## **Oracle® Argus Mart**

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## Preface

The Oracle Argus Mart (AM) is a data source software product that can be used for analysis and reporting in medical product safety and pharmacovigilance. The primary data for Argus Mart are the adverse event cases managed by the Oracle Argus Safety application. The Argus Mart product consists of:

- A pre-defined Argus Mart data model containing Signal and Reporting tables
- Pre-built ODI based interfaces that are linked to Oracle PL/SQL based packages

The Argus Safety application serves as the primary source of data for Argus Mart. The ODI software extracts the data from the Argus Safety database, transforms and loads the data into the Argus Mart. Once the ODI tool loads the data into the Argus Mart, it is available for the Argus Mart users for querying and reporting activities.

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Always visit the My Oracle Support Web site for the latest information, including alerts, release notes, documentation, and patches.

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The Oracle Argus Mart media pack is available both as physical media and as a disk image from the Oracle E-Delivery Web site. The media pack contains the technology stack products and the Oracle Argus Mart application. To receive the physical media, order it from Oracle Store at https://oraclestore.oracle.com.

To download the Oracle Argus Mart media pack from eDelivery, do the following:

- 1. Navigate to http://edelivery.oracle.com and log in.
- 2. From the Select a Product Pack drop-down list, select Health Sciences.
- 3. From the Platform drop-down list, select the appropriate operating system.
- 4. Click Go.
- 5. Select Oracle Argus Mart Media Pack for Operating System and click Continue.
- **6.** Download the software.

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- **3.** Follow the instructions on the registration page.

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- Refine Search Once you have results from a search, use the Refine Search options on the right side of the Knowledge page to narrow your search and make the results more relevant.
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- To find a patch by product name, release, and platform, click the Product or Family link to enter one or more search criteria.
- 3. Click Search to execute your query. The Patch Search Results page opens.
- **4.** Click the patch ID number. The system displays details about the patch. In addition, you can view the Read Me file before downloading the patch.
- **5.** Click **Download**. Follow the instructions on the screen to download, save, and install the patch files.

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- 1. Sign in to My Oracle Support at http://support.oracle.com.
- **2.** Click the **Certifications** tab. The Certifications page opens and displays the Find Certifications region.
- 3. In Select Product, enter Oracle Argus Mart.
- 4. Click the Go to Certifications icon.

The right pane displays the certification information.

5. Select a certification to view the certification details.

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## Conventions

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	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.

The following text conventions are used in this document:

# **1** Overview

This chapter comprises the following topics:

- Scope
- Assumptions

## 1.1 Scope

This document contains information that helps a database expert to extend Argus Mart data structure/logic for custom data.

## 1.2 Assumptions

This guide assumes the following:

- Argus Mart (AM) is dependent on Argus Safety (AS).
- You should avoid executing any such functionality that may be implemented in a simpler and more general way in Argus Safety.
- It is not necessary to wrap PL/SQL components of the ETL.

# 2

# Argus Mart ETL

This chapter comprises the following topics:

- Introduction to Argus Mart ETL
- ETL Hooks
- Configuring Flexible Data Re-categorization Code List
- Customizing Tables
- Customizing Table for CLOB columns

**Note:** The user interface in the application may vary from the figures displayed in the subsequent sections.

## 2.1 Introduction to Argus Mart ETL

Argus Mart is a data source for analysis and reporting in medical product safety and pharmacovigilance. The primary data is the adverse event cases managed by the Argus Safety application. Argus Mart consists of one or more data marts and the software to Extract the source data from Argus Safety; Transform the data, and Load it into the Argus Mart data marts. The two sets of tables used in Argus Mart are:

- Reporting Mart (RM)
- Signal Mart (SM)

The data can be customized before or after fetching data from Argus Safety database with the help of ETL Hooks. The next section comprises the details about ETL Hooks.

## 2.2 ETL Hooks

ETL Hooks are the custom procedures that are used to extend the existing functionality or behavior of the Argus Mart ETL.

ETL Hooks can be executed to perform actions while fetching data from the source database to the destination database, as required by the users.

The data fetched from Argus Safety database can be modified before or after uploading the data into the Argus Mart database. You can populate customized (non-standard/user-defined) columns to the standard RM and SM tables. Besides, you can also populate customized table(s).

For more information on populating customized columns or tables, refer to Section 2.4, "Customizing Tables".

ETL Hooks perform these actions at different stages of both initial and incremental ETL.

The ODI Load Plan lists all the ETL scenarios, as shown below:

Figure 2–1 ODI Load Plan

inition					
eps					
eptions	#	Steps Hierarchy	Enabled	Scenario/Variable	Restart
ables	0	⊡… \$ root_step	<b>v</b>		Restart from failure
leges	1		~	SCN_compile_schema_stage Version 001	Restart from failed step
ion	2	SCN_compile_schema_mart	~	SCN_compile_schema_mart Version 001	Restart from failed step
fields	3	SCN_compile_schema_rls	<b>v</b>	SCN_compile_schema_rls Version 001	Restart from failed step
neius	4	SCN_etl_pre_req_checks_initial	~	SCN_etl_pre_req_checks_initial Version 001	Restart from failed step
	5	SCN_mark_etl_state_to_started	~	SCN_mark_etl_state_to_started Version 001	Restart from failed step
	6	SCN_set_etl_status_initial_start	~	SCN_set_etl_status_initial_start Version 001	Restart from failed step
	7	SCN_maintain_logs_history	~	SCN_maintain_logs_history Version 001	Restart from failed step
	8	SCN_etl_log_start_time	~	SCN_etl_log_start_time Version 001	Restart from failed step
	9	SCN_update_etl_jobs_stage_start	~	SCN_update_etl_jobs_stage_start Version 001	Restart from failed step
	10	SCN_populate_control_table	~	SCN_populate_control_table Version 001	Restart from failed step
	11	SCN_truncate_dict_tables	~	SCN_truncate_dict_tables Version 001	Restart from failed step
	12	SCN_delete_stage_schema_stats	~	SCN_delete_stage_schema_stats Version 001	Restart from failed step
	13	SCN_pop_etl_enterprise_to_proces	~	SCN_pop_etl_enterprise_to_proces Version 001	Restart from failed step
	14	SCN populate profile switches	V	SCN populate profile switches Version 001	Restart from failed step
	15	- Contract C		SCN_p_exec_etl_custom_hooks_PRE_STAGE	Restart from failed step
	16	SCN_change_schema_tables_logging(0,0)	~	SCN_change_schema_tables_logging(0,0) Ver	. Restart from failed step
	17	SCN_calc_etl_high_water_mark	~	SCN_calc_etl_high_water_mark Version 001	Restart from failed step

This section comprises of the following topics:

- List of Argus Mart ETL Hooks
- Viewing Argus Safety User Interface
- Executing ETL Hooks

## 2.2.1 List of Argus Mart ETL Hooks

Argus Mart comprises the following ETL Hooks:

- CUSTOM ROUTINE BEFORE STAGE TABLES POPULATION: This hook can be executed before populating the Staging tables.
- CUSTOM ROUTINE BEFORE REPORTING TABLES POPULATION: This hook can be executed before populating the Reporting tables (or RM tables).
- CUSTOM ROUTINE AFTER REPORTING TABLES POPULATION: This hook can be executed after populating the Reporting tables (or RM tables).
- CUSTOM ROUTINE BEFORE SIGNAL HELPER TABLES POPULATION: This hook can be executed before populating the Signal Helper tables.
- CUSTOM ROUTINE AFTER SIGNAL HELPER TABLES POPULATION: This hook can be executed after populating the Signal Helper tables.
- CUSTOM ROUTINE AFTER ETL: This hook can be executed after running the initial or incremental ETL (post-ETL commit).

**Note:** ETL hooks CUSTOM ROUTINE BEFORE SIGNAL HELPER TABLES POPULATION and CUSTOM ROUTINE AFTER SIGNAL HELPER TABLES POPULATION are executed only when any case revision is being processed for SM tables in the current ETL run.

## 2.2.2 Viewing Argus Safety User Interface

ETL Hooks help in customizing the existing ETL to suit your requirements through Argus Safety user interface.

Follow the steps given below to view the Argus Safety user interface:

- 1. Log in to the Argus Safety application.
- 2. From the menu bar, click Argus Console.

The menu bar updates for Argus Console.

- 3. From the new menu bar, click System Configuration.
- 4. Click System Management (Common Profile Switches).

On the left hand side of the screen, a list of all system-managed common profile switches appears.

5. Expand the Common Profile folder and click Argus Mart.

The Modify Argus Mart page appears.

**Note:** ETL hooks are the global-level switches, visible on Argus Safety Console when you are logged-in through the default enterprise. These switches are visible only after installing and creating Argus Mart schema.

Figure 2–2 Argus Safety User Interface

ORACLE				
Code Lists Business Configuration	Access Management	System Configuration	Tools	
COMMON PROFILE - Argus Mart				
Browser	Modify Argus Mart			
	MISSING CODE DISPLAY V     Code Missing in the Code	VALUE		
Common Profile	code maaing in the code			
Advanced Conditions	CUSTOM DATA SHEET FO	RLISTEDNESS		
Argus Mart	SMQ CMQ FOR FATAL TE	RMS Specific SMQ/CMQ to be u	sed for deter	mining fatal terms for the column FATAL_YN_DV
Bocument wanagement     E2B     Gocal Labeling     MedWatch Configuration	PRE STAGE TABLES POPU	JLATION		
Network Settings	PRE REPORTING TABLES	POPULATION		
User Interface	POST REPORTING TABLE	S POPULATION		
	PRE HELPER TABLES POP	ULATION		
	CUSTOM ROUTINE AFTER	ETL		
Help Text	POST HELPER TABLES PO	OPULATION		

## 2.2.3 Executing ETL Hooks

The ETL Hooks can be executed at different staging levels.

- 1. Before populating the reporting tables, execute CUSTOM ROUTINE BEFORE STAGE TABLES POPULATION, and/or CUSTOM ROUTINE BEFORE REPORTING TABLES POPULATION.
- 2. Before populating the signal tables, execute ETL Hooks CUSTOM ROUTINE AFTER REPORTING TABLES POPULATION, CUSTOM ROUTINE BEFORE SIGNAL HELPER TABLES POPULATION, and/or CUSTOM ROUTINE AFTER SIGNAL HELPER TABLES POPULATION.
- **3.** After populating reporting and signal tables and before populating the results, execute CUSTOM ROUTINE AFTER ETL.

EGIN	ETL
	CUSTOM ROUTINE BEFORE STAGE TABLES POPULATION
	CUSTOM ROUTINE BEFORE REPORTING TABLES POPULATION
	REPORTING TABLES POPULATION
	CUSTOM ROUTINE AFTER REPORTING TABLES POPULATION
	CUSTOM ROUTINE BEFORE SIGNAL HELPER TABLES POPULATION
	CUSTOM ROUTINE AFTER SIGNAL HELPER TABLES POPULATION
	SIGNAL TABLES POPULATION
	CUSTOM ROUTINE AFTER ETL
	END ETL

Figure 2–3 Sequence of ETL Hook Execution

Follow the steps given below to execute an ETL Hook:

1. On the **Modify Argus Mart** page, enter a procedure name in the text box relevant to the ETL Hook execution stage. The ETL type can be initial or incremental where the customized data will be fetched. The ETL Hook will look for the database object that matches the procedure name.

A procedure name denotes the ETL Hook that comprises the custom procedure, or steps. Based on the stage (initial or incremental) where this procedure is being called, the data is modified before sending it to the destination tables.

- 2. If the database object (or procedure) is found, the ETL is executed as follows:
  - If the ETL executes without any errors, then move to the next procedure.
  - If the ETL executes with errors, then log the error(s) and exit.

When executing ETL, if there is any error while populating the staging schema tables, error(s) are logged in the table ETL\_STAGE\_LOG, whereas while populating the mart schema tables, error(s) are logged in the table ETL\_MART\_LOG.

**3.** If the database object (or procedure) is not found, then log the error(s) and fail the ETL. In this case, the ETL may be executed if you have explicitly created an exception-handling for such cases to absorb any exceptions and move on to the next procedure.

Optionally, to resolve this issue, create a procedure of that name, provide an existing procedure name, or remove the configuration.

- **WARNING:** •You should not modify the existing data or names of the objects. Although additional objects can be created, all changes should first be tested on a test environment, before implementing them in a production environment.
- No data commit should be done within ETL Hooks.

## 2.3 Configuring Flexible Data Re-categorization Code List

Flexible Data Re-categorization is an Argus Safety functionality through which users can define code list display values (LM tables) in different languages.

Argus Safety maintains this data in the tables CODE\_LIST\_MASTER, CODE\_LIST\_ CODE\_ATTRIBUTES, and CODE\_LIST\_DETAIL\_DISCRETE for supported languages.

The Argus Mart ETL populates the code list data in the tables RM\_CODE\_LIST\_ MASTER, RM\_CODE\_LIST\_CODE\_ATTRIBUTES, and RM\_CODE\_LIST\_DETAIL\_ DISCRETE, which are used for processing the SM table columns.

Based on the applicable language, the SM table fields are divided into the following categories:

- LI Language Independent fields: These fields are applicable for first-human language, or second-human language parameters. The values are the same, irrespective of the language code.
- FL First Language fields: These fields are populated on the basis of the Argus Mart Common Profile Switch FIRST\_HUMAN\_LANGUAGE, which is present in Argus Console.

The default value of this switch is **en**. As a result, the default language in which these fields will be populated is English.

If the user configures this switch with any other available language and if its corresponding data is also present in the Flexible Data Re-categorization code list tables, these first language fields will contain data as per the configured language.

 SL - Second Language fields: These fields are populated on the basis of the Argus Mart Common Profile Switch SECOND\_HUMAN\_LANGUAGE, which is present in Argus Console.

The default value of this switch is NULL. This implies that the second language fields will be populated in the SM tables only after this switch is configured.

If the user configures this switch with any other configured language (like German), and:

- If its corresponding data is also present in the Flexible Data Re-categorization code list tables, these second language fields will contain data as per the configured language.
- If its corresponding data is not available in the Flexible Data Re-categorization code list tables, these second language fields will contain data as per the English language.
- **EN English fields**: These fields are always populated for only the English language.
- **J Japanese fields**: These fields are applicable only if the second-human language parameter is set to Japanese language.
- **EN\_ABBRV**: These fields use the EN\_ABBRV language for the specified code list.

• **SM:** These fields use the SM language for the specified code list.

The following is an example to configure a code list display value in a new language for an already existing code in Argus Safety:

## Example 2–1 Configuring Flexible Data Re-categorization

For a code list GENDER, data in the table CODE\_LIST\_DETAIL\_DISCRETE for code 1 is available in the following four decode contexts (languages):

#### Figure 2–4 Original Decode Contexts (Languages)

CODE_LIST_I	DECODE_CONTEXT	CODE DISPLAY_VALUE	PREFERRED	SORT	LAST_UPDATE_TIME	ENTERPRISE_ID
GENDER	en	1 Male	0	(null)	05-FEB-13	1
GENDER	ja	1 男性	0	(null)	05-FEB-13	1
GENDER	E2B	11	0	(null)	05-FEB-13	1
GENDER	SM	1 M	0	(null)	05-FEB-13	1

To configure the same code 1 in the code list GENDER for a new language such as GERMAN (decode context **ge**), populate the table CODE\_LIST\_DETAIL\_DISCRETE with required values in the GERMAN language.

INSERT INTO CODE\_LIST\_DETAIL\_DISCRETE (CODE\_LIST\_ID, DECODE\_CONTEXT, CODE, DISPLAY\_VALUE, PREFERRED, SORT, LAST\_UPDATE\_TIME, ENTERPRISE\_ID) VALUES ( 'GENDER', 'ge', 1, 'männlich', 0, null, sysdate, 1);

#### Figure 2–5 New Decode Contexts (Languages)

CODE_LIST_ID	DECODE_CONTEXT	CODE DISPLAY_VALUE	PREFERRED	SORT	LAST_UPDATE_TIME	ENTERPRISE_ID
GENDER	en	1 Male	0	(null)	05-FEB-13	1
GENDER	ja	1 男性	0	(null)	05-FEB-13	1
GENDER	E2B	11	0	(null)	05-FEB-13	1
GENDER	SM	1 M	0	(null)	05-FEB-13	1
GENDER	ge	1 männlich	0	(null)	20-FEB-13	1

## 2.4 Customizing Tables

You can customize RM and SM tables, as explained in the following sections:

- Customizing RM Tables
- Customizing SM Tables

## 2.4.1 Customizing RM Tables

This section comprises information on the following actions:

- Populating a Column Added in the Argus Safety table
- Populating a Calculated Column in RM

## 2.4.1.1 Populating a Column Added in the Argus Safety table

You can populate new column(s) to existing RM tables that are added to the Argus Safety tables.

#### To populate the new column:

1. Check mapping between the source and the target tables, through the table *ETL\_ SIGNAL\_TABLE\_MAPPING*. **2.** Based on the mapping between the Argus Safety and RM tables, fetch the desired column in the RM table through ETL Hooks.

There can be different source types to fetch data into tables at initial or incremental stages, such as:

- ATOS Argus Safety to Staging tables
- DTOS DLP to Staging tables
- STORM Staging to RM tables
- STOSM PRE\_SM to SM Tables

#### Example 2–2 Populating a new column in the RM table

Follow the steps given below to populate a new column in the table RM\_CASE\_MASTER:

- 1. Check the mapping between RM\_CASE\_MASTER, and the source table (SDLP\_CASE\_MASTER) to fetch columns from the staging table into the RM table. In this case, the source type is STORM.
- **2.** Check the source table for target table (SDLP\_CASE\_MASTER), where columns are fetched from Argus Safety into the staging table. In this case, the source type can be ATOS/DTOS.

Figure 2–6 Populating New Columns in the RM Table

Worksheet	Query Builder				
SELECT *	FROM etl_signal_table_	mapping WHERE targ	et_tab_name='SI	LP_CASE_MASTER';	
select *	from etl_signal_table_	mapping where sour	ce_tab_name='SI	DLP_CASE_MASTER';	
Script Outpu	it × >Query Result ×				
ا 🚯 🚨 📌	SOL All Rows Fetched: 2 in	0.388 seconds			
2 TA	BLE_ID SOURCE_TAB_NAME	TARGET_TAB_NAME	SOURCE_TYPE	EXECUTE_STATUS	CATEGORY
1	1020 DLP_CASE_MASTER	SDLP_CASE_MASTER	DTOS	1	CASE
2	3140 SDLP CASE MASTER	RM CASE MASTER	STORM	1	CASE

**3.** Once the mapping of the tables has been identified, fetch these column(s) from Argus Safety/DLP into Argus Mart, as required.

#### 2.4.1.2 Populating a Calculated Column in RM

You can populate customized calculated column(s) to the existing RM tables that do not exist in the Argus Safety database. You can also populate column(s) which are calculated on the basis of the existing columns in a table.

To populate such custom columns, create a procedure, and use ETL Hooks to execute them.

#### Example 2–3 Creating a custom procedure

Creating a procedure called P\_UPD\_RM\_CASE\_PAT\_INFO, to populate a new column called PAT\_FULL\_NAME in the table RM\_CASE\_PAT\_INFO. The value of this column is calculated, and populated from the existing columns of RM\_CASE\_PAT\_INFO. Here, we concatenate three columns PAT\_INITIALS, PAT\_FIRSTNAME, and PAT\_LASTNAME to populate this value as PAT\_FULL\_NAME.

- **1.** Create a procedure called P\_UPD\_RM\_CASE\_PAT\_INFO.
- **2.** In the table RM\_CASE\_PAT\_INFO, populate a new column called PAT\_FULL\_NAME.

The value of this column is calculated, and populated from the existing columns of RM\_CASE\_PAT\_INFO.

**3.** Concatenate three columns PAT\_INITIALS, PAT\_FIRSTNAME, and PAT\_LASTNAME to populate this value as PAT\_FULL\_NAME.

#### Figure 2–7 Creating Custom Procedure

```
CREATE OR REPLACE PROCEDURE p_upd_rm_case_pat_info AS

BEGIN

UPDATE rm_case_pat_info

SET pat_full_name = pat_initials || ' ' || pat_firstname || ' ' || pat_lastname

WHERE pat_full_name IS NULL;

EXCEPTION

WHEN OTHERS THEN

pkg_sm_logging.p_etl_mart_log (SUBSTR (SQLERRM, 1, 300),

'p_upd_rm_case_pat_info',

'Error during updation of RM_CASE_PAT_INFO.');

END p_upd_rm_case_pat_info;

/
```

4. Once this procedure is created, call this procedure using ETL Hook PRE\_ REPORTING\_TABLES\_POPULATION.

The ETL Hook will populate this new column PAT\_FULL\_NAME in SDLP\_CASE\_PAT\_INFO.

## 2.4.2 Customizing SM Tables

When using ETL Hooks to populate data into SM tables, it is recommended to use RM tables as the source, with join(s) to the chunk table ETL\_SM\_CASES\_TO\_PROCESS\_CHUNK.

Do not use RM Views such as V\_ETL\_CASE\_MASTER, because each view is joined individually to the chunk table. This can lead to sluggish performance of the application if ETL Hook extracts data from the multiple views.

#### Example 2–4 Populating data into SM tables using the chunk table

In the example given below, two RM tables RM\_CASE\_MASTER and RM\_CASE\_PAT\_ INFO have been joined with the chunk table ETL\_SM\_CASES\_TO\_PROCESS\_ CHUNK to fetch data into the SM table with the help of the ETL Hooks.

#### Figure 2–8 Populating Data into SM tables using Chunk Table

```
SELECT *
FROM rm_case_master rcm, rm_case_pat_info rcpi, etl_sm_cases_to_process_chunk chnk
WHERE chnk.enterprise_id = rcm.enterprise_id
AND chnk.case_id = rcm.case_id
AND chnk.validstart >= rcm.effective_start_date
AND chnk.validstart < rcm.effective_end_date
AND chnk.enterprise_id = rcpi.enterprise_id
AND chnk.case_id = rcpi.case_id
AND chnk.validstart >= rcpi.effective_start_date
AND chnk.validstart <= rcpi.effective_end_date;</pre>
```

This section comprises information on the following actions:

- Defining a New Column in SM table
- Populating a Custom UVT table

## 2.4.2.1 Defining a New Column in SM table

New column(s) can be added before or after fetching data into SM tables. The columns to be added into SM can have simple or complex calculations.

- Simple calculation-based columns: SM Views are created based on Argus Safety tables. When a customized column having simple calculations is to be added in an SM table, these calculations are done on SM Views, such as:
  - select <column-name> from <table-name> table where <column-name> DateOfBirth = '1990';
  - The definition of these SM Views is based on RM tables and is not updated automatically. When calculations are done, make sure to update the views, to reflect the changes. Once SM Views are updated, use ETL Hooks to fetch this column(s) into SM table, as required.
- Complex calculation-based columns: *PRE\_SM* table is a set of tables that comprises the staging data for SM tables. You can perform complex calculations on these tables and then fetch them into SM tables using ETL Hooks.

The basic procedure to define a new column is the same for both simple and complex calculation-based column(s) - SM View and PRE\_SM tables.

Simple and complex calculations are segregated to improve performance of execution of the data.

## 2.4.2.2 Populating a Custom UVT table

The Argus Mart ETL maintains Unique Value Tables (UVT) for first-human language and second-human language, as defined in the system. The UVTs contain the list of distinct values available for categorical data items in the case data.

To populate a custom UVT table, you must first check the source and target table mapping from the table *ETL\_UVT\_SM\_MAPPING*.

Fetch the data from the source table into the target table as per the mapping done above.

#### Example 2–5 Populating a custom UVT table

Follow the steps given below to populate a column in the table UVT\_GENDER:

1. Check the mapping between the source table PRE\_SM\_CASE and the target table UVT\_GENDER from the table ETL\_UVT\_SM\_MAPPING.

Figure 2–9 Populating Custom UVT Table

Worksheet	Query Builder				
SELECT	FROM etl_u	vt_sm_mapping where	uvt_source_table_name=	'PRE_SM_CASE' and uvt_tab	le_name='UVT_GENDER';
Script Outp	it × >Query	Result X			
📌 📇 🔞	SOL All Ro	ws Fetched: 1 in 0.388 sec	onds		
2 U	T_TABLE_NAME	UVT_COLUMN_NAME	UVT_SOURCE_TABLE_NAME	UVT_SOURCE_COLUMN_NAME	
1 UVT (	ENDER	ITEM_VALUE	PRE_SM_CASE	GENDER_VE	

**2.** After mapping the tables and their related columns, you can populate the column(s), as required.

## 2.5 Customizing Table for CLOB columns

To reduce the time taken to load the CLOB data from Argus Safety source tables to Argus Mart stage tables, add or modify the data in the table ETL\_SPLIT\_CLOB\_COLUMN\_MAP available in Argus Mart schema.

With this customization, the ETL fetches only the first 32767 bytes of the source CLOB column to the respective column of the stage table. The value in the source CLOB column splits into twenty five VARCHAR2 columns at the source before moving the data to the respective stage column. Hence, reduced loading time of these tables, and reduced ETL time.

#### Note:

- Enabling this feature fetches only the first 32767 bytes of the data from the source CLOB column to the respective stage table column. The rest of the data is not copied.
- Enable this feature purely based on your own discretion.

The following are the table details to enable or disable this customization:

COLUMN NAME	DATA TYPE (LENGTH)	DESCRIPTION
TABLE_NAME	VARCHAR2 (30)	Defines Argus Safety source table name from which data is populated in to Argus Mart stage table. For example, DLP_CASE_ NARRATIVE.
COLUMN_NAME	VARCHAR2 (30)	Defines the name of the CLOB column present in the source table. For example, ABBREV_NARRATIVE.
ENABLE_YN	VARCHAR2 (1)	Defines the values for this column. Y—The feature is enabled N—The feature is disabled

Besides, as part of the Factory Data, the following columns of the table ETL\_SPLIT\_ CLOB\_COLUMN\_MAP are disabled by default (ENABLE\_YN = N):

TABLE_NAME	COLUMN_NAME	ENABLE_YN
CMN_REG_REPORTS	NULLIFICATION_REASON	Ν
DLP_CASE_ASSESS	BFARM_MANUAL_TEXT	Ν
	EVALUATION	Ν
	EVALUATION_J	Ν
DLP_CASE_DOSE_REGIMENS	DOSE_DESCRIPTION	Ν
	DOSE_DESCRIPTION_J	Ν
DLP_CASE_EU_DEVICE	CORRECTIVE_ACTION	Ν
	CORRECTIVE_ACTION_FINAL	Ν
	COUNTRIES_OF_DISTRIBUTION	Ν
	CURRENT_DEV_LOCATIONS	Ν
	FURTHER_INVESTIGATION	Ν
	INDENTIF	Ν
	INVESTIGATION_RESULT	Ν
	MANUFACTURER_COMMENTS	Ν
	PROJECTED_TIMING	Ν
	PROJECTED_TIMING_FINAL	Ν
DLP_CASE_EVENT	DETAILS	Ν
	DETAILS_J	Ν
DLP_CASE_FOLLOWUP	JUSTIFICATION	Ν
	JUSTIFICATION_J	Ν
DLP_CASE_JUSTIFICATIONS	J_TEXT	Ν
	J_TEXT_J	Ν
DLP_CASE_LAB_DATA	COMMENTS	Ν
	COMMENTS_J	Ν
	NOTES	Ν
	NOTES_J	Ν
DLP_CASE_NARRATIVE	ABBREV_NARRATIVE	Ν
	ABBREV_NARRATIVE_J	Ν
DLP_CASE_NOTES_ATTACH	NOTES	Ν
	NOTES_J	Ν
DLP_CASE_PAT_HIST	NOTE	Ν
	NOTE_J	Ν
DLP_CASE_PAT_INFO	NOTES	Ν
	NOTES_J	Ν
DLP_CASE_PROD_DEVICES	NARRATIVE_TEXT	Ν
	PRELIMINARY_COMMENTS	Ν
	PRELIMINARY_COMMENTS_J	Ν

TABLE_NAME	COLUMN_NAME	ENABLE_YN
DLP_CASE_PRODUCT	COMMENTS_TIMEFRAME	Ν
	GENERIC_NAME	Ν
	GENERIC_NAME_J	Ν
	NOTES	Ν
	NOTES_J	Ν
	QC_ANALYSIS_CAT_TEXT	Ν
	QC_ANALYSIS_CAT_TEXT_J	Ν
	QC_ANAL_SUMMARY_TEXT	Ν
	QC_ANAL_SUMMARY_TEXT_J	Ν
	QC_COMMENT	Ν
	QC_COMMENT_J	Ν
	QC_COMPLAINT_CAT_TEXT	Ν
	QC_COMPLAINT_CAT_TEXT_J	Ν
	QC_RESULT	Ν
	QC_RESULT_J	Ν
	REASON_DOWNGRADE	Ν
	RETRO_INFECTION	Ν
DLP_CASE_REPORTERS	NOTES	Ν
	NOTES_J	Ν
DLP_CASE_ROUTING	COMMENT_TXT	Ν
	COMMENT_TXT_J	Ν
DLP_CASE_STUDY	STUDY_DESC	Ν
	STUDY_DESC_J	Ν
LM_LABELED_TERMS	NOTES	Ν
	NOTES_J	Ν
LM_PRODUCT	PROD_GENERIC_NAME	Ν
	PROD_GENERIC_NAME_J	Ν
RPT_ROUTING	COMMENT_TXT	Ν

## To enable this feature:

• For the columns available in the table ETL\_SPLIT\_CLOB\_COLUMN\_MAP as part of the factory data, update the column value for ENABLYE\_YN as **Y** for the required column. For example:

```
UPDATE ETL_SPLIT_CLOB_COLUMN_MAP
SET ENABLYE_YN = 'Y'
WHERE TABLE_NAME = '<TABLE_NAME>'
AND COLUMN_NAME = '<COLUMN_NAME>'
```

• For new columns that are not available in the table ETL\_SPLIT\_CLOB\_COLUMN\_ MAP as part of the factory data, create new entry in this table with the column value for ENABLYE\_YN as **Y** for the required column. For example:

```
INSERT INTO ETL_SPLIT_CLOB_COLUMN_MAP
        (TABLE_NAME , COLUMN_NAME , ENABLYE_YN)
VALUES ('<TABLE_NAME>, '<COLUMN_NAME>', 'Y');
COMMIT;
```

**Note:** Enabling this feature only affects the data that is fetched from Argus Safety Source to Argus Mart in the Next ETL. It does not affects the existing data in the MART. (It does not triggers the re-load of data for the respective CLOB columns.)

#### To disable this feature:

\_

Set the column value for ENABLYE\_YN as N for the required column. For example:

```
UPDATE ETL_SPLIT_CLOB_COLUMN_MAP
SET ENABLYE_YN = 'N'
WHERE TABLE_NAME = '<TABLE_NAME>'
AND COLUMN_NAME = '<COLUMN_NAME>'
```

**Note:** Disabling this feature only affects the data that is fetched from Argus Safety Source to Argus Mart in the Next ETL. It does not affects the existing data in the MART. (It does not triggers the re-load of data for the respective CLOB columns.)