100	Test_KPD_100	Draft		...
PLC_01_KEY_DIM_ID	plc1 kpd	plc 1 kpd	Approved	1001	...
PLC_03_KEY_DIM_ID	plc 3 kpd	plc 3 kpd	Approved	1003	...
PLC_04_KEY_DIM_ID	plc4 kpd	plc 4 kpd	Approved	1004	...
PLC_02_KEY_DIM_ID	plc 2 KPD	plc 2 KPD	Approved	1002	...

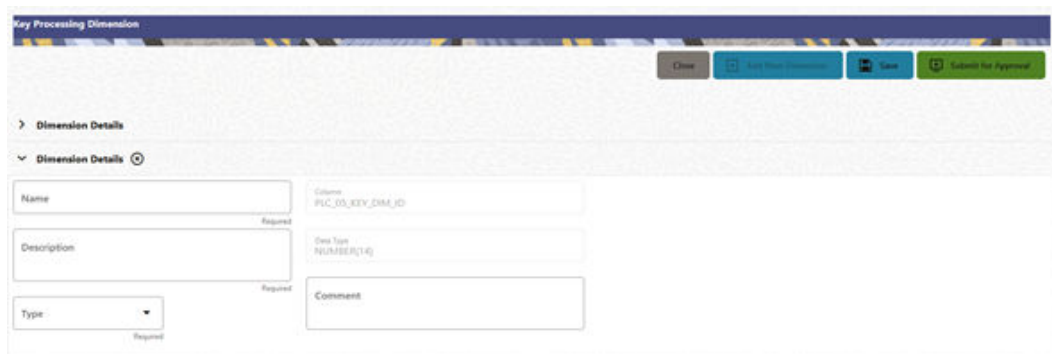
The summary screen displays the summary of existing Key Processing Dimensions with the details Physical Column Names, Name, Description, Registration Status, Dimension ID, and Actions icon.

The Actions icon displays the **View** button. You can click the **View** button and see the Dimension Details in View Only mode.

The registration of a dimension happens after the dimension is approved. The Dimension ID is displayed only for the approved dimensions.

2. Click **Add New Dimension** to collapse the Dimension Details summary and to display the dimension details.
When you click **Add New Dimension**, the UI displays the **Save** and **Submit for Approval** buttons.

Figure 2-3 Key Processing Dimension screen



Key Processing Dimension

Close Add New Dimension Save Submit for Approval

> Dimension Details

Dimension Details

Name Required

Description Required

Type Required

Code Required

Data Type Required

Comment

3. Enter the following details:

- **Name:** This is a mandatory field. Specify the required logical name of the dimension.
- **Description:** This is a mandatory field. Specify the required description of the dimension.
- **Type:** This is a mandatory field. Select a relevant Dimension Type.
 - **Product (Prod):** Select this option if you want to use the placeholder Dimension to define Business Rules and Assumptions.
 - **Organization (Org):** Select this option if you want to use the Placeholder Dimension to define a new Organization structure.
 - **Other:** Select this option if you want to use the placeholder Dimension for any other purpose.
- **Comment** Specify the required maker/checker comment. Note that special characters *, newline, and double quotes are not allowed.

The **Details** section displays the Physical Column and Data Type information that the dimension uses for user reference. As and when a registration is successful and the physical column is utilized, the next registration process proceeds to take the next-in-numerical-order physical column available for registration.

4. Click **Save** to save the details. The details are saved as a Draft and displayed on the summary screen. You can change the Name, Description, and Comments later by double clicking the details.

5. Click **Submit for Approval** to send the Dimension Details for approval.
Or

Select a **Name** from the list and click the **Actions** Icon to View, Edit, Submit for Approval or Delete the key processing dimension.

 Note:

- You can delete a registration when it is in Draft state.
- If the selected Dimension is in Approved state, then the Actions Menu displays only View, Edit, and Submit for Approval actions.

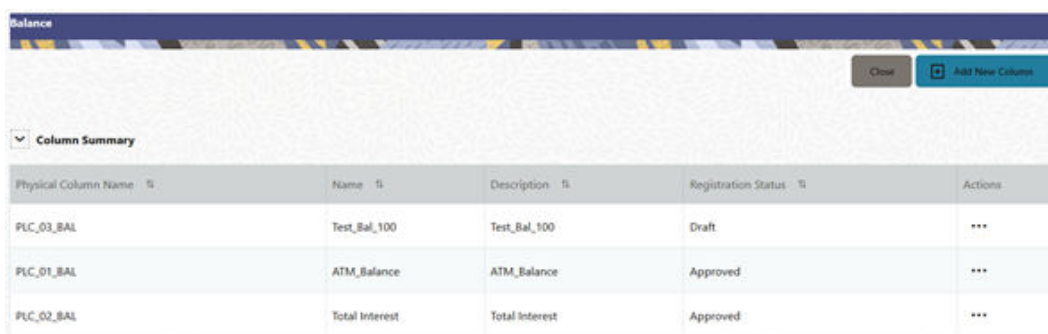
2.2 Registering Columns

The Placeholder Columns are categorized under the different domains to be used for different purposes.

The procedures to register the listed Columns are similar. To register a column:

1. Navigate to the Summary screen, and click a **Column** tile to display the Column Summary screen.

Figure 2-4 Column Summary screen



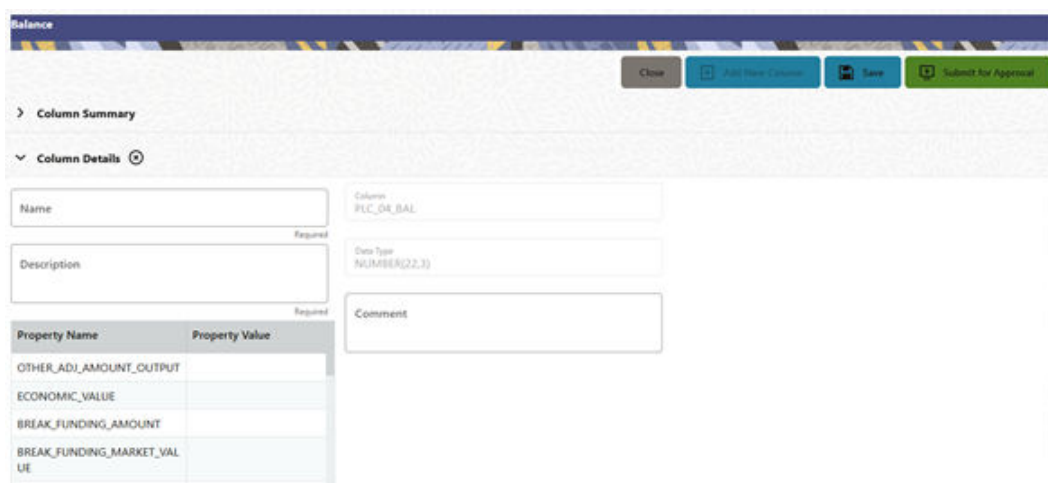
Physical Column Name	Name	Description	Registration Status	Actions
PLC_03_BAL	Test_Bal_100	Test_Bal_100	Draft	***
PLC_01_BAL	ATM_Balance	ATM_Balance	Approved	***
PLC_02_BAL	Total Interest	Total Interest	Approved	***

The summary screen displays the summary of existing Columns with the details Physical Column Names, Name, Description, Registration Status, and Actions icon.

The registration of a Column happens after the Column is approved.

- Click **Add New Column** to collapse the Column Summary and to display the Column Details. When you click **Add New Column**, the UI displays the **Save** and **Submit for Approval** buttons.

Figure 2-5 Column Screen



Column Details

Name: Column PLC_04_BAL

Description: Data Type: NUMBER(22,3)

Comment:

Property Name	Property Value
OTHER_ADJ_AMOUNT_OUTPUT	
ECONOMIC_VALUE	
BREAK_FUNDING_AMOUNT	
BREAK_FUNDING_MARKET_VALUE	

- Enter the following details:
 - Name:** This is mandatory. Specify the required logical name of the column.
 - Description:** This is a mandatory field. Specify the required description of the column.
 - Property Name:** This is an optional field used to select a relevant Property from the drop-down list, as applicable to the Column.
 - Property Value:** Double click to display a drop-down where you can select Yes if it is applicable to the Column.
 - Comment:** Specify any maker/approver comment. Note that special characters *, newline, and double quotes are not allowed.

The **Details** section displays the Physical Column and Data Type Information that the column uses for user reference. As and when a registration takes place successfully and the Physical Column is utilized, the next registration process proceeds to take the next-in-numerical-order physical column available for registration.

4. Click **Save**. The details are saved as a Draft and are displayed on the Summary screen. You can change the Name, Description, and Comments later by double clicking the details.
5. Click **Submit for Approval** to send the column details for approval.
OR

Select a **Name** from the list and click the **Actions** icon to View, Edit, Submit for Approval, or Delete the Column. Editing, Submitting for Approval, or Deleting procedures are similar to Dimension Edit, Submit for Approval, or Delete procedures.

 Note:

- You can delete a registration when it is in Draft state.
- If the selected Column is in *Approved* state, then the Actions menu displays only View, Edit, and Submit for Approval actions.

Domain Types

The below domain types are available for each of the Cloud Service:

Table 2-1 Domain Types

Profitability and Balance Sheet Management Cloud Service Domain Types	Accounting Standards Cloud Service Domain Types	Climate Change Analytics Cloud Service Domain Types
• DATE • RATE • VOLUME • CHAR • LONG_DESCRIPTION • FLAG • BALANCE	• DATE • RATE • VOLUME • CHAR • LONG_DESCRIPTION • FLAG • BALANCE • SHORT_NAME • SHORT_NUMBER • SHORT_DESCRIPTION • CODE_CURRENCY • PERCENT • LOCALE_CD • TIMESTAMP • NAME • LEAF • OBJECT_ID • SYSTEM_IDENTIFIER	• BALANCE • CHAR • CODE • DATE • FLAG • LEAF • NUMBER • RATE • PERCENT • LONG_DESCRIPTION • SHORT_DESCRIPTION • COUNTERPARTY_BALANCE • COUNTERPARTY_RATE • COUNTERPARTY_PERCENT • COUNTERPARTY_CHAR

2.3 Registering a Management Ledger

This is applicable only to Profitability and Balance Sheet Management Cloud Services.

PBSM Cloud Service contains the default Management Ledger (FSI_D_MANAGEMENT_LEDGER). However, you can add up to five other Management Ledgers to the Service.

To view and edit the Management Ledger:

1. Navigate to the Summary screen, and click the **Management Ledger** tile to display the **Edit Management Ledger** screen.

Figure 2-6 Edit Management Ledger Screen

This screen displays the following details of the Management Ledger as follows:

- **Name** (non-editable)
 - **Physical Name** (non-editable)
 - **Description** (non-editable)
2. Click **Standard Management Ledger Attribute** to collapse and see the available Standard Dimensions, Standard Columns, and Approved Dimensions.

The Standard Dimensions section shows the Key Processing Dimensions that are available OOTB for the Management Ledger. In addition to this, the screen enables the selection of custom Key Processing Dimensions for the Management Ledger through a shuttle box component that displays the registered custom dimensions in the Available Dimensions and the Selected Dimensions boxes. You can select from the **Available Dimensions** box and move them to the **Selected Dimension** box using the **Move** button. Additionally, you can remove the Selected Dimensions by clicking the **Move Back** button.

The Standard Columns comprises of the OOTB Ledger-level Simple Dimensions and Admin Columns. The Approved Dimensions shows the list of Custom Dimensions approved for the Management Ledger.

2.3.1 Adding a Management Ledger

To add a new Management Ledger, perform the following steps:

1. Navigate to the Summary screen, and click the **Add Management Ledger** tile to display the Add Management Ledger screen.

Figure 2-7 Add Management Ledger Screen

2. Enter the following details:
 - **Name:** This is a mandatory field. Specify the logical name of the Management Ledger.
 - **Description:** This is a mandatory field. Specify the description of the Management Ledger.
3. Select the applicable Dimensions from the **Available Dimensions** box and click the **Move** button to move them to Selected Dimensions box. The selected Dimensions are included as the additional activated Key Processing Dimensions for the Management Ledger.
4. Click **Submit for Approval** to send the column details for approval.

The details are sent to the Supervisor or Approver for approval. The newly added Management Ledger is displayed on the summary screen in a new tile.

Note:

- You can delete a registration when it is in Draft state.
- If the selected Management Ledger table is in *Approved* state, then the Actions Menu displays only View, Edit, and Submit for Approval actions.

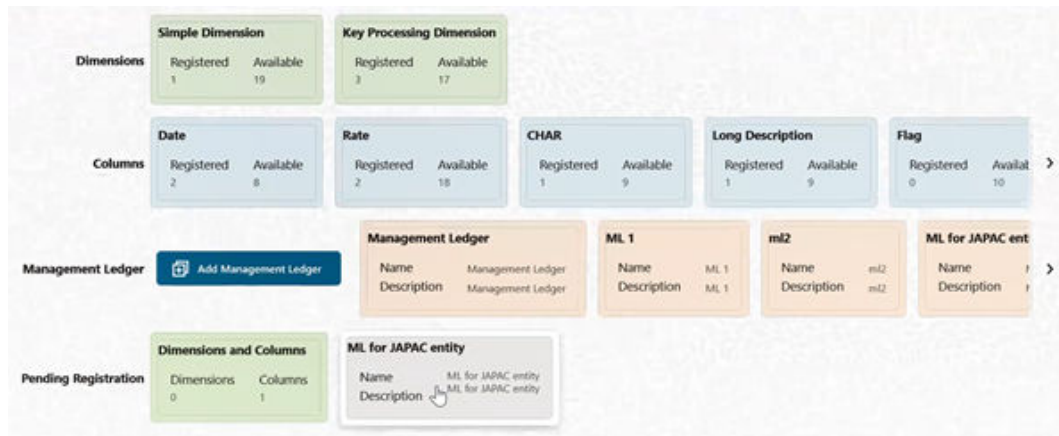
2.4 Approving or Rejecting the Registrations

The Supervisor or Approver can see the Dimensions or Columns or Management Ledgers that are ready for approval on the Data Model Extension summary screen.

To approve the Dimensions, Columns, and Management Ledgers, perform the following steps:

1. Navigate to the **Data Model Extension** summary screen.

Figure 2-8 Data Model Extension Summary Screen



The Dimensions and Columns that are ready for approval are displayed in one tile and the Management Ledgers that are ready for approval are displayed in another tile against the **Pending Approval** Table.

2. Click on any Tile to open to the **Pending Dimension and Column Registration** screen or **Approve Management Ledger Registration** screen.
3. Enter a comment and click the **Approve** or **Reject** buttons.
4. Select **OK**.
 - a. The approved Dimension or Column or Management Ledger is displayed in the summary screen with *Approved* status.
 - b. Select **Cancel** to keep the Dimension or Column or Management Ledger in a Pending for Approval Status.
5. Click **Reject** to reject the registration. Complete the approval process. The Registration will be marked with status Rejected in the summary screen.
6. After it is approved or rejected, the registration is available for further modification by the Maker and can be submitted again.

A registration cannot be deleted after it has passed the Draft State and is currently in Pending, *Approved* or *Rejected* state.