## **Oracle® Argus Mart**

Installation and Administration Guide Release 7.0.3 **E48402-01** 

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Oracle Argus Mart Installation and Administration Guide, Release 7.0.3

E48402-01

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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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## Finding Information and Patches on My Oracle Support

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

#### Getting the Oracle Argus Mart Standard Configuration Media Pack

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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- 4. Enter the Article ID number in the text box.
- **5.** Click the magnifying glass icon to the right of the Search box (or press the Enter key) to execute your search.

The Knowledge page displays the results of your search. If the article is found, click the link to view the abstract, text, attachments, and related products.

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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.
- Advanced Search You can specify one or more search criteria, such as source, exact phrase, and related product, to find knowledge articles and documentation.

#### **Finding Patches on My Oracle Support**

Be sure to check My Oracle Support for the latest patches, if any, for your product. You can search for patches by patch ID or number, or by product or family.

To locate and download a patch:

- 1. Sign in to My Oracle Support at http://support.oracle.com.
- 2. Click the Patches & Updates tab.

The Patches & Updates page opens and displays the Patch Search region. You have the following options:

- In the Patch ID or Number is field, enter the primary bug number of the patch you want. This option is useful if you already know the patch number.
- 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.

#### **Finding Certification Information**

Certifications provide access to product certification information for Oracle and third party products. A product is certified for support on a specific release of an operating system on a particular hardware platform, for example, Oracle Database 11g Release 2 (11.2.0.3.0) on Sun Solaris 10 (SPARC). To find certification information:

- 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.

## **Known Installation and Configuration Issues**

Oracle maintains a list of installation and configuration issues that you can download from My Oracle Support (MOS). For information about these issues, please see Note ID 1326918.1.

## 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:

# Part I Installation

This part of the Oracle Argus Mart Installation and Administration Guide describes how to install Oracle Argus Mart.

Part I contains the following chapters:

- Chapter 1, Introduction
- Chapter 2, Installing the Argus Mart Application
- Chapter 3, Creating the Argus Mart Database Structure
- Chapter 4, Creating Multiple Enterprises in Multi-tenant Environment
- Chapter 5, Configuring ODI Settings
- Chapter 6, Configuring the Argus Mart Application
- Chapter 7, Upgrading the Argus Mart
- Chapter 8, Extracting, Transforming, and Loading Data
- Chapter 9, Uninstalling the Argus Mart Application

# Introduction

This section of the guide introduces you with the Oracle Argus Mart software product. In addition, it also gives you an outline of all the tasks that are required to install and configure Oracle Argus Mart, and explains the organization of these tasks in this guide. The Oracle Argus Mart is referred to as AM and Oracle Data Integrator as ODI in all the later sections of the guide.

This section comprises the following sub-sections:

- Oracle Argus Mart Overview
- How this Guide is Organized

## 1.1 Oracle Argus Mart Overview

The Argus Mart 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 Oracle PL/SQL based packages that are linked to ODI interfaces extract the data from the Argus Safety database, transform and load the data into the Argus Mart. Once the data has been loaded to the Argus Mart, it is available for the Argus Mart users for querying and reporting activities.

## 1.2 How this Guide is Organized

This section gives you information regarding all the chapters that are covered in this guide.

The following table illustrates the chapters covered in this guide:

No.	Chapter Name	Description
1	Introduction	This chapter gives you information regarding all the chapters that are covered in this guide
2	Installing the Argus Mart Application	This chapter explains how to use the installation wizard to install Argus Mart, including the ODI Repository and the Schema Creation Tool.

#### Table 1–1

No.	Chapter Name	Description
3	Creating the Argus Mart Database Structure	This chapter helps you to create the Argus Mart Structure using the Schema Creation Tool.
4	Creating Multiple Enterprises in Multi-tenant Environment	This chapter explains the step-by-step procedure that you need to execute to create multiple enterprises in Argus Mart in a multi-tenant environment.
5	Configuring ODI Settings	This chapter explains the step-by-step procedure to configure the ODI settings using ODI Studio.
6	Configuring the Argus Mart Application	This chapter explains the step-by-step procedure to configure Argus Mart profile switches using the Argus Safety Console.
7	Upgrading the Argus Mart	This chapter explains the step-by-step procedure to upgrade existing Argus Mart application, the Argus Mart Database, and the ODI Metadata.
8	Extracting, Transforming, and Loading Data	This chapter describes the steps required to run the Extract, Transform, and Load (ETL) process using the ODI Studio and ODI Console.
9	Uninstalling the Argus Mart Application	This chapter describes the procedure to uninstall the Argus Mart application.
10	Setting Context in Multi-tenant Environment	This chapter explains the steps to set context in a multi-tenant environment for the Argus Mart application.
11	Secure Unblinding in Argus Mart	This chapter explains the concept of blinded security for certain table columns in Argus Mart for a drug study.
12	Incremental ETL: ODI Studio	This chapter describes the steps required to administer the ETL process using the Oracle Data Integrator Studio (ODI Studio).
13	Incremental ETL: ODI Console	This chapter describes the steps required to administer the ETL process using the Oracle Data Integrator Console (ODI Console).
14	Re-initializing the ETL Process	This chapter describes the steps to re-initialize the ETL process.
15	Troubleshooting	This chapter explains the error messages that might be displayed while working with Argus Mart.

Table 1–1 (Cont.)

# **Installing the Argus Mart Application**

This chapter explains how to use the installation wizard to install Argus Mart, including ODI Repository and the Schema Creation Tool.

The following figure depicts your progress in the complete installation process:

Figure 2–1 Installation Progress: Installing the AM Application

Insta	alling	the A	rgus N	Mart Application	
	Crea	ting t	he Ar	rgus Mart Data Mart Structure	
		Crea	iting N	Multiple Enterprises in Multi-tenant Environment	
			Conf	figuring ODI Settings	
				Configuring the Argus Mart Application	
				Extracting, Transforming, and Loading Data	

This chapter includes the following topics:

- Before You Install the Argus Mart Application
- Installing Argus Mart Components

## 2.1 Before You Install the Argus Mart Application

Before you begin to install the Argus Mart application, you must verify or obtain the following information:

- Verify that the Argus Mart database instance has been created and that it is running. In addition, verify that the database has been created using the character set of your Argus Safety database.
- You must install the required software components, as mentioned in the following table:

	Oracle Data			
Specification	Server	Database	DBInstaller	Client
Operating System	Windows Server 2008 with SP1 or above (64 Bit)	Windows Server 2008 with SP1 or above (64 Bit)	Windows 2008 SP2 Standard (32 bit)	Windows XP Pro SP3 (English) (32 bit)
	Windows Server 2008 R2 with	Windows Server 2008 R2 (64 Bit) Oracle Enterprise	Windows 2008 SP2 Enterprise	Windows 7 (English) (32 bit
	SP1 (64 Bit)		(32 bit)	and 64 bit)
	Enterprise Linux 6.2 (64 Bit)	Oracle Sun Solaris 10 (64 Bit)	Windows 2008 R2 Standard (64 bit)	
	Oracle Sun Solaris 10 (64 Bit)	Oracle Sun Solaris 11 (64 Bit)	Windows 2008 R2 Enterprise (64 bit)	
	Oracle Sun Solaris 11 (64 Bit)		Windows XP Pro SP3 (32 bit)	
Oracle Database		11.2.0.3.0 (Enterprise) - AL32UTF8 character set		
		11.2.0.3(Standard/ Enterprise) - AL32UTF8 character set		
		Note: Oracle database standard edition is supported for single tenant deployment only.		
Browser				IE 8.0, IE 9.0
Oracle Data Integrator (ODI)	11.1.1.7			

Table 2–1 Argus Mart Software Requirements

- Ensure that you have installed the Oracle 32 bit client (Administrator installation type) on the machine where Argus Mart is being installed.
- If you are using Windows 64 bit machine and Oracle 11.2.0.3 32 bit client, you must execute the following procedure to register the DLL file:
  - 1. Open the MS-DOS command prompt and change directory to <ORACLE\_ HOME>\bin

Example: cd C:\app\<username>\product\11.2.0\client\_1\bin

**2.** Execute the following command to register DLL using the command prompt: regsvr32 oip11.dll

The following confirmation message is displayed on DLL registration: DLLRegisterServer in oip11.dll succeeded

## 2.2 Installing Argus Mart Components

To run the installation wizard and install the Argus Mart components:

- 1. Log in to the Argus Mart Server as a user with administrator privileges.
- **2.** Download the Argus Mart software from Oracle E-delivery and copy the software to the Argus Mart Server.
- **3.** Click **setup.exe.** The system opens the Welcome screen for the installation wizard, which will guide you through the installation of Argus Mart, as shown in the following figure:

Oracle Universal Installer: Welcome	
Welcome	
The Oracle Universal Installer guides you through t Oracle products.	the installation and configuration of your
Click "Installed Products" to see all installed prod	ucts.
	Deinstall Products

Figure 2–2 Welcome Screen

The Welcome screen comprises the following buttons:

Installed Products...

Help

**a. About Oracle Universal Installer** : Click this button for information about the Oracle Universal Installer, as depicted in the following figure:

Back

Next

Install

Cancel



Figure 2–3 About Oracle Universal Installer

**b. Installed Products** to view the list of installed products, as depicted in the following figure:

📓 Inventory		
Contents		
You have the following Oracle products in	nstalled:	
e>Independent Products ⊖-Oracle Homes		
⊕ OraClient11g_home1		
Product Information Location: Not Available		
🗖 Show empty homes.		
If you want to remove Oracle software, pla	ease check the items and cli	ck "Remove".
To see the languages installed and othe and then click "Details".	r details of a component,sele	ect the component
	Expand All	Details
Help	Save As	Close

Figure 2–4 List of Installed Products

**4.** Click **Next** on the **Welcome** screen. This displays the **Specify Home Details** screen, as shown in the following figure:

Specify Home Details	CRACLE HEALTH SCIENCES
Destination Enter or select a name for the installation and the full path where you want Name: ArgusMart703	to install the product.
Path: C:VargusMart703	Browse
	Product Languages

Figure 2–5 Specify Home Details Screen

- 5. Enter the name for the product installation in the Name field.
- 6. Specify the folder into which the system installs the Argus Mart application:
  - To install Argus Mart into the default folder, click Next.
  - To install Argus Mart into a different folder, click **Browse**, select another folder, and click **Next**.

This displays the Oracle Home Location screen, as depicted in the following figure:

🗽 Oracle Universal Installer: Oracle Argus Mart 7.0.3	
<b>Oracle Argus Mart 7.0.3</b> Choose the location of the Oracle Home	HEALTH SCIENCES
C:\Oracle\product\11.2.0\dbhome_1	Browse
Choose the location of the Oracle Home which will be used by the installat	ion for connecting to the database.
Help Installed Products Back Nex	t Install Cancel

Figure 2–6 Oracle Home Location Screen

**7.** Click **Browse** and navigate to the location of Oracle Home that identifies the TNSNAMES.ORA file.

Example: C:\app\product\11.2.0\client\_1

8. Click Next.

This displays the Database Details screen, as shown in the following figure:

Oracle Universal Installe	r: Oracle Argus Mart 7.0.3		_ 🗆 🗙
Oracle Argus I Enter the Databas	flart 7.0.3 e Connection details		ORACLE HEALTH SCIENCES
AM Database Server	≺Argus Mart Database TNS≻	1	
AM Database Instance	<argus database="" insta<="" mart="" td=""><td>ice&gt;</td><td></td></argus>	ice>	
AM Database Port	<port number=""></port>		
Enter the Database Conr	ection details for the Oracle A	rgus Mart Database.	
	talled <u>Products</u>	Back Next	Install Cancel

Figure 2–7 Database Details Screen

- **9.** Enter the following parameters:
  - Name or IP Address in the **AM Database Server** field.
  - Instance Name in the AM Database Instance field.
  - Database Port Number in the **AM Database Instance** field.

Once the Installation process is complete, you can validate these database inputs by navigating to the **TNSNAMES.ORA** file, saved at the following path:

<ORACLE\_HOME>\NETWORK\ADMIN

10. Click Next. This displays the Summary screen, as depicted in the following figure:

Summary	HEALTH SCIENCES
Dracle Argus Mart 7.0.3.0.0 ⊖-Global Settings	
Source: C:\Downloads\Disk1\stage\products.xml	
-Oracle Home: C:\ArgusMart703 (ArgusMart703)	
Installation Type: Default	
-Product Languages	
English	
Space Requirements	
C:\ Required 25MB (includes 773KB temporary) : Available 77.71G	3
-New Installations (1 product)	
└─Oracle Argus Mart 7.0.3.0.0	
Halp (Installed Bradusta ) Back No.	

Figure 2–8 Summary Screen

**11.** Click **Install** to start the installation. The system reports that Argus Mart is configuring your new software and displays a progress bar.

Once completed, the **End Of Installation** screen is displayed, as depicted in the following figure:

Oracle Universal Installer: End of Installation	
End of Installation	HEALTH SCIENCES
The installation of Oracle Argus Mart was successful.	
Help Installed Products Back	Next Install Exit

Figure 2–9 End Of Installation Screen

To verify the successful installation of Argus Mart, you can click **Installed Products** and navigate to **Contents** > **Independent Products** on the **Inventory** screen to view **Oracle Argus Mart** in the list of products, as highlighted in the following figure:

Inventory		
Contents Environment		
You have the following Oracle pro	ducts installed:	
Oracle Homes		
⊕-⊡ agent10g		
⊕- ☐ OraDb11g_home1		
⊕-□ OH728222043		
⊕-□ OH2084675296		100
⊖-⊡ ArgusMart703		
Oracle Argus Mart 7.0	300	
Product Information Location: C:\ArgusMart703\oracle.hsgbu.am		
Product Information Location: C:VargusMart703/oracle.hsgbu.am Show empty homes. If you want to remove Oracle softw "Remove". To see the languages installed ar	are, please check the i	tems and click
Product Information Location: C:VargusMart703/oracle.hsgbu.am Show empty homes. If you want to remove Oracle softw "Remove". To see the languages installed ar the component and then click "Det	are, please check the i nd other details of a cor tails".	tems and click
Product Information Location: C:\ArgusMart703\oracle.hsgbu.am Show empty homes. If you want to remove Oracle softw "Remove". To see the languages installed ar the component and then click "Det Expand A	are, please check the i and other details of a cor tails".	tems and click nponent,select Is <u>R</u> emove

Figure 2–10 Verifying Successful Argus Mart Installation

- **12.** Click **Close** to exit from the **Inventory** window.
- **13.** Click **Exit**. This displays the following confirmation window:

Figure 2–11 Exit Confirmation Window



**14.** Click **Yes** to close the Installer window.

This completes the steps to install Argus Mart on the machine.

# **Creating the Argus Mart Database Structure**

Once you have installed the Argus Mart application, you can now create its database structure.

The following figure depicts your progress in the complete installation process:

Figure 3–1 Installation Progress: Creating the Argus Mart Data Structure



The Argus Mart Schema Creation tool enables you to create the Argus Mart schema structure. It creates a link between the safety database and the new Argus Mart database. The Extract, Transform, and Load (ETL) process uses this link to transfer data from source (Argus Safety) database to the Argus Mart database. Once transferred, this data can be used for querying and reporting purposes.

This chapter comprises the following sub-sections:

- Before Running the Argus Mart Schema Creation Tool
- Argus Mart Tablespaces
- Starting the Argus Mart Schema Creation Tool
- Creating the Database Schema
- Validating the Schema

## 3.1 Before Running the Argus Mart Schema Creation Tool

The **GLOBAL\_NAME** and **NLS\_LENGTH\_SEMANTICS** database parameters must be configured properly in order, for the Argus Mart Schema Creation Tool to run. If the parameters are not set properly, the Schema Creation Tool fails.

You must check the following settings before you run the Argus Mart Schema Creation Tool:

- GLOBAL\_NAME is set to FALSE. This enables the Argus Mart application to create the database links.
- NLS\_LENGTH\_SEMANTICS is set to CHAR for the Argus Mart Schema Creation Tool to run.

## 3.2 Argus Mart Tablespaces

The following table lists the tablespaces for the Argus Mart database. The Schema Creation Tool creates these tablespaces when you create Argus Mart schema:

 Table 3–1
 Tablespaces Created for the Argus Mart Database

AM_MART_DATA_01	AM_MART_INDEX_01	AM_MART_LOB_01
AM_STAGE_DATA_01	AM_STAGE_INDEX_01	AM_STAGE_LOB_01

## 3.3 Starting the Argus Mart Schema Creation Tool

This section gives you a brief introduction about all the options that are visible on the user interface, once you start the Argus Mart schema creation tool.

To start the Argus Mart Schema Creation tool, execute the following procedure:

- 1. Log in to the Argus Mart Server as a user with administrator privileges.
- 2. Click **DBInstall.exe** saved at the following location:

...\ArgusMart\Database\DBInstaller\DBInstall.exe

Alternatively, select the Argus Mart Schema Creation Tool from the Windows **Start** menu.

This displays the Argus Mart **Schema Creation Tool**, as shown in the following figure:

ersion AM 7.0.3 D	atabase		
	Cabarra Cr	anting Tool	
	Schema Cr	eation lool	
	A State Street	11-1-1-	and the second second
Create Schema	Schema Validation	Factory Data	DB Upgrade
Argus User Creat	ion Exit	T IL	

Figure 3–2 Schema Creation Tool

The following is a summary of all the options provided on the user interface:

- Argus User Creation Enables you to create the users for the Argus Safety database. See Section 3.4.1, Creating User for the Argus Safety Database.
- Create Schema Enables you to create a new database schema for Argus Mart. See Section 3.4.3, Creating a New Database Schema for Argus Mart, for more details.
- Factory Data Loads data in to the newly created Argus Mart database schema. See Section 3.4.4, Loading Factory Data.
- Schema Validation Enables you to validate a newly-created Argus Mart database schema. See Section 3.5, Validating the Schema for more details.
- DB Upgrade Enables you to upgrade existing database. See Section 7.3, Upgrading Argus Mart Database.
- Exit Enables you to exit from the Argus Mart Schema Creation tool.

## 3.4 Creating the Database Schema

This section explains all the steps required to create a new Argus Mart database schema and load factory data into the database schema.

This section comprises the following sub-sections:

- Creating User for the Argus Safety Database
- Clearing the Cache
- Creating a New Database Schema for Argus Mart
- Loading Factory Data

#### 3.4.1 Creating User for the Argus Safety Database

Before creating a new Argus Mart database schema, you must create a user for the Argus Safety database.

This section explains the procedure to create a user for the Argus Safety database. To do so, execute the following procedure:

1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart Schema Creation Tool, as shown in the following figure:

Version AM 7.0.3 Da	atabase		
10	Schema Cr	eation Tool	
Create Schema	Schema Validation	Factory Data	DB Upgrade
Argus User Creat	ion Exit cle Corporation. All rights re	sserved.	16

Figure 3–3 Schema Creation Tool: Creating Argus Safety User

**2.** Click **Argus User Creation**. This displays the **Oracle Database Connect** dialog box, as shown in the following figure:

Figure 3–4 Oracle Database Connect Dialog Box

<u>U</u> ser:	
SYSTEM	<u></u> K
Password:	
	<u>L</u> ancel
Argus Safetv Database	

- 3. In the Oracle Database Connect dialog box:
  - a. Enter the password for the SYSTEM user in the Password field.
  - **b.** Enter the name of the Argus Safety database that you want to connect to, in the **Argus Safety Database** field.
  - c. Click OK.

This displays the **Argus Safety User Creation** dialog box as depicted in the following figure:

New User Informa	tion	
New User Name:	AI703SD_NEW	New <u>U</u> ser
Log File		
		Deserve

Figure 3–5 Argus Safety User Creation Dialog Box

**4.** Click **New User**. This displays the **New User** dialog box, as displayed in the following figure:

Figure 3–6 New User Dialog Box

New User Name:	
New User Password:	
Re-enter Password:	
Default Tablespace:	USERS
Temporary Tablespace:	TEMP

- 5. In the New User dialog box:
  - **a.** Enter the name for the new user in the **New User Name** field.
  - **b.** Enter the password for the new user in the **New User Password** field.
  - c. Re-enter the password for the new user in the Re-enter Password field.
  - **d.** Select the default tablespace, where you want to store the database objects, from the **Default Tablespace** drop-down list.
  - **e.** Select the tablespace, where you want to store the database objects temporarily, from the **Temporary Tablespace** drop-down list.

New User Information —	
New User Name:	AS_MART_USER
New User Password:	*****
Re-enter Password:	*****
Default Tablespace:	USERS
Temporary Tablespace:	ТЕМР

Figure 3–7 Argus Safety User Creation

- 6. Click OK.
- Select the name of the newly created user from the list of existing users in the New User Name drop-down list of the Argus Safety User Creation dialog box.
- **8.** Click **Browse** to navigate to the location where you want to save the log file. This displays the **Save Log File** dialog box, as shown in the following figure:

Figure 3–8 Save Log File Dialog Box

😑 Save Log File			×
- 7.0	0.3 • Database • DBInstaller •	👻 😝 Search	
File name:	as_mart_user_log		•
Save as type:	Log Files		•
Browse Folders		Save	Cancel

- **9.** Enter the name of the log file in the **File name** field. You can enter the name of the file as **AS\_SAFETY\_USER**, which is easier to remember, for reference later in the installation process.
- **10.** Click **Save**. This displays the complete path of the log file in the **Log File Name** field of the **Argus Safety User Creation** dialog box, as shown in the following figure:

Figure 3–9 Saving Log File

New User Informal	tion	
New User Name:	AS_MART_USER	New <u>U</u> ser
Log File		
Log File Name :	C:\SVN\Argus Mart\branches\	Browse

**11.** Click **OK** when you are ready to create the specified user. This displays a command prompt as shown in the following figure:

Figure 3–10 Entering Password for the SYSTEM User



- 12. Enter the password for the SYSTEM user and press Enter to continue.
- **13.** Verify that the script is successfully connected as SYSTEM User@<Argus Safety Database Name> as shown in the following figure:

Figure 3–11 Verifying User and Database Details

c:\Oracle\product\11.2.0\dbhome_1\bin\sqlplus.exe		
SQL*Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:24:52 2013		
Copyright (c) 1982, 2011, Oracle. All rights reserved.		
Argus Mart 7.0.3		
## Argus Safety Database User Creation Script ##		
## Grants necessary privileges to negus user ## ## Copyright =2013 Oracle Corporation. All Rights Reserved. ##		
Enter Password for user SYSTEM :		
Connecting to user SYSTEM		
Connected.		
If user failed to connect to database then stop here and restart the tool. To stop processing close current window.		
Press Enter if the Script successfully connected as SYSTEMPARGSAFTY -		

**14.** Press **Enter** again to continue.

The system displays information about the Argus Safety database name, the name of the user to create, and the name of the log file, as depicted in the following figure:



Figure 3–12 Verifying AS Database, User, and Log File Details

- **15.** Verify that the information is correct, and press **Enter** to continue. Wait till the system displays additional information about creating the user and granting privileges along with the log file details.
- **16.** Press **Enter** to complete the installation. The system displays a message that the user account has been created successfully and lists the folder location of the log files, as shown in the following figure:

Figure 3–13 User Creation Confirmation



- **17.** Click **OK** to close the message box. The system returns to the **Argus Safety User Creation** dialog box.
- 18. Click View Log File.
- **19.** Review the information in the log file and check for any errors.
- **20.** Close the log file.
- 21. Click Close to exit from the Argus Safety User Creation dialog box.

#### 3.4.2 Clearing the Cache

If the Schema Creation process is interrupted before completion and you need to restart it from the beginning, you must clear the Cache and re-run the Schema Creation Tool using a fresh database instance.

To clear the Cache:

1. Press and hold the **CTRL** key and right-click the mouse. The Schema Creation Tool prompts for confirmation that you want to reset the Cache.

Version AM 7.0.3 Database

 Reset Cache?

 Would you like to reset Cache?

 Version Scher

 Yes

 No

 DB Upgrade

 Argus User Creation

 Exit

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Figure 3–14 Clearing Cache

2. Click Yes.

Argus Mart clears the cache and logs the action in the AMCreateLog.rtf file.

### 3.4.3 Creating a New Database Schema for Argus Mart

**Note:** Before executing the steps for creating a new schema for Argus Mart, ensure that you have remote access to the SYS user.

If you **do not** have remote access to SYS user, execute the **sm\_sys{grant}.sql** script through SYS user, after replacing the schema identifier as below:

- &rls\_user. with VPD Admin User, such as AM\_VPD\_USER
- **&sm\_mart.** with Argus Mart User, such as AM\_MART\_USER

This SQL script is located in the following folder:

```
...\ArgusMart\Database\DBInstaller\SM_DDL\sm_sys{grant}.sql
```

Once you have created the user for the Argus Safety database, you can now create a new database schema for Argus Mart. To do so, execute the following procedure:

1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart Schema Creation Tool, as shown in the following figure:



Figure 3–15 Schema Creation Tool: Create Schema

**2.** Click **Create Schema**. This displays the **Oracle Database Connect** dialog box, as shown in the following figure:

Figure 3–16 Connecting to Argus Mart Database

<u>U</u> ser:	
SYSTEM	<u> </u>
<u>P</u> assword:	
	<u>C</u> ancel
Arous Mart Database	

- 3. In the Oracle Database Connect dialog box:
  - **a.** Enter the password for the SYSTEM user in the **Password** field.
  - **b.** Enter the name of the Argus Mart database that you want to connect to, in the **Argus Mart Database** field.
  - **c.** Click **OK**. This displays the **Argus Mart Schema Creation Options** dialog box, as depicted in the following figure:

VPD Admin User	T	Argus Stage User-	
Argus ETL User	•	Argus Mart User	
201200 <u>2</u> 0001 10001 100	rmation		
Safety Database Link Info D <u>a</u> tabase Name	DB Link <u>S</u> chema Owner	Password	Verify Password

Figure 3–17 Argus Mart Schema Creation Options Dialog Box

Now we need to create the following four users using this screen:

- VPD Admin User
- Argus Stage User
- Argus ETL User
- Argus Mart User

You can create the users with names AM\_VPD\_USER, AM\_STAGE\_ USER, AM\_ETL\_USER, and AM\_MART\_USER respectively so that you can easily remember and use them later in the installation process.

**4.** Click **New User**. This displays the **New User** dialog box, as displayed in the following figure:

Figure 3–18 New User Dialog Box

New User Name:	-
New User Password:	
Re-enter Password:	
Default Tablespace:	USERS
Temporary Tablespace:	ТЕМР

- 5. In the New User dialog box:
  - **a.** Enter the name for the new user in the **New User Name** field.

Enter the password for the new user in the **New User Password** field.

- **b.** Re-enter the password for the new user in the **Re-enter Password** field.
- **c.** Select the default tablespace, where you want to store the database objects, from the **Default Tablespace** drop-down list.
- **d.** Select the tablespace, where you want to store the database objects temporarily, from the **Temporary Tablespace** drop-down list.

M_VPD_USER
*******
JSERS 🗾
EMP 👤

Figure 3–19 Creating VPD Admin User

- 6. Click OK.
- **7.** Repeat steps 5(a) to 5(e) of this procedure to create three more users, which are referred as Argus Stage User, Argus ETL User, and Argus Mart User.
- 8. In the Argus Mart Schema Creation Options dialog box:
  - **a.** Select the Argus VPD user, which you have created using step 5 of this procedure, from the **VPD Admin User** drop-down list.
  - **b.** Select the Argus Stage user, which you have created using step 5 of this procedure, from the **Argus Stage User** drop-down list.
  - **c.** Select the Argus ETL user, which you have created using step 5 of this procedure, from the **Argus ETL User** drop-down list.
  - **d.** Select the Argus Mart user, which you have created using step 5 of this procedure, from the **Argus Mart User** drop-down list.

Figure 3–20 Selecting Users in the Argus Mart Schema Creation Options Dialog Box

Argus Mart Schema C	reation Options			×
VPD Admin User AM_VPD_USER		Argus Stage User AM_STAGE_USER		-
Argus ETL User	×	Argus Mart User		-
- Safety Database Link Info D <u>a</u> tabase Name	rmation DB Link <u>S</u> chema Owner	Password	⊻erify Pasa	sword
		New User	<u>G</u> enerate	<u>C</u> ancel

- 9. In the Safety Database Link Information section:
  - a. Enter the Argus Safety Database name, which you have used while creating the user for the Argus Safety database in the Database Name field. See step 3(b) of the section 3.4.1, Creating User for the Argus Safety Database for detailed steps.
  - **b.** Enter the name of the user for the Argus Safety database in the **Database Link Schema Owner** field. See step 5(a) of the section 3.4.1, Creating User for the Argus Safety Database for detailed steps.

- **c.** Enter the password of the user for the Argus Safety database, in the **Password** field. See step 5(b) of the section 3.4.1 , Creating User for the Argus Safety Database for detailed steps.
- d. Re-enter the password in the Verify Password field.

Figure 3–21 Safety Database Link Information Details

😑 Argus Mart Schema C	reation Options		×
VPD Admin User		Argus Stage User AM_STAGE_USER	<b></b>
Argus ETL User	<b>T</b>	Argus Mart User AM_MART_USER	
Database Name	DB Link <u>S</u> chema Owner	<u>P</u> assword	Verify Password
ARGSAFTY	AS_MART_USER		XXXXXXX
		<u>N</u> ew User	<u>G</u> enerate <u>C</u> ancel

**10.** Click **Generate**. This displays the **Oracle Database Connect** dialog box, as shown in the following figure:

Figure 3–22 Oracle Database Connect: Argus Stage User Password

Oracle Database Connect	
<u>U</u> ser	
AM_STAGE_USER	<u> </u>
Password	Cancel
******	<u>L</u> ancel

- 11. Enter the password for the Argus Stage User in the Password field.
- 12. Click OK.

This displays the **Oracle Database Connect** dialog box again, as shown in the following figure:

Figure 3–23 Oracle Database Connect: Argus Mart User Password

AM_MART_USER	<u> </u>
Password	Cancel

- **13.** Enter the password for the Argus Mart User in the **Password** field.
- 14. Click OK. This displays a command prompt, as shown in the following figure:
Figure 3–24 SYS User Details

GC:\Oracle\product\11.2.0\dbhome_1\bin\sqlplus.exe	
SQL*Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:37:22 2013	
Copyright (c) 1982, 2011, Oracle. All rights reserved.	
######################################	*****
## Grant Privileges On SYS Objects To Mart Schema Owner ## Copyright -2013 Oracle Corporation. All Rights Reserved. ## #################################	
AM_MART_USER does not have access on required view(s)/package(s) owned by user SYS	
If you have remote access to SYS user then provide SYS user password else execute GRANT stat specified in DBInstaller\SM_DDL\sm_sys{grant}.sql file through SYS user after replacing user Close this command window after successful execution of grant statements.	ements variables
Enter Password for user SYS : _	

**15.** If you have remote access to the SYS user, enter the password for the **SYS** user and Press **Enter** to continue. This displays the following screen:

Figure 3–25 Verifying User and Argus Mart Database Details

🚾 C:\Oracle\product\11.2.0\dbhome_1\bin\sqlplus.exe	
SQL*Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:37:22 2013	
Copyright (c) 1982, 2011, Oracle. All rights reserved.	
	#
Argus Mart 7.0.3	#
## Grant Privileges On SYS Objects To Mart Schema Owner # ## Copyright -2013 Oracle Corporation. All Rights Reserved. #	###
	#
AM_MART_USER does not have access on required view(s)/package(s) owned by user SYS If you have remote access to SYS user then provide SYS user password else execute GRANT statements specified in DBInstaller\SM_DDL\sm_sys{grant}.sql file through SYS user after replacing user variab Close this command window after successful execution of grant statements.	les
Enter Password for user SYS :	
Connecting To SYS@ARGMART	
Connected.	
If user failed to connect to database then stop here and restart the tool. To stop processing close current window.	
Press ENTER if the script successfully connected as SYS@ARGMART	

**Note:** If you have already executed the script **sm\_sys{grant}.sql** through SYS user, the above screen will not be displayed.

- 16. Verify that the script is successfully connected as <SYS User Name>@<Argus Mart Database Name> and press Enter. This displays the Grant succeeded message multiple times on the command screen and subsequently displays the location of the log file.
- **17.** Verify the location of the log file and press **Enter**. This displays the **Tablespace Creation** dialog box, as shown in the following figure:

Delimiter Character for Directories: C Enter Database Server Directory where	/ (Forward Slash for UNIX)	skSlash for Windows) 🛛 🔽 Auto Exter	d On
C:\ORACLE\ORADATA\AM_DB		Generate Da	ataFile Path and Name
Tablespaces	Default Size	Complete Path and Data	file
AM_MART_DATA_01	306M		
AM_MART_INDEX_01	118M		
AM_MART_LOB_01	84M		
AM_STAGE_DATA_01	161M		
AM_STAGE_INDEX_01	86M		
AM STAGE LOB 01	82M		

Figure 3–26 Tablespace Creation Dialog Box

- **18.** In the **Tablespace Creation** dialog box:
  - **a.** Enter the complete path to the directory for the tablespace data files used by Argus Mart, in the **Enter Database Server Directory where all Data Files will be Created** field.
  - **b.** Click **Generate DataFile Path and Name**. The system automatically fills in the Complete Path and Datafile column for all tablespaces, as shown in the following figure:

Figure 3–27 Generating DataFile Path and Name

Generation of File Names for DataFiles Delimiter Character for Directories: C / (For Enter Database Server Directory where all Da	ward Slash for UNIX) 6 atafiles will be Created:	(BackSlash for Windows)	I Auto Extend On
C:\ORACLE\ORADATA\AM_DB			Generate DataFile Path and Name
Tablespaces	Default Size	Comple	te Path and Datafile
AM_MART_DATA_01	306M	C:\ORACLE\ORADATA\AM_	DB\AM_MART_DATA_01.DBF
AM_MART_INDEX_01	118M	C:\ORACLE\ORADATA\AM_	DB\AM_MART_INDEX_01.DBF
AM_MART_LOB_01	84M	C:\ORACLE\ORADATA\AM_	DB\AM_MART_LOB_01.DBF
AM_STAGE_DATA_01	161M	C:\ORACLE\ORADATA\AM_	DB\AM_STAGE_DATA_01.DBF
AM_STAGE_INDEX_01	86M	C:\ORACLE\ORADATA\AM_DB\AM_STAGE_INDEX_01.DBF	
AM STAGE LOB 01	82M	C:\ORACLE\ORADATA\AM	DBVAM_STAGE_LOB_01.DBF

- **c.** Click **Create Tablespace** to create all Tablespaces. If a Tablespace already exists, the system displays a warning message to use the existing Tablespace.
- d. Click Yes to use the existing Tablespace.
- **19.** Wait until the system creates the tablespaces and opens the **Argus Mart Database Installation** dialog box, as shown in the following figure:

Argus Mart Database Installation     ✓ Pause on error □ Show All	<u>J</u>
Argus Mart DDL installation release 7.0.3 Installing database objects to: AM Stage Schema : AM_STAGE_USER AM Mart Schema : AM_MART_USER Database : ARGMART Application Type : Multi-tenant Default Enterprise : Ent_SH_2	
	<u>C</u> ontinue Ca <u>n</u> cel

Figure 3–28 Argus Mart Database Installation Dialog Box

**20.** Click **Continue** to start the schema creation. The system executes the scripts, displays status information during the schema creation process, and reports when the update is complete, as shown in the following figure:

Figure 3–29 Argus Mart Database Successful Installation: Confirmation Screen

O Argus Mart Database Installation	×
Pause on error 🔲 Show All	<u>,</u>
Executing script .\SM_DDL\sm_set_default_enterprise_val.src	
Creating package	
Successfully Completed 2013-06-29 01:43:39 PM	
Creating package	
Successfully Completed 2013-06-29 01:43:39 PM	
Successfully Completed 2013-06-29 01:43:39 PM	
Installation complete.	
Total Queries: 2454 Total Errors: 0	
This log file can be viewed completely by using the book button above. File location for this log is C:\SVN\Argus Mart\branches\7.0.3\Database\DBInstaller\AMCreateLog.rtf	_
<u> </u>	Ca <u>n</u> cel

- **21.** Click the Book icon to view the log file and check for errors. Alternatively, you can view the log file at any time at the following location: ...\ArgusMart\Database\DBInstaller\AMCreateLog.rtf
- **22.** Click **Finish** to close the **Argus Mart Database Installation** dialog box. This completes the procedure to create a new database schema for Argus Mart.

#### 3.4.4 Loading Factory Data

To load factory data into the newly created Argus Mart database schema, execute the following procedure:

1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart Schema Creation Tool, as shown in the following figure:

Figure 3–30 Schema Creation Tool

Version AM 7.0.3 D	atabase		
1 F	Schema Cr	eation Tool	
Create Schema	Schema Validation	Factory Data	DB Upgrade
Argus User Creat Copyright © 2013 Ora	ion Exit Incle Corporation. All rights re	eserved.	16

2. Click Factory Data. The Connect to Database dialog box opens.

Figure 3–31 The Connect to Argus Mart Database Screen

User:	
SYSTEM	<u>0</u> K
Password:	Cancel
Argus Mart <u>D</u> atabase	

- **3.** Enter the following parameters:
  - Argus Mart Schema Owner
  - Password
  - Database
- 4. Click OK. This displays a command prompt, as shown in the following figure:

Figure 3–32 Entering Argus Mart User Password

📾 C:\Oracle\product\11.2.0\dbhome_1\bin\SQLPLUS.exe	
SQL*Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:45:01 2013	
Copyright <c> 1982, 2011, Oracle. All rights reserved.</c>	
######################################	******
## Factory Data Load Script ## Copyright =2013 Oracle Corporation. All Rights Reserved. ##	## ## ##
annanannannannannannannannannannannanna	

**5.** Enter the password for the Argus Mart user and Press **Enter**. This displays the following screen:



🐼 C:\Oracle\product\11.2.0\dbhome_1\bin\SQLPLUS.exe			
SQL*Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:45:01 2013			
Copyright (c) 1982, 2011, Oracle. All rights reserved.			
ARANANANANANANANANANANANANANANANANANANA			
Connecting To AM_MART_USER@ARGMART			
Connected.			
If user failed to connect to database then stop here and restart the tool. To stop processing close current window.			
Press ENTER if the script successfully connected as AM_MART_USER@ARGMART -			

6. Verify that the script is successfully connected as <Argus Mart User Name>@<Argus Mart Database Name> and press Enter. The system displays messages about the creation of rows and subsequently displays the following message:

Figure 3–34 Loading Factory Data



**7.** Press **Enter**. The system displays a confirmation message, as shown in the following figure:

Figure 3–35 Loading Factory Data Successful: Confirmation Screen



**8.** Click **OK** to complete the procedure to load the factory data into the newly created Argus Mart database.

## 3.5 Validating the Schema

Once you have created the database schema for Argus Mart, you can also validate it using the Argus Mart Schema Creation tool. To do so, execute the following procedure:

1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart Schema Creation Tool, as shown in the following figure:



Figure 3–36 Schema Creation Tool: Validating the Schema

**2.** Click **Schema Validation**. This displays the **Oracle Database Connect** dialog box, as shown in the following figure:

<u>J</u> ser:	
SYSTEM	<u></u> K
2assword:	Cancel
Argus Mart Database	

Figure 3–37 Schema Validation: Connecting to Argus Mart Database

- 3. In the Oracle Database Connect dialog box:
  - **a.** Enter the password for the SYSTEM user in the **Password** field.
  - **b.** Enter the name of the Argus Mart database that you want to connect to, in the **Argus Mart Database** field.
  - **c.** Click **OK**. This displays the **Schema Validation Utility** dialog box, as shown in the following figure:

Figure 3–38 Schema Validation Utility Dialog Box

Schema Validation Utility		×
Schema Validation CTL File Validation CTL Folder and File :	<b>J</b>	Browse
Schema Validation Log Files		
Select Log Files Folder :		Browse
Validation LOG File Name : (Record Diff)		View <u>D</u> ifference Log File
Validation LOG File Name : (Record Output)		View Qutput Log File
	<u>⊻</u> alidate Schema	Close

- 4. In the Schema Validation Utility Dialog Box:
  - **a.** Click **Browse** next to the **Validation CTL Folder and File** field. This displays the **Schema Validation CTL File Name** dialog box, as shown in the following figure:

Schema Validation Cl	TL File Name		×
O DBIns	taller 👻 SM_ValidateSchema	🔻 🛃 Search	
🕘 Organize 👻 📗 Vie	ws 🔻 📑 New Folder		0
Eavorite Links	Name	→ Date modi	fied 🗧 T
· E PI D 2240822	Visual Basic User Control (2)		
Desktop	VLDN_AM_1.0	2013-06-2	8 04:19 PM V
Becent Places	🚿 VLDN_AM_7.0.3	2013-06-2	28 04:19 PM V
Documents	CAN COLOR DO DO		
Pictures			
Music			
Recently Changed			
🖹 Searches			
Public			
Folders	^		
File na	ame: VIDN AM 70.3	CTL Files *.ctl	<u>.</u>
	1.2012/002/000		Connect
		Open -	Cancel

Figure 3–39 Schema Validation: Selecting CTL File

- b. Select the CTL file (VLDN\_AM\_7.0.3) to validate the Argus Mart 703 instance, and click Open. This displays the complete path of the CTL file in the Schema Validation CTL File section. Once you select the location of the CTL file, the Validation LOG File Name (Record Diff) and Validation LOG File Name (Record Output) fields are also auto-populated with the <name of the CTL file>\_Diff.log and <name of the CTL file>\_Out.log names respectively.
- **c.** In the **Schema Validation Log Files** section, click **Browse** next to the **Select Log Files Folder** field. This displays the **Select Folder** dialog box, as depicted in the following figure:

Figure 3–40 Schema Validation: Selecting Folder for the Log Files

Select Folder		
<b>—</b> c:	ОК	Cancel
C:\ SVN Cargus Mart Cargus Mart Cargus Mart Cargus Mart Cargus Martines Cargus Martines Chargus Mart Cargus Martines Cargus Martines Cargus Martines Cargus Martines Cargus Martines Corgus Martines Cargus Martines Corgus Martines Cargus Martines Ca		

d. Select the folder, where you want to save the log files.

**e.** Click **OK**. This displays the name of the folder in the **Select Log Files Folder** field, as shown in the following figure:

Validation CTL Folder and File :	fart\branches\7.0.3\Database\DBInstaller\SM_ValidateSchema\VLDN_AM_7.0.3.CTL	Browse
Schema Validation Log Files		
Select Log Files Folder :	C:\SVN\Argus Mart\branches\7.0.3\Database\DBInstaller\SM_ValidateSchema	<u>Br</u> owse
	Factor and a second sec	
Validation LOG File Name : (Record Diff)	VLDN_AM_7.0.3_Diff.log	View <u>D</u> ifference Log Fil

Figure 3–41 Schema Validation: Log Files Location

f. Click Validate Schema. The system displays the following command screen:

Figure 3–42 Entering SYSTEM User Password



**5.** Enter the password for the SYSTEM user and press **Enter**. This displays the following command screen:

Figure 3–43 Verifying User and Database Details

C:\Oracle\product\11.2.0\dbhome_1\bin\sqlplus.exe
SQL*Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:48:05 2013
Copyright <c> 1982, 2011, Oracle. All rights reserved.</c>
## Argus Mart 7.0.3 ##
## Schema Validation / Database Objects Verifier Tool ## ## Copyright r 2013 Oracle Corporation. All Rights Reserved. ## ##
## Assumptions: ## ## (1) SYSTEM user does not own a table called ULD_SCH_TOOL_U001 ## ## (2) Default Tablespace for user SYSTEM contains at least 32 KB free space ##
<u></u>
Enter Password for user SYSTEM :
Connecting To SYSTEM@ARGMART
Connected.
If user failed to connect to database then stop here and restart the tool. To stop processing close current window.
Press ENTER if the script successfully connected as SYSTEM@ARGMART

**6.** Verify that the script is successfully connected as <SYSTEM User Name>@<Argus Mart Database Name> and press **Enter**. This displays the following command screen:

Figure 3–44 Verifying other Details

C:\Oracle\product\11.2.0\dbhome_1\bin\sqlplus.exe	
SQL∗Plus: Release 11.2.0.3.0 Production on Sat Jun 29 13:48:05 2013	
Copyright (c) 1982, 2011, Oracle. All rights reserved.	
ARABABABABABABABABABABABABABABABABABABA	
 Connecting To SYSIEM@ARGMART	
If user failed to connect to database then stop here and restart the tool. To stop processing close current window.	
Press ENTER if the script successfully connected as SYSTEM@ARGMART	
Database Name : ARGMART Database Administrator User Name : SYSTEM Enter Validation Data File Name : ULDN_AM_7.0.3 Folder Name for Log Files : C:SUN\Argus Mart\branches\7.0.3\Database\DBInstaller\SM_Valio Validation Difference File Name : VLDM_AM_7.0.3_Diff.log Validation Output File Name : VLDM_AM_7.0.3_Out.log Please verify the parameters. Press ENTER to continue	dateSchema

**7.** Review the information on the command screen and press **Enter**. This displays the following command screen:

Figure 3–45 Entering Database Administrator Password



- 8. Enter the password for the SYSTEM User and press Enter.
- **9.** Continue to review the information on each screen and press **Enter** until the system displays the **Schema Validation Utility** dialog box along with the location of the log file, as shown in the following figure:

Figure 3–46 Schema Validation: Successful Confirmation Screen



- 10. Click OK. This displays the Schema Validation Utility dialog box.
- 11. In the Schema Validation Utility dialog box, you can:
  - Click View Difference Log File to check for any schema discrepancies, such as missing objects.
  - Click View Output Log File to see the list of errors, if any, which occurred during schema validation.
- 12. Click Close to exit from the Schema Validation Utility dialog box.

## Creating Multiple Enterprises in Multi-tenant Environment

When you run ETL to transfer data from the Argus Safety database to Argus Mart a default enterprise is automatically fetched into Argus Mart. In addition to the default enterprise, Argus Mart also enables you to create multiple enterprises by using:

- The configuration of default enterprise.
- The configuration of any other existing enterprise in Argus Safety Database.

This chapter explains the step-by-step procedure that you need to execute to create multiple enterprises in Argus Mart in a multi-tenant environment.

**Note:** In case of a Multi-tenant setup, you can create additional enterprises after initial or incremental ETL as well.

The following figure depicts your progress in the complete installation process:





To create multiple enterprises in Argus Mart, execute the following steps:

 Double-click the am\_create\_enterprise.bat file located at the following path: ...\ArgusMart\Database\Utils\am\_create\_enterprise.bat This displays the **Argus Mart Enterprise Creation** Screen as shown in the following figure:

Figure 4–2 Entering TNS Name to Connect to Database



Specify the TNS Name to connect to the Argus Mart database in the Enter the TNS name to connect to the AM database field, and press Enter. This displays the following text on the command screen:

Figure 4–3 Entering Argus ETL User



**3.** Enter the following parameters for the user who have administrator rights to access the ETL process.

**Note:** This user is referred to as Argus ETL User in the Creating a New Database Schema for Argus Mart section. If the user is not the database owner with the administrator rights for the ETL process, the system displays an error message.

- **a.** Enter the Argus Mart Database Owner in the **Enter Argus ETL User** field, and press **Enter**.
- b. Enter the password in the Enter Password for User field, and press Enter.
- **c.** Enter the name of the enterprises, which you want to create in Argus Mart, in the **Enter comma separated enterprise short names** field, and press **Enter**.

If you want to enter multiple values in this field, they must be separated by a comma.

**d.** Enter the Source Enterprise name using which you want to create new enterprises in the **Enter source enterprise short name for copying data** field, and press **Enter**.

If there is no input to this field, the Default Enterprise, configured during initial schema creation is considered as the Source Enterprise.

e. Enter the name of the log file in the Enter log file name field, and press Enter.

The system displays a **Connecting** status message and once connected displays **Connected**, as shown in the following figure:

Figure 4–4 Connecting to the Database

as C:\Windows\system32\cmd.exe			
SQL*Plus: Release 11.2.0.3.0 Production on Tue Jul 23 15:18:45 2	201	3	
Copyright (c) 1982, 2011, Oracle. All rights reserved.			
	****	##	
## Argus Mart 7.0.3			##
## Multiple Enterprise Creation Scrip ## Copyright -2013 Oracle Corporation. All Ri ##	pt igh	its	Reserved. ##
		##	
Enter the TNS name to connect to AM database			ARGMART
Enter Argus ETL User Enter Password for User AM_ETL_USER :			AM_ETL_USER
Enter comma separated enterprise short names [eg. ENT1,ENT2,ENT3	81		ENT_SH_2, ENTEP_3_ENTERPRISE_X
Enter source enterprise short name for copying data (Default enterprise will be taken if no value is entered)			ENT_SH_2
Enter log file name [eg. am_create_enterprise.log] (Default log file name am_create_enterprise.log will be taken if	n	0	value is entered) : am_multi_entprise.log
Connecting to AM_ETL_USER			
Connected.			
If the connection to the database failed, stop and re-run the sc To stop processing, click the X icon on top right corner of the Press Enter, if the status is Connected as AM_ETL_USERMARMAN	sc:	pt re	en.

The system also validates that the Argus Mart database is a multi-tenant database, which supports creation of multiple enterprises and the factory data has already been loaded to the database. If any of these requirements are not met, the system displays an error message.

Once done, the system starts verifying the status of enterprises created in Argus Safety and Argus Mart. The Enterprise Names that you have entered in Step 5 must already be there in the Argus Safety database and should not be already created in Argus Mart.

The system displays the name of the enterprises that exist in Argus Safety, and the enterprises that will be created in Argus Mart, as shown in the following figure:

C:\windows\system32\cr SQL\*Plus: Release 11.2.0.3.0 Production on Thu Jun 20 12:21:10 2013 Copyright (c) 1982, 2011, Oracle. All rights reserved. Enter the TNS name to connect to the AM database : AM DB : AM\_ETL\_USER Enter Argus ETL User Enter Password for User AM\_ETL\_USER Inter comma separated enterprise short names [eg. ENT1,ENT2,ENT3] : newE2,newE1 Inter source enterprise short name for copying data (Default enterprise will be taken if no value is entered) : Ent\_SH\_2 Enter log file name [eg. am\_create\_enterprise.log] (Default log file name am\_create\_enterprise.log will be taken if no value is entered) : AM\_ENT\_CREATION.log connecting to AM\_ETL\_USER onnected. If the connection to the database failed, stop and re-run the script. Io stop processing, click the X icon on top right corner of the screen. Press Enter, if the status is Connected as AM\_ETL\_USERPAM\_DB Jerifying Argus Mart Application Type (single/multi tenant) Check existence of enterprises in Safety and Mart Enterprises existing in Safety : NEWE2,NEWE1 Following enterprises will be created in Mart : NEWE2,NEWE1

Figure 4–5 Displaying List of Enterprises to be Created in Argus Mart

After displaying the final list of enterprises that will be created in Argus Mart, the data is inserted into the tables referring the Source Enterprise.

Once done, the system displays the names of the enterprises that have been created successfully along with the name of the log file, as shown in the following figure:

onumight (c) 1982 2011 Owacle All mights recommed		
opyright (c) 1782, 2011, oracle. All rights reserved.		
*****		******
# Argus Mart 7.0.3		**
# Multiple Enterprise Creation Scrip # Copyright -2013 Oracle Corporation. All Ri #	t ghts Res	erved. ##
	*******	
nter the TNS name to connect to the AM database	: AM_D	B
nter Argus EIL User nter Password for User AM_ETL_USER	: AM_E :	TL_USER
nter comma separated enterprise short names [eg. ENT1,ENT2,ENT3	1 : newE	2,newE1
nter source enterprise short name for copying data Default enterprise will be taken if no value is entered)	: Ent_	\$H_2
nter log file name [eg. am_create_enterprise.log] Default log file name am_create_enterprise.log will be taken if	no valu	e is entered) : AM_ENT_CREATION.]
onnecting to AM_ETL_USER		
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB	ript. screen.	
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant)	ript. screen.	
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart	ript. screen.	
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1	ript. screen.	
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1	ript. screen.	
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2,NEWE1 ollowing enterprises will be created in Mart : NEWE2,NEWE1 nserting data into rm_cmn_profile_enterprise for enterprise	ript. screen.	: newE1
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_cmn_profile_enterprise for enterprise nserting data into safety cmn_profile_enterprise table for ente	ript. screen. rprise	: newE1 : newE1
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USER@AM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_cmn_profile_enterprise for enterprise nserting data into safety cmn_profile_enterprise table for ente nserting data into etl_sm_fr_mapping for enterprise	ript. screen. rprise	: newE1 : newE1 : newE1
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USERGAM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_cmn_profile_enterprise for enterprise nserting data into safety cmn_profile_enterprise table for ente nserting data into etl_sm_fr_mapping for enterprise nserting data into etl_sm_ref_mapping for enterprise	ript. screen. rprise	: newE1 : newE1 : newE1 : newE1 : newE1
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USERGAM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_cmn_profile_enterprise for enterprise nserting data into safety cmn_profile_enterprise table for ente nserting data into etl_sm_fr_mapping for enterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into rm_cmn_profile_enterprise for enterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into rm_cmn_profile_enterprise for enterprise	ript. screen. rprise	: newE1 : newE1 : newE1 : newE1 : newE1 : newE2
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USERGAM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_cmn_profile_enterprise for enterprise nserting data into safety cmn_profile_enterprise table for ente nserting data into etl_sm_fr_mapping for enterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into safety cmn_profile_enterprise for enterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into safety cmn_profile_enterprise table for enterprise	ript. screen. rprise rprise	: newE1 : newE1 : newE1 : newE1 : newE2 : newE2
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USERGAM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_emn_profile_enterprise for enterprise nserting data into safety cmn_profile_enterprise table for ente nserting data into etl_sm_fr_mapping for enterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into safety cmn_profile_enterprise to renterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into safety cmn_profile_enterprise to renterprise nserting data into etl_sm_ref_mapping for enterprise nserting data into safety cmn_profile_enterprise table for enterprise nserting data into safety cmn_profile_enterprise to renterprise nserting data into safety cmn_profile_enterprise table for enterprise nserting data into safety cmn_profile_enterprise table for enterprise nserting data into safety cmn_profile_enterprise table for enterprise nserting data into etl_sm_fr_mapping for enterprise	ript. screen. rprise rprise	: newE1 : newE1 : newE1 : newE1 : newE2 : newE2 : newE2
onnected. f the connection to the database failed, stop and re-run the sc o stop processing, click the X icon on top right corner of the ress Enter, if the status is Connected as AM_ETL_USERMAM_DB erifying Argus Mart Application Type (single/multi tenant) heck existence of enterprises in Safety and Mart nterprises existing in Safety : NEWE2.NEWE1 ollowing enterprises will be created in Mart : NEWE2.NEWE1 nserting data into rm_cmm_profile_enterprise for enterprise nserting data into etl_sm_fr_mapping for enterprise nserting data into rm_cmm_profile_enterprise for enterprise nserting data into etl_sm_fr_mapping for enterprise nserting data into safety cmm_profile_enterprise table for enterprise data into etl_sm_ref_mapping for enterprise nserting data into safety cmm_profile_enterprise table for enterprise nserting data into safety cmm_profile_enterprise table for enterprise nserting data into safety cmm_profile_enterprise table for enterprise nserting data into etl_sm_fr_mapping for enterprise mserting data into etl_sm_fr_mapping for enterprise	ript. screen. rprise rprise	: newE1 : newE1 : newE1 : newE1 : newE2 : newE2 : newE2 : newE2 : newE2

Figure 4–6 Displaying Enterprise Creation Confirmation

4. Press Enter to exit from the window.

# **Configuring ODI Settings**

Once you have installed Oracle Data Integrator (ODI), you must configure certain settings to be able to use it for running the ETL process.

All the ODI related data has been zipped into a file, which is a part of the installation package and is available at the following path:

...\ArgusMart\ODI\AM.zip

However, there are certain tasks that you need to execute before and after importing this zip file. All these tasks are covered in sequence in the later sections.

This chapter explains the step-by-step procedure to configure all the ODI related tasks using the ODI Studio. The configuration of these tasks using the ODI Console is not supported for this release.

The following figure depicts your progress in the complete installation process:

Figure 5–1 Installation Progress: Configuring ODI Settings



This chapter comprises the following sub-sections:

- Minimum Components Required
- Before Configuring ODI Settings
- Creating Master Repository
- Creating Work Repository
- Importing Argus Mart Schema Object

- Creating and Testing Data Server Connection
- Creating New Physical Schema
- Validating Load Plan
- Managing the ODI Agent
- Executing Steps of a Load Plan in Parallel

### 5.1 Minimum Components Required

The following are the minimum components required to setup ODI for Argus Mart:

- ODI Studio
- ODI Agent



Select Installation Type				
	Velcome ikip Software Updates ielect Installation Type rerequisite Checks istallation Location Application Server ison figure Repositories laster Repository supervisor User Details	Developer Installation     DOI Studio (with local agent)     ODI SDK     ODI Standalone Installation     ODI Standalone Agent     Java EE Installation     Java EE Agent     ODI Console     DOI Console     Public Web Service		
	specify Agent Details stallation Summary istallation Progress on figuration Progress	950 MB of disk space is required to install the selected components.		

## 5.2 Before Configuring ODI Settings

There are certain tasks that you need to execute before configuring the ODI settings. All these tasks are explained in this section.

This section comprises the following sub-sections:

- Creating the Database Users for Master and Work Repositories
- Granting Privileges to the Database Users

#### 5.2.1 Creating the Database Users for Master and Work Repositories

You must create two separate database users for Master and Work Repositories and grant them the necessary privileges. You need to create these users in the Argus Mart instance that maintains the ODI metadata.

To do so, you must log on to the SQL developer as a **SYS** user and execute the following commands to create the users:

CREATE USER <odi\_master> IDENTIFIED BY <password>;

CREATE USER <odi\_work> IDENTIFIED BY <password>;

Where **<odi\_master>** refers to the Master Repository User Name and **<odi\_work>** refers to the Work Repository User Name.

**Oracle Recommends:** While creating ODI Master and Work schemas, the database administrator must create a new default Tablespace for these schemas. In addition, the administrator must ensure that no objects of ODI Master and Work schemas exist in any other Tablespace.

#### 5.2.2 Granting Privileges to the Database Users

Once you have created two separate database users for Master and Work Repositories, you must grant them the necessary privileges using the following commands:

GRANT RESOURCE, CREATE SESSION, CONNECT TO odi\_master;

GRANT RESOURCE, CREATE SESSION, CONNECT TO odi\_work;

GRANT EXECUTE ON DBMS\_LOCK TO odi\_work;

Where **odi\_master** refers to the Master Repository User Name and **odi\_work** refers to the Work Repository User Name.

## 5.3 Creating Master Repository

To create the Master Repository, execute the following steps:

1. Open the ODI, and select **File** > **New**.

This displays the New Gallery dialog box, as depicted in the following figure:

New Gallery		×
Available Items		
Categories:	Items:	Show All Descriptions
	🔆 Create a New ODI Repository Login	
All Items	Master Repository Creation Wizard Creates a new Master Repository	
	Master Repository Import Wizard	
Help		OK Cancel

Figure 5–3 Creating Master Repository

- 2. Click OK. This displays the Master Repository Creation Wizard with the Repository Connection selected in the left pane.
- 3. In the Database Connection section:
  - **a.** Enter the required JDBC Driver in the **JDBC Driver** field. You can click the Search icon close to the **JDBC Driver** field to search for the available list of drivers.
  - **b.** Enter the required JDBC URL in the **JDBC Url** field. You can click the Search icon close to the **JDBC Url** field to search for the available list of URL.
  - **c.** Enter the name of the ODI Master Repository User Name in the **User** field. You have already created the ODI Master Repository User Name (for example, odi\_master) using Section 5.2.1, Creating the Database Users for Master and Work Repositories of this chapter.
  - **d.** Enter the password for the ODI Master Repository User in the **Password** field. You have already created the ODI Master Repository Password using Section 6.1.1, Creating the Database Users for Master and Work Repositories of this guide.
  - e. Enter the name of the ODI DBA User Name in the DBA User field.
  - f. Enter the password for the ODI DBA User in the Password field.
  - g. In the Repository Configuration section, specify the ID for the Master Repository. For example, 386. You must not enter 588 in this field as it would result in an error message while importing the AM.zip file. This ID has already been used while creating the AM.zip file, which you will be importing in the subsequent sections of this guide.
  - h. Click Test Connection, as highlighted in the following figure:

Master Repository Creation Wizard - Step 1 of 3				
Repository Connectio	n	Click to search JDBC Driver		
Repository Connecti     Authentication	Database Conne	ection	_	
Password Storage	JDBC Driver:	oracle.jdbc.OracleDriver	2	
	JDBC Url: User:	jdbc:orade:thin:@ <host>:<port>:<sid></sid></port></host>	~	
	Password: DBA User:	<pre></pre> <odi dba="" user=""></odi>		
	DBA Password:	•••••• Test Connection		
	Repository Conf	figuration	_	
	Id: 386	(ID of new repository)		
Help		< <u>Back</u> Next > Einish Cance	1	

Figure 5–4 Master Repository Creation Wizard

If successful, the **Information** dialog box is displayed with the **Successful Connection** message, as depicted in the following figure:

Figure 5–5 Connection Successful Confirmation Message



- i. Click OK.
- j. Click Next on the Master Repository Creation Wizard. This displays the Authentication screen on the Master Repository Creation Wizard, as depicted in the following figure:

Master Repository Creat	ion Wizard - Step 2 of 3	
Authentication		
Repository Connection     Authentication     Password Storage	Select the authentication r manage users using ODI's use an external enterprise authentication. (•) Use ODI Authentication	node that this master repository will use. Use ODI authentication to internal security system. Use External authentication if you wish to identity store, such as Oracle Internet Directory, to manage user
	Supervisor User:	SUPERVISOR
	Supervisor Password:	•••••
	Confirm Password:	•••••
	O Use External Authentic	ation
	Supervisor User:	
	Supervisor Password:	

- 4. On the Authentication screen:
  - **a.** Enter the password for the SUPERVISOR user in the Supervisor Password field. The Password that you enter in this field will be used later in the configuration process.
  - **b.** Re-enter the password in the **Confirm Password** field.
  - **c.** Click **Next**. This displays the **Password Storage** screen, as shown in the following figure:

Kaster Repository Creation Wizard - Step 3 of 3			
Password Storage			
Repository Connection     Authentication	<ul> <li>Internal Password</li> <li>External Password</li> </ul>	Storage i Storage	
Password Storage	MBean Server	Parameters	
	Server Type:	Orade WebLogic 💌	
	Host:	localhost	
	Port:	7001	
	User:		
	Password:		
		Test Connection	
Help		< Back Next > Finish Cancel	

Figure 5–7 Password Storage Screen

5. Click Finish. This displays the Master Repository Creation Wizard with the ODI is creating your master repository message, as depicted in the following figure:

Figure 5–8 Creating Master Repository



Subsequently, this displays the **Information** dialog box with the confirmation of the successful Master Repository Creation, as depicted in the following figure:

Figure 5–9 Master Repository Creation Successful Confirmation Message



6. Click **OK** to complete the creation of the Master Repository.

Once you have created the Master Repository, you also need to create a login for the repository. To do so, execute the following steps:

**1.** On the **Oracle Data Integrator Login** screen, click the **+** icon, as highlighted in the following figure:

Figure 5–10 Creating Login for Master Repository

I and a Manager		~
Login Name:		~
User:	SUPERVISOR	
Password:		

This displays the **Repository Connection Information** screen, as depicted in the following figure:

Repository Connection Information				
Oracle Data In	tegrator Connection			
Login Name:	<login name=""></login>			
User:	<supervisor user=""></supervisor>			
Password:	•••••			
Database Con	nection (Master Repository)			
User:	<master name="" repository="" user=""></master>			
Password:	•••••			
Driver List:	Oracle JDBC Driver			
Driver Name:	orade.jdbc.OradeDriver			
Url:	jdbc:orade:thin:@ <host>:<port>:<sid></sid></port></host>			
Work Reposito	ry			
Master Re	pository Only			
O Work Repository				
Default Conne	ction			
Help	Test OK Cancel			

Figure 5–11 Repository Connection Information

- 2. On the Repository Connection Information screen:
  - **a.** Specify the login name for the Repository in the Login Name field.

- **b.** Enter the name of the SUPERVISOR user in the User field.
- **c.** Enter the password for the SUPERVISOR user in the **Password** field. This password was specified in step 4 (a) of the steps to create the Master Repository section.
- d. In the Database Connection section, enter the Master Repository User Name and Password in the User and Password fields respectively. You have already created the ODI Master Repository User Name (for example, odi\_master) and Password using Section 6.1.1, Creating the Database Users for Master and Work Repositories of this guide.
- e. Enter the database details in the Driver List, Driver Name and URL fields. You can also click the Search icon adjacent to the Driver List and URL fields to search for the required Driver List and URL.
- f. Click OK. This creates a login for the Master Repository.

## 5.4 Creating Work Repository

To create the Work Repository, execute the following steps:

- 1. Open the ODI, and connect to the repository using the Master Repository credentials that you have just created, as mentioned in the previous section.
- 2. Select the **Topology** tab.
- **3.** In the **Repositories** section, right-click **Work Repositories** and select **New Work Repository**, as depicted in the following figure:



Figure 5–12 New Work Repository Option

This displays the **Specify ODI Work Repository connection properties** screen, as depicted in the following figure:

🔩 Create Work Repository - Step 1 c	Create Work Repository - Step 1 of 2				
Specify ODI Work Repositor	y connectio	on properties			
Specify ODI Work Repository	Technology:	Orade			
<ul> <li>Specify ODI Work Repository prop</li> </ul>	JDBC Driver:	oracle.jdbc.OracleDriver			
	JDBC Url:	jdbc:orade:thin:@ <host>:<port>:<sid></sid></port></host>			
	User:	<work name="" repository=""></work>			
	Password:				
		Test Connection			
Help		<back next=""> Einish Cancel</back>			

Figure 5–13 Specify ODI Work Repository connection properties screen

- **4.** Enter the database details in the **JDBC Driver** and **JDBC Url** fields. You can also click the Search icon close to the fields to search for the required JDBC Driver and JDBC URL.
- **5.** Enter the Work Repository User Name in the **User** field. You have already created the ODI Work Repository User Name (for example, odi\_work) using Section 6.1.1, Creating the Database Users for Master and Work Repositories of this guide.
- **6.** Enter the password for the Work Repository User in the **Password** field. You have already created the ODI Work Repository User Name using Section 6.1.1, Creating the Database Users for Master and Work Repositories of this guide.
- **7.** Click **Next**. This displays the **Specify ODI Work Repository properties** screen, as depicted in the following figure:

🔥 Create Work Repository - Step 2 o	of 2		and the second second	
Specify ODI Work Repositor	y properties			
Specify ODI Work Repository conn	Id:	564		
Specify ODI Work Repository	Name:	<work name="" repository=""></work>		
	Password:			
	Work Repository Type:	Development		•
Help			< <u>B</u> ack <u>N</u> ext >	<u>Finish</u> Cancel

Figure 5–14 Specify ODI Work Repository properties screen

- 8. Specify the ID for the Work Repository in the Id field. For example, 564. You must **not enter 589** in this field as it would result in an error message while importing the **AM.zip** file. This ID has already been used while creating the **AM.zip** file, which you will be importing in the subsequent sections of this guide.
- **9.** Enter the name for the Work Repository in the **Name** field. For example, AM\_ Work\_Repository.
- 10. Enter the password for the Work Repository in the Password field.
- 11. Select Development from the Work Repository Type drop-down list.
- **12.** Click **Finish**. This displays the **Starting ODI Action** dialog box with the **ODI is creating your work repository** message, as depicted in the following figure:

Figure 5–15 Creating Work Repository

Starting ODI Action	×
ODI is creating your work repository	
Please wait	

Subsequently, this displays the **Confirmation** dialog box with the option to create a login for the Work Repository, as depicted in the following figure:



Figure 5–16 Displaying the Option to Create Work Repository Login

**13.** Click **Yes** if you want to create a login for the Work Repository. If you click **No**, you can perform the steps for creating a login for the Repository, as mentioned below (Figure 5–18).

Once done, this creates a Work Repository in the **Work Repositories** folder of the **Repositories** section, as depicted in the following figure:

Figure 5–17 Viewing New Work Repository

62		<u>-</u>
Physical Architecture		
Contexts	<u> -</u>	
Logical Architecture		
Languages	<u>&amp;</u>	
✓ Repositories		
MASTER REPOSITORY_v04.03.04.02	New Work Repository	

Once you have created the Work Repository, you also need to create a login for the repository. To do so, execute the following steps:

**1.** On the **Oracle Data Integrator Login** screen, click the **+** icon, as highlighted in the following figure:

Figure 5–18 Creating Login for Work Repository

Login Name:	ODI_MASTER 🚽 🕈 🥒
User:	SUPERVISOR
Password:	•••••

This displays the **Repository Connection Information** screen, as depicted in the following figure:

Repository Con	nection Information		
Oracle Data In	tegrator Connection		
Login Name:	<login name=""></login>		
User:	<supervisor user=""></supervisor>		
Password:	•••••		
Database Coni	nection (Master Repository)		
User:	<master name="" repository="" user=""></master>		
Password:			
Driver List:	Oracle JDBC Driver		
Driver Name:	orade.jdbc.OradeDriver		
Url:	jdbc:oracle:thin:@ <host>:<port>:<sid></sid></port></host>		
Vork Reposito	ory.		
O Master Re	pository Only		
Work Report	sitory AM_Work_Repository		
Default Conne	ction		
	Name of the Work Repository		
Help	Test OK Cancel		

Figure 5–19 Repository Connection Information

- 2. On the **Repository Connection Information** screen:
  - **a.** Specify the login name for the Repository in the Login Name field.
  - **b.** Enter the name of the SUPERVISOR user in the User field.
  - **c.** Enter the password for the SUPERVISOR user in the **Password** field. This password was specified in step 4 (a) of the steps to create the Master Repository section.
  - d. In the Database Connection section, enter the Master Repository User Name and Password in the User and Password fields respectively. You have already created the ODI Master Repository User Name (for example, odi\_master) and Password using Section 6.1.1, Creating the Database Users for Master and Work Repositories, of this guide.
  - e. Enter the database details in the Driver List, Driver Name, and URL fields. You can also click the Search icon adjacent to the Driver List and URL fields to search for the required Driver List and URL.
  - f. In the Work Repository section:

Select the **Work Repository** radio button and enter the name of the Work Repository in the adjacent text box (for example, AM\_Work\_Repository), which you have created in the previous section. You can also click the Search icon adjacent to the Work Repository name text box.

g. Click OK. This creates a login for the Work Repository.

## 5.5 Importing Argus Mart Schema Object

Once you have created the Master and Work Repositories, you can now import the **AM.zip** file using the following procedure:

- 1. Open the ODI, and connect to the repository using the Work Repository credentials that you have just created, as mentioned in the previous section.
- **2.** Click the down arrow under the **Designer** tab. This displays a menu, as depicted in the following figure:

Figure 5–20 Import Link

Import
Export  Display markers and memo flags Edit Release Tag Default Designer Context

**3.** Click **Import**. This displays the **Import Selection** dialog box, as shown in the following figure:

Figure 5–21 Import Selection Dialog Box



**4.** Select **Smart Import** and click **OK**. This displays the **Smart Import** window, as depicted in the following figure:

Smart Import - Step	of 3	×
File Selection	This wizard will guide you through the process of importing objects into Oracle Data Integrator. To replay a previous Smart Import wizard execution select a Response File to preset all fields.	n
Summary	File Selection:     C:\S\VI\AM 7.0.3\ODI\AM703.zip       Response file:	0
	Click to select the .zip fil	e
Help	< Back Next > Einish Canc	el

Figure 5–22 Smart Import Window

- **5.** Click the Search icon close to the **File Selection** field. This displays the **Select an import file** window.
- 6. Navigate to the AM.zip file, saved at the following location:

...\ArgusMart\ODI\AM.zip

- Select the AM.zip file and click Open. This displays the complete path of the zip file in the File Selection field. Keep the Response file field as blank.
- 8. Click Next. This displays the Please wait window with a Matching Import Objects message. Subsequently, this again displays the Smart Import window listing the components that will be imported from the zip file using the Import Actions screen, as depicted in the following figure:

🔩 Smart Import - Step 2 o	of 3				×
Import Actions					
File Selection	🖉 No Issu	es			
Import Actions	Object Mat	ch Details 💏	5	6 🖷 🖬	\$ { }
Summary		Import Object	Action	Repository Object	t Issues
	E Ces	signer pology			
Components imported from the	zip file				
	Issue Deta	ils:	( #		<b>ふ</b> 合)
	Issue	Туре	Description	Action	Fix
Help			< <u>B</u> ack	Next > Einish	Cancel

Figure 5–23 Displaying Components Imported from the Zip File

**9.** Click **Next**. This displays the **Summary** screen with the **No issues** message if there are no errors in the import process, as depicted in the following figure:

Figure 5–24 Import Summary Screen

Smart Import - Ste	p 3 of 3	
ummary		
File Selection Import Actions Summary	Select Finish to run the Smart Import. Select Save Response File to save a Smart Import File Selection: C:\SVN\AM 7.0.3\ODI\AM703.zip	execution
	Save Response File C: (SVNVAM 7.0.3)(ODI/SmartImportResponse.xml	
Help		< Back Next > Finish Cano

**10.** Click **Finish**. This displays the **Please wait** window with a **Import in progress** message. Subsequently, this displays the **Smart Import Report** window listing the objects imported using the zip file, as shown in the following figure:

									1	
Object Type	Object I	Name	Object ID	Pare Obje Tyj	ent ect pe	Parent Object Name	Parent Object ID	Duplicated Object Type	Duplicated Object Name	Duplicate Object I
Data Server	DS_AM_AR	GUSMART	2588	Techno	logy	Oracle	1999	Data Server	DS_AM_ARGUSMART	2588
Agent	PA_AM		1588					Agent	PA_AM	1588
Logical Agent	LA_AM		1588					Logical Agent	LA_ANT	1588
Context	CTX_ARGUS	MART	1588					Context	CTX_ARGUSMART	1588
Logical Schema	LS_AM_ARG	USMART	1588	Techno	logy	Oracle	1999	Logical Schema	LS_AM_ARGUSMART	1588
Merge I	mported	Objects								
Object Type	Object Name	Object ID	: Parent Object Type		Pa Ob N	rent oject ame	Parent Object ID	Duplicated Object Type	Duplicated Object Name	Duplicated Object ID
Overwri	te Import	ed Obje	ects							
Object	Object	Object	Par	ent t Type	Pa	rent oject	Parent Object ID	Duplicated	Duplicated	Duplicated

Figure 5–25 Smart Import Report

**11.** Click **Save**. This displays the **Save Report** window, as depicted in the following figure:

Figure 5–26 Save Report Window

Save Report	Canada Anno	
Saving format:	Save as HTML	•
Name of the target file:		<b>Q</b>
Click to define the name to save the	path and report	OK Cancel

- **12.** Click the Search icon close to the **Name of the target file** field. This displays the **Save** window.
- **13.** Navigate to the path where you want to save the report and enter the name for the report in the **File Name** field.
- **14.** Click **Save**. This displays the name of the report file along with the complete path in the **Name of the target file** field, as shown in the following figure:

Figure 5–27 Path of the Saved Report File

Saving format:	Save as HTML	-
Name of the target file	C:\Users\Desktop\SmartImport_Log	

**15.** Click **OK**. This displays the **Information** dialog box displaying the path where the report file has been saved, as depicted in the following figure:

Figure 5–28 Report File Saved Confirmation



16. Click OK. This completes the steps to import the AM zip file. You can verify this using the Designer tab of ODI. You can now view Argus Mart specific folders in the Designer tab such as ARGUSMART703 in the Projects section, as depicted in the following figure:

Figure 5–29 Verifying the Smart Import



#### 5.6 Creating and Testing Data Server Connection

To create and test the Data Server connection, execute the following procedure:

 Select the Topology tab and double-click DS\_AM\_ARGUSMART in the Oracle folder of the Physical Architecture section, as depicted in the following figure:

-🖕 Designer 🗴 🔣 Operator 🗴 🍰 Security 🗴 Topology × 3 - 1 -Physical Architecture - Technologies 🗄 🕞 File 🕀 🦳 In-Memory Engine - Orade DS\_AM\_ARGUSMART Double-click Datatypes 🗄 🔚 Actions Agents € - C AM

Figure 5–30 Creating Data Server Connection

This displays the connection details in the right pane, with **Definition** selected by default, as depicted in the following figure:

Figure 5–31 Entering Connection Details

Definition IDBC	🔵 Data Server						
On Connect/Disconnect	Name:	DS_AM_ARGUSMART					
Properties Data Sources Version Privileges	Technology: Instance / dblink (Data Server): Connection						
Flexfields	User: <a etl="" m="" user=""> Password:</a>	Batch Update Size: 30					

- **2.** Enter the name of the Argus ETL User (**AM\_ETL\_USER**) in the **User** field. This user was created in the Creating the Database Schema section of this guide.
- 3. Enter the password for the Argus ETL User in the **Password** field.
- 4. Select JDBC and enter database details of the Argus Mart schema in the JDBC Driver and JDBC Url fields, as depicted in the following figure:

Figure 5–32 Entering Database Details

DS_AM_ARGUSMART ×			
Test Connection			
Definition JDBC On Connect/Disconnect Properties Data Sources Version Privileges Filexfields	JDBC Driver: JDBC Url:	oracle.jdbc.OracleDriver jdbc:oracle:thin:@ <host>:<port>:<sid></sid></port></host>	Ø

You can also click the Search icon close to the **JDBC Driver** and **JDBC Url** fields to search for the required JDBC Driver and JDBC Url.

5. Click **Test Connection**, as highlighted in the following figure:

Figure 5–33 Testing the Connection

est Connection		
Definition JDBC	JDBC Driver:	orade.jdbc.OradeDriver
Dn Connect/Disconnect Properties Data Sources Version Privileges Flexfields	JDBC Url:	jdbc:oracle:thin:@ <host>:<port>:<sid></sid></port></host>

This displays a Confirmation to save data before testing the connection.

**6.** Click **OK**. This displays the **Test Connection** dialog box, as depicted in the following figure:

Figure 5–34 Test Connection Dialog Box

Test Connection for	: DS_AM_ARGUSMART	×
Select a Physical Ag	ent to test this Connection	
Physical Agent:	ocal (No Agent)	•
Help	Detail Test	Cancel

- 7. Select Local from the Physical Agent drop-down list.
- **8.** Click **OK**. This displays an **Information** dialog box with the **Successful Connection** message, as depicted in the following figure:
Figure 5–35 Successful Connection Confirmation



9. Click OK. This completes the steps to create and test the Data Server connection.

# 5.7 Creating New Physical Schema

To create a new physical schema, execute the following steps:

1. Select the **Topology** tab and right-click **DS\_AM\_ARGUSMART** in the **Oracle** folder of the **Physical Architecture** section. This displays a menu, as depicted in the following figure:

Figure 5–36 Selecting New Physical Schema

🔩 Designer 🗴 🔣 Operator 🗴 🍰	Security × 🛛 🚈 Topology ×	_
62		-
V Physical Architecture		-
	Right-click	
Datatypes     Actions	<u>O</u> pen <u>V</u> iew	
Index Type ⊡∰ Agents ⊞∰ PA_AM	New Duplicate Selection	
	New Physical Schema	-
▽ Contexts	Import	
CTX_ARGUSMART		_

2. Select New Physical Schema.

This displays the **Physical Schema** screen, where **Definition** is selected by default.

- **3.** Select the Argus ETL User (**AM\_ETL\_USER**) from the **Schema** drop-down list. This user was created in Creating the Database Schema section of the guide.
- **4.** Select the Argus ETL User (**AM\_ETL\_USER**) again from the **Schema** (**Work Schema**) drop-down list, as depicted in the following figure:

n	Name:	DS_AM_ARGUSMART.AM_E	TL	
eges	Schema (Schema):	AM_ETL	•	
lexheids	Schema (Work Schema):	<undefined></undefined>	<b>-</b>	Select Argus ETL user in both the lists.
	Default	<undefined></undefined>	-	
	E berbare	AM_ETL		
	Work Tables Prefix	AM_MART		
	Errors: E\$_	AM_STAGE Loading: C\$_	Integration: I	Temporary Indexes: IX\$_
	Journalizing element	s prefixes		

Figure 5–37 Selecting Argus ETL User in Definition Section

**5.** Select **Context** and click the **+** symbol. This adds a row in the empty space below the **Context** and **Logical Schema** options, as depicted in the following figure:

Figure 5–38 Selecting Context for the Data Server

DS_AM_AR	QUSMART.AM_ETL ×	
Definition		Click to add a row
Context		- · · · · · · · · · · · · · · · · · · ·
Version	Context	Logical Schema
Drivienee	Global	<undefined></undefined>
rineges .	CTX_ARGUSMART	
Plexheids	Global	
	<undefined></undefined>	

- 6. Select CTX\_ARGUSMART from the Context drop-down list.
- **7.** Select **LS\_AM\_ARGUSMART** from the **Logical Schema** drop-down list, as depicted in the following figure:

Figure 5–39 Selecting Context and Logical Schema

DS_AM_AR	RGUSMART.AM_ETL X			
Definition				<b>4</b> ¥
Context				<b>T</b> 05
Version	Context		Logical Schema	
De de un	CTX_ARGUSMART	LS_AM_ARGUSMART		
Privieges				
Flexfields	L			

8. Click Save on the menu bar.

This displays the new physical schema in the **Oracle** folder of the **Physical Architecture** section, as depicted in the following figure:



Figure 5–40 Viewing the New Physical Schema

# 5.8 Validating Load Plan

To validate the Load Plan, execute the following steps:

 Double-click the LP\_INI\_AM Load Plan in the Load Plans and Scenarios > SCN\_ LP\_ARGUSMART703 section of the Operator tab, as shown in the following figure:



Figure 5–41 Double-clicking the LP\_INI\_AM Load Plan

If the **Object Locking** screen is displayed, you can click **No** and proceed with the Validation process, as depicted in the following figure:

2	Do you want to lock this object to prevent other
:	users from modifying it until you unlock it?
	Dop't show this window peyt time

Figure 5–42 Selecting No in the Object Locking Screen

This displays the Load Plan details in the right pane, as depicted in the following figure:

Figure 5–43 Load Plan Details

LP_INI_AM	x	
Vali	date	
Steps	🛅 Load Plan [Load Pla	an and Scenario Folder: SCN_LP_ARGUSMART703]
Exceptions	Name:	LP_INI_AM
Variables Privileges	Folder Name:	SCN_LP_ARGUSMART703
/ersion	Keep Log History (days):	
lexfields	Log Sessions:	Always
	Log Session Step:	By Scenario Settings
	Session Tasks Log Level:	
	Keywords:	

**2.** Click **Validate**. This displays the following confirmation, if there are no issues associated with the Load Plan:

Figure 5–44 No Errors Confirmation for the Load Plan



# 5.9 Managing the ODI Agent

This section explains the tasks that you need to execute to manage the ODI Agent.

This section comprises the following sub-sections:

- Managing the Standalone ODI Agent
- Creating the Java EE Agent

#### 5.9.1 Managing the Standalone ODI Agent

This section explains the tasks that you need to execute to manage the Standalone ODI Agent.

This section comprises the following sub-sections:

- Setting up the Standalone ODI Agent
- Encoding User's Password
- Starting the Standalone ODI Agent

#### 5.9.1.1 Setting up the Standalone ODI Agent

Once you have installed the standalone ODI Agent, you also need to set it up using the following steps:

- **1.** Open the ODI, and connect to the repository using the Work Repository credentials.
- **2.** Navigate to **Topology** > **Physical Architecture** > **Agents** and double-click **PA\_AM**. This displays the Agent details in the right pane.
- **3.** Enter the Standalone Agent IP Address in the **Host** field, as depicted in the following figure:

Figure 5–45 Setting the Standalone Agent IP Address

PA_AM ×				
View Schedule Upd	ate Schedule Test Generate Ser	ver Template		
Definition Data Sources	<b>谷 Agent</b>			
Properties	Name:	PALAM		
Load balancing	Host:	<stand address="" agent="" alone="" ip=""></stand>	Port:	20588
Privileges	Web application context:	oradedagent	Protocol:	http
Flexfields	Maximum number of sessions:	1000		

**Note:** You can change the default port for Argus Mart using this screen, if required.

4. Navigate to the location, where ODI is installed and open the bin sub-folder.

Example: <ODI\_AGENT\_HOME>\oracledi\agent\bin

- 5. Open the odiparams.bat file in a text editor.
- **6.** Edit the **odiparams.bat** file according to the list of changes mentioned in Table 5–1. The following are the contents of a sample **odiparams.bat** file:

```
set ODI_MASTER_DRIVER=oracle.jdbc.OracleDriver
set ODI_MASTER_URL=jdbc:oracle:thin:@<HOST>:<PORT>::<SID>
set ODI_MASTER_USER=<ODI Master Repository User Name>
set ODI_MASTER_ENCODED_PASS=<encoded password>
REM #
REM # User credentials for agent startup program
REM #
set ODI_SUPERVISOR=SUPERVISOR
set ODI_SUPERVISOR_ENCODED_PASS=<encoded password>
REM #
REM # User credentials for ODI tools
REM #
set ODI_USER=%ODI_SUPERVISOR%
```

```
set ODI_ENCODED_PASS=%ODI_SUPERVISOR_ENCODED_PASS%
REM #
REM # Work Repository Name
REM #
set ODI_SECU_WORK_REP=<Work Repository>
```

The following table lists the required modifications in the odiparams.bat file:

Table 5–1 Required Modifications in the odiparams.bat file

Parameter	Description	
ODI_MASTER_DRIVER and ODI_MASTER_URL	Refers to the database details.	
ODI_MASTER_USER	Refers to the ODI Master Repository User Name, which you have created using Section 5.2.1.	
ODI_MASTER_ENCODED_ PASS	Refers to the ODI Master Repository User Password, which must encode using the steps given in Section 5.9.1.2.	
ODI_SUPERVISOR	Refers to the ODI SUPERVISOR User Name.	
ODI_SUPERVISOR_ ENCODED_PASS	Refers to the ODI SUPERVISOR User Password, which must encode using the steps given in Section 5.9.1.2.	
ODI_SECU_WORK_REP	Refers to the Work Repository Name. For example, AM_Work_Repository.	

#### 5.9.1.2 Encoding User's Password

The following are steps that you need to execute to encode the ODI Master Repository and SUPERVISOR user password:

1. Open the Command window and change the directory to the ODI\_AGENT\_ HOME\oracledi\agent\bin directory.

Where **ODI\_AGENT\_HOME** refers to the location, where ODI is installed.

The password information is always stored as an encrypted string in the **odiparams.bat** file. You need to encrypt the ODI Master Repository as well as the SUPERVISOR Password using the **encode** command.

 Encode the ODI Master Repository User password using the encode command, as depicted in the following figure:

Figure 5–46 Encoding the ODI Master Repository Password



Here password refers to the Password for the ODI Master Repository User.

**3.** Similarly, encode the SUPERVISOR user password using the **encode** command, as shown in step 2 of this procedure.

#### 5.9.1.3 Starting the Standalone ODI Agent

Once you have made the required modifications to the **odiparams.bat** file, you can start the ODI Agent.

To start the ODI Agent:

- 1. Navigating to the **bin** folder using the CD command.
- **2.** Execute the **agent.bat** file using the following command in the Command Prompt:

```
CD/d <ODI_AGENT_HOME>\oracledi\agent\bin agent.bat -NAME=PA_AM -PORT=20588
```

Where *C*:\*ODI\_AGENT\_HOME*\*oracledi*\*agent*\*bin* refers to the local file system path where the ODI Agent is installed.

#### 5.9.2 Creating the Java EE Agent

Create the Java EE Agent for ODI with **OracleDIAgent**, using the following tutorial link:

http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/odi/odi\_ 11g/setup\_jee\_agent/setup\_jee\_agent.htm

**Note:** You must create the Java EE Agent for ODI with **OracleDIAgent** (Case-sensitive) as the name.

## 5.10 Executing Steps of a Load Plan in Parallel

The Load Plan comprises a list of steps, which can be executed in sequence or in parallel. You can reduce the time taken by the ETL process by selecting to run the steps of a Load Plan in parallel.

This section explains the procedure for parallel execution of the steps of a Load Plan. In addition, this section also suggests the list of tables of a Load Plan that you can select for parallel execution.

**Note:** The steps mentioned in this section enable you to reduce the total time taken to complete the ETL process. This is not a mandatory step to configure Argus Mart.

To execute the steps of a Load Plan in parallel, execute the following procedure:

1. Double-click the LP\_INI\_AM Load Plan in the Load Plans and Scenarios section of the Designer tab, as shown in the following figure:



Figure 5–47 Double-clicking the LP\_INI\_AM Load Plan

This displays the Load Plan details in the right pane.

- 2. Select Steps. This lists all the steps of a Load Plan.
- **3.** Click the down arrow next to the + icon. This displays a menu, as depicted in the following figure:

Figure 5–48 Adding Parallel Step to the List of Steps

DLP_INI_AM	x						
🕨 🖋 Vali	date						
Definition					( 46	0 <u>0</u> 0 0. 0.	
Steps					(60	कम) सम स्व	N. N. A. C.
Exceptions	#	Steps Hierarchy	Enabled	Scenario/Variable	Restart	Context	Add Step Wizard
Variables	0	⊡ \$ root_step	<ul> <li>Image: A start of the start of</li></ul>		Restart from failure		💲 Serial Step
Privileges	1	SCN_compile_schema_stage		SCN_compile_schema_stage Version 001	Restart from failed step		••• Parallel Step
Vareion	2			SCN_compile_schema_mart Version 001	Restart from failed step		🚱 Run Scenario Step
Flaverate	3	- CN_compile_schema_rls	4	SCN_compile_schema_rls Version 001	Restart from failed step		Case Step
Flexifields	4	- 🍪 SON_etl_pre_req_checks_initial	9	SCN_etl_pre_req_checks_initial Version 00	Restart from failed step		🔶 When Step
	5	SCN_mark_etf_state_to_started		SCN_mark_etf_state_to_started Version	Restart from failed step		🔶 Else Step
	6	SCN_set_etl_status_initial_start		SCN_set_etl_status_initial_start Version	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 Versio	. Restart from failed step		
	10	SCN_populate_control_table	9	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		ľ
	12	SCN_delete_stage_schema_stats	4	SCN_delete_stage_schema_stats Version	. Restart from failed step		
	13	\$3 SCN one et enterarise to proces		SCN page eff enterprise to proces Versi	Restart from failed sten		

- 4. Select Parallel Step. This adds a Parallel step to the existing list of steps.
- **5.** Use the Navigation buttons (Up, Down, Right, and Left arrow keys) adjacent to the + icon, to move the Parallel Step, according to the requirements.

You can move all the steps that you want to execute in parallel, below the Parallel Step and use the Right Arrow key, to enable all those steps for parallel execution, as shown in the following figure:

inition					
eps					
eptions	#	Steps Hierarchy	Enabled	Scenario/Variable	Restart
iables	18	SCN_populate_dict_to_process	<b>~</b>	SCN_populate_dict_to_process Version 001	Restart from failed ste
rileges	19	SCN_populate_meddra_tables	<b>v</b>	SCN_populate_meddra_tables Version 001	Restart from failed st
sion	20	SCN_populate_who_tables	<b>~</b>	SCN_populate_who_tables Version 001	Restart from failed st
fields	21	SCN_manage_sm_stage_indexes(0,0,0)	<b>~</b>	SCN_manage_sm_stage_indexes(0,0,0) Version.	. Restart from failed st
neida	22	SCN_truncate_stage_tables_REPORT	<b>~</b>	SCN_truncate_stage_tables_REPORT Version 00:	1 Restart from failed st
	23	SCN_truncate_stage_tables_CFG	×	SCN_truncate_stage_tables_CFG Version 001	Restart from failed st
	24	SCN_truncate_stage_tables_CL	<b>V</b>	SCN_truncate_stage_tables_CL Version 001	Restart from failed st
	25	SCN_truncate_stage_tables_LM	1	SCN_truncate_stage_tables_LM Version 001	Restart from failed st
	26	🖨 စုံစုံ Parallel	Image:		Restart all children
	27	SCN_truncate_stage_tables_CASE01	~	SCN_truncate_stage_tables_CASE01 Version 001	Restart from failed st
	28	SCN_truncate_stage_tables_CASE02	~	SCN_truncate_stage_tables_CASE02 Version 001	Restart from failed st
	29	SCN_truncate_stage_tables_CASE03	~	SCN_truncate_stage_tables_CASE03 Version 001	Restart from failed st
	30	SCN_truncate_stage_tables_CASE04	~	SCN_truncate_stage_tables_CASE04 Version 001	Restart from failed st
	31	SCN_truncate_stage_tables_CASE05	~	SCN_truncate_stage_tables_CASE05 Version 001	Restart from failed st
	32	SCN_truncate_stage_tables_CASE06	~	SCN_truncate_stage_tables_CASE06 Version 001	Restart from failed st
	33	SCN_truncate_stage_tables_CASE07	~	SCN_truncate_stage_tables_CASE07 Version 001	Restart from failed st
	34	SCN_truncate_stage_tables_CASE08	~	SCN_truncate_stage_tables_CASE08 Version 001	Restart from failed st
	35	SCN_truncate_stage_tables_CASE09	~	SCN_truncate_stage_tables_CASE09 Version 001	Restart from failed st
	36	SCN_truncate_stage_tables_CASE10	~	SCN_truncate_stage_tables_CASE10 Version 001	Restart from failed st
	37	SCN_truncate_stage_tables_LOOKUP	~	SCN_truncate_stage_tables_LOOKUP Version 00:	Restart from failed st
	38	SCN_update_etl_execute_status(0)		SCN_update_etl_execute_status(0) Version 001	Restart from failed st
	39	SCN_populate_stage_tables_REPORT		SCN_populate_stage_tables_REPORT Version 00	1 Restart from failed st
	40	SCN_populate_stage_tables_CFG		SCN_populate_stage_tables_CFG Version 001	Restart from failed st
	41	SCN_populate_stage_tables_CL		SCN_populate_stage_tables_CL Version 001	Restart from failed st
	42	SCN populate stage tables LM		SCN populate stage tables LM Version 001	Restart from failed st
	43	🖃 🗄 🖕 Parallel			Restart all children
	44	SCN populate stage tables CASE01		SCN populate stage tables CASE01 Version 001	Restart from failed st
	45	SCN populate stage tables CASE02		SCN populate stage tables CASE02 Version 001	Restart from failed st
	46	SCN populate stage tables CASE03		SCN populate stage tables CASE03 Version 001	Restart from failed st
	47	SCN populate stage tables CASE04		SCN populate stage tables CASE04 Version 001	Restart from failed st
	48	SCN populate stage tables CASE05		SCN populate stage tables CASE05 Version 001	Restart from failed st
	49	SCN populate stage tables CASE06		SCN populate stage tables CASE06 Version 001	Restart from failed st
	50	SCN populate stage tables CASE07		SCN populate stage tables CASE07 Version 001	Restart from failed st
	51	SCN populate stage tables CASE08		SCN populate stage tables CASE08 Version 001	Restart from failed st
	52	SCN populate stage tables CASE09		SCN_populate_stage_tables_CASE09 Version 001	Restart from failed st
	53	SCN populate stage tables CASE10		SCN populate stage tables CASE10 Version 001	Restart from failed st
	54	SCN populate stage tables LOOKUP		SCN populate stage tables LOOKUP Version 001	1 Restart from failed st
	55	SCN pop et signal case to procs		SCN pop et signal case to proce Version 001	Restart from failed st
	56	SCN manage sm stage indexes(1.0.2)		SCN manage sm stage indexes(1,0,2) Version	Restart from failed st
	57	SCN analyze schema		SCN_analyze_schema Version 001	Dectart from failed at
	57	the new landyze_scielling			Restart from failed s

Figure 5–49 Executing Load Plan Steps in Parallel

The **AM.zip** file, which you have imported using Importing Argus Mart Schema Object section of this chapter has the provision to execute the Staging Case Table Truncation and Population in parallel, as highlighted in Figure 5–49. The process of Truncation comprises of various tables, which have been divided into different categories. These categories have been named as **SCN\_truncate\_stage\_tables\_ CASE01**, **SCN\_truncate\_stage\_tables\_CASE02**, and so on. Each category contains a list of tables, which are sorted based on size. The larger tables are executed first as compared to the smaller ones.

Similarly, the process of Population also consists of various tables, which are divided into different categories. These categories have been named as **SCN\_populate\_stage\_tables\_CASE01**, **SCN\_populate\_stage\_tables\_CASE02**, and so on.

# **Configuring the Argus Mart Application**

Before running the Initial ETL (Extract, Transform, and Load) process, you need to configure the Argus Mart Common Profile Switches to have control over the data that you want to transfer from the Argus Safety database to the Argus Mart database. These Common Profile Switches are configured using the Argus Safety Console.

This section explains these Common Profile Switches along with the step-by-step procedure to configure these profile switches using the Argus Safety Console.

The following figure depicts your progress in the complete installation process:



Figure 6–1 Installation Progress: Configuring the Argus Mart Application

To configure the Common Profile Switches using the Argus Safety Console, execute the following steps:

 Log on to the Argus Safety Console and navigate to System Configuration > System Management (Common Profile Switches), as shown in the following figure:

Ent_SH_2-Argus	Console - Windows Internet Exp	olorer						_ 🗆 ×
ORACLE			Welcome Administrator, Thurs	sday, October	4, 2012 (AS702MTJ-Ent_SH_2)	Home	Help	Close
Code Lists	Business Configuration	Access Management	System Configuration	Tools				
			Case Priority Field Validation Field Labels LMM System Numbering System Numbering System Numbering SMTP Configuration Enabled Modules	<sup>o</sup> rofile Switche	3)			

Figure 6–2 System Management Link on Argus Safety Console

This displays the Common Profile Screen with the list of configuration options in the left pane, as depicted in the following figure:

Figure 6–3 Argus Mart Link in Argus Safety Console

Organized by	Common Profile	•
🖃 📸 Common	Profile	
- 🔁 Adva	nced Conditions	
🚊 🚞 Argu	s Dossier	
- 🚞 Argu	s Insight	
🚊 🚞 Argu	sJ	
🚰 🗛 Argu	us Mart	
- 🚞 Case	Form Configuration	
🚊 🗀 Case	Processing	
Docu	ment Management	
🚞 E2B		
🗄 🚞 Loca	l Labeling	
- 🚞 Medv	Vatch Configuration	
- 🚞 Netw	ork Settings	
😟 🚞 Repo	rting	
🛓 🚞 Secu	rity	
- 🚞 User	Interface	
	flow	

**2.** Click **Argus Mart**. This displays the **Modify Argus Mart** Screen with the list of Argus Mart Common Profile Switches that you need to configure, in the right pane, as depicted in the following figure:

Figure 6–4	List of Common	<b>Profile Switches</b>	for Argus Mart
------------	----------------	-------------------------	----------------

Modify Argus Mart
ENABLE SM PROCESSING
(a) Yes
© No
REVISIONS TO PRCOESS
FIKSI_HUMAN_LANGUAGE
SECOND_HUMAN_LANGUAGE
MISSING CODE DISPLAY VALUE Code Missing in the Cod
CUSTOM DATASHEET FOR LISTEDNESS
SMQ_CMQ_FOR_FATAL_TERMS Specific SMQ/CMQ to be used for determining fatal terms for the column FATAL_YN_DV
PRE STAGE TABLES POPULATION
PRE REPORTING TABLES POPULATION
POST REPORTING TABLES POPULATION
PRE HELPER TABLES POPULATION
CUSTOM ROUTINE AFTER ETL
POST HELPER TABLES POPULATION
PRE INCREMENTAL ETL TASK
POSTINGREMENTALET TASK

There are several Argus Mart Common Profile Switches that you can configure using this screen. See Table 6–1 for description about these profile switches along with their type (Global or Enterprise-specific).

The Global switches are visible only if you are logged in from a default enterprise. If you are logged in from a non-default enterprise, only the enterprise-specific switches are visible in the list of Common Profile Switches, as depicted in the following figure:

lart.
ANGUAGE SHEET FOR LISTEDNESS FATAL TERMS R0)

Figure 6–5 Non-Default Enterprise: List of Common Profile Switches

**3.** Enter the required input in the text box (or select the radio buttons in case of the **ENABLE SM PROCESSING** profile switch) adjacent to the name of each profile switch and click **Save**.

**Note:** The Global Switches, as mentioned in the table below, impact all enterprises configured for Argus Mart whereas the Enterprise specific Switches impact the enterprise to which user is logged in, to access the Argus Safety console.

The following table lists the Common Profile Switches that you can configure for Argus Mart, their type, and their description:

Profile Switch	Туре	Description
ENABLE SM PROCESSING	Global switch	This switch is used to enable or disable SM Processing for Argus Mart.
		<b>Yes -</b> Enable SM Processing for Argus Mart.
		<b>No</b> - Disable SM Processing for Argus Mart.
		The value for this switch cannot be changed once initial ETL has been executed.
REVISIONS TO PROCESS	Global switch	This switch refers to the Configuration Flag to process maximum number of revisions in an incremental ETL run.
		Setting the value as 0 for this switch represents that the Configuration Flag is not set.

 Table 6–1
 Common Profile Switches for Argus Mart

Profile Switch	Туре	Description
FIRST HUMAN LANGUAGE	Enterprise specific switch	This switch refers to first human language for derived decoded items. This value should not be changed after data mart is initialized.
		For information on the First Human Language profile switch columns in SM Tables, refer to the ETL Mapping document.
SECOND HUMAN LANGUAGE	Enterprise specific switch	This switch refers to second human language for derived decoded items. This value should not be changed after data mart is initialized.
		For information on the Second Human Language profile switch columns in SM Tables, refer to the ETL Mapping document.
CUSTOM DATASHEET FOR LISTEDNESS	Enterprise specific switch	This switch refers to the specific datasheet value to be used for the <b>SM_EVENT_PRODUCT.LISTEDNESS_CDS_VE</b> column. This value should not be changed after data mart is initialized.
SMQ/CMQ FOR FATAL TERMS	Enterprise specific switch	This switch refers to the specific SMQ/CMQ to be used for determining fatal terms for the <b>FATAL_YN_DV</b> column. This value should not be changed after data mart is initialized.
CUSTOM ROUTINE BEFORE STAGE TABLES POPULATION	Global switch	This switch refers to the full path of the custom routine to be executed before population of the Signal Staging Tables. If this routine fails or is not found, the ETL is not run and an error message is displayed.
CUSTOM ROUTINE BEFORE REPORTING TABLES POPULATION	Global switch	This switch refers to the full path of the custom routine to be executed before population of Signal Reporting Tables. If this routine fails or is not found, the ETL is not run and an error message is displayed.
CUSTOM ROUTINE AFTER REPORTING TABLES POPULATION	Global switch	This switch refers to the full path of the custom routine to be executed after population of Signal Reporting Tables. If this routine fails or is not found, the ETL is not run and an error message is displayed.
CUSTOM ROUTINE BEFORE SIGNAL HELPER TABLES POPULATION	Global switch	This switch refers to the full path of the custom routine to be executed before population of Signal Helper Tables. If this routine fails or is not found, the ETL is not run and an error message is displayed.

 Table 6–1 (Cont.) Common Profile Switches for Argus Mart

Profile Switch	Туре	Description
CUSTOM ROUTINE AFTER SIGNAL HELPER TABLES POPULATION	Global switch	This switch refers to the full path of the custom routine to be executed after population of Signal Helper Tables. If this routine fails or is not found, the ETL is not run and an error message is displayed.
CUSTOM ROUTINE AFTER ETL	Global switch	This switch refers to the full path of the custom routine to be executed after Initial/Incremental ETL (post ETL commit). If this routine fails or is not found, the ETL is not run and an error message is displayed.
MISSING_CODE_ DISPLAY_VALUE	Global switch	This switch refers to the missing display value corresponding to the code.

Table 6–1 (Cont.) Common Profile Switches for Argus Mart

7

# **Upgrading the Argus Mart**

This chapter explains how to upgrade Argus Mart 1.0 to Argus Mart 7.0.3, including ODI Metadata and the Schema Creation Tool. Besides, it also explains how to upgrade SM tables.

The following figure depicts the process to upgrade from Argus Mart 1.0 to Argus Mart 7.0.3:

Figure 7–1 Steps to Upgrade Argus Mart 1.0



This chapter comprises the following sub-sections:

- Before Upgrading Argus Mart
- Upgrading Argus Mart Application
- Upgrading Argus Mart Database
- Upgrading ODI Metadata
- Validating Upgraded Schema
- Post Upgrade Processes

## 7.1 Before Upgrading Argus Mart

Before you start the upgrade process, perform the Schema Validation for Argus Mart database.

To validate the existing schema, see Section 3.5, Validating the Schema.

# 7.2 Upgrading Argus Mart Application

To upgrade the existing Argus Mart application, perform all the steps mentioned in the Section 2.2, Installing Argus Mart Components in the following order:

- 1. Step 1 to Step 4. (Skip Step 5)
- 2. In Step 6, on Specify Home Details screen (Figure 2–5):
  - a. In the Name field, select the name of the existing Argus Mart version.
  - b. In the Path field, select the path of the existing Argus Mart version.
  - c. Click Next.

This displays the Summary screen (Figure 2–8).

- 3. Click Install to start the upgrade process.
- **4.** After upgrade process is complete, the release version 1.0 is updated to 7.0.3 as shown below:

Figure 7–2 Argus Mart Application Upgrade Tool



# 7.3 Upgrading Argus Mart Database

**Note:** Before upgrading the Argus Mart Database, you must re-create the Argus Mart user (AM\_MART\_USER) for the Argus Safety database. This user must be the same as the one created in Section 3.4.1, Creating User for the Argus Safety Database.

To upgrade the database from Argus Mart 1.0 to Argus Mart 7.0.3:

- **1.** Start the Argus Mart Schema Creation Tool.
- 2. Click DB Upgrade. The Oracle Database Connect dialog box opens.

<u>J</u> ser:	
SYSTEM.	<u>о</u> к
Password:	
*****	<u>C</u> ancel
Argus Mart <u>D</u> atabase	
ARGMART	_

Figure 7–3 Oracle Database Connect Screen

- **3.** Connect to the Oracle Database:
  - **a.** In the **Password** field, type the password for the SYSTEM user.
  - **b.** In the **Database** field, type the name of your Argus Mart database.
  - c. Click OK.

The Upgrade Parameters dialog box opens.

Figure 7–4 Upgrade Parameters Screen

Database Name:	ARGMART		
Current Database Version:	10		
Upgrade to Version:	7.0.3		
Upgrade Directory:	C:\SVN\Argus Mart\branches\7.0.3\Database\Upgrades		
pgrade Parameters			
YS Owner Password:			
fart Schema Owner:	AM_MART_USER		
fart Schema Password:	NENEXXX		
itaging Schema Owner:	AM_STAGE_USER		
itaging Schema Password:	MAXAMANA		

- 4. Complete the Upgrade Parameters dialog box as follows:
  - **a.** In the Database and Upgrade Information section, verify that the database and upgrade information is correct. If the information is incorrect, click **Cancel**.
  - **b.** In the Upgrade Parameters section, enter the correct password for each user.
- 5. Click Next. The Tablespace Management dialog box opens.

	ARGMART					
Current Database Version:	1.0					
Upgrade to Version:	7.0.3					
Upgrade Directory:	C:\SVN\Argus Mart\branches\7.0.3\Database\Upgrades					
Tablespace	Current Size (Mb)	Free Space (Mb)	Free Space Needed (Mb)	Data File Location		
AM_MART_DATA_01	308	306	0	C:\ORACLE\ORADATA\AM10DOC\AM_MART		
AM_MART_INDEX_01	118	116.56	1	C:\ORACLE\ORADATA\AM10DOC\AM_MART Add		
AM_MART_LOB_01	94	93	11	C:\ORACLE\ORADATA\AM10DOC\AM_MART		
	162	161	5	C:\ORACLE\ORADATA\AM10DOC\AM_STAG		
AM_STAGE_DATA_01		lor	1			
AM_STAGE_DATA_01 AM_STAGE_INDEX_01	86	185				

Figure 7–5 Tablespace Management Screen

**6.** Verify that all tablespaces have enough free space.

The green check mark indicates that the tablespace has enough free space.

If the tablespace does not have enough free space, increase the size of the tablespace by below mentioned methods:

**a.** Click **Add** to add a new datafile to the existing tablespace. The Add Data File dialog box opens.

Figure 7–6 Add Data File Screen

Tablespace:	AM_MART_LOB_01		
Database File Name:	AM_MART_LOB_02		
Datafile Location:	C:\ORACLE\ORADATA\AM10DOC\		
Size (Mb):	11		

Enter a name for the new datafile (such as, **AM\_MART\_LOB\_02**), containing the required additional space, and click **OK**.

**b.** Alternatively, if you do not wish to add a new data file, the database administrator can resize the tablespace from the back-end.

The tablespace information is updated as shown below:

Database Name:	ARGMART				_	
Current Database Version:	1.0 7.0.3					
Upgrade to Version:						
Upgrade Directory:	C:\SVN\Argus Mart\branches\7.0.3\Database\Upgrades					
ablespace	Current Size (Mb)	Free Space (Mb)	Free Space Needed (Mb)	Data File Location		
AM_MART_DATA_01	308	306	0			
AM_MART_INDEX_01	118	116.56	1	C:\ORACLE\ORADATA\AM10DOC\AM_MART Ad	Ы	
AM_MART_LOB_01	105	103	0	C:\ORACLE\ORADATA\AM10DOC\AM_MART		
AM_STAGE_DATA_01	162	161	5	C:\ORACLE\ORADATA\AM10DOC\AM_STAG	Ы	
AM_STAGE_INDEX_01	86	85	1	C:\ORACLE\ORADATA\AM10DOC\AM_STAG	Ы	
		l loo			41	

Figure 7–7 Updated Tablespace Management Screen

After resizing, click the **Recalculate** button to re-evaluate the tablespace size and refresh the tablespace grid, as per the updated tablespace size.

Once updated, the **Add** button will not be displayed and the green check mark will be displayed, indicating that the tablespace has enough free space.

When all the tablespaces have enough free space, the **Next** button is enabled.

Figure 7–8 Tablespace Management Screen (with Next Button Enabled)

) atabase Name:	ARGMART				
Current Database Version:	se Version: 1.0 sion: 7.0.3				
Jpgrade to Version:					
Upgrade Directory:	C:\SVN\Argus Mart\branches\7.0.3\Database\Upgrades				
ablespace	Current Size (Mb)	Free Space (Mb)	Free Space Needed (Mb)	Data File Location	
AM_MART_DATA_01	495.56	492.56	0	C:\ORACLE\ORADATA\AM10GG\AM_MART_	
M_MART_INDEX_01	216	213.56	0	C:\ORACLE\ORADATA\AM10GG\AM_MART_	
M_MART_LOB_01	99	97	0	C:\ORACLE\ORADATA\AM10GG\AM_MART_ 🗸	
AM_STAGE_DATA_01	359	357	0	C:\ORACLE\ORADATA\AM10GG\AM_STAGE	
AM_STAGE_INDEX_01	151	149.94	0	C:\ORACLE\ORADATA\AM10GG\AM_STAGE	
M STACE LOD 01	98	96	0		

7. Click Next.



Figure 7–9 Continue Database Upgrade Screen

**8.** Click **Continue** to start the upgrade process. During the upgrade process, the system upgrades the database and loads the factory data.

**Note:** In case some columns that are to be added during the upgrade process already exists in the Mart tables, then the upgrade process fails. An error message is displayed listing the name of those columns in a log file.



To execute the upgrade process successfully:

- 1. Stop the current upgrade process.
- 2. Drop or rename the existing columns as listed in the error message. Also, update all the dependent objects where columns are to be renamed, like views.
- 3. Re-execute DB Upgrade.
- **9.** After successful completion of upgrade process, the system displays status information as shown below:



Figure 7–10 Database Upgrade Completion Screen

**10.** Click the **Book** icon to view the log file and check for errors.

Alternatively, you can view the log file at any time at the following location:

<Argus Mart Install>\Database\DBInstaller\UpgradeLog.rtf

**11.** Click **Finish** to close the dialog box.

# 7.4 Validating Upgraded Schema

Once you have upgraded Argus Mart, validate the schema to ensure that no object is missing except the following:

Object Type	Object Name
Table	UVT_PSUR_PREF_PRODUCT_NAME
Table	UVT_DOSE_EXPOS_GENERIC_NAME
Table	UVT_DOSE_EXPOS_FAMILY_NAME
Table	UVT_DOSE_EXPOS_PRODUCT_NAME

To validate the upgraded schema, see Section 3.5, Validating the Schema.

## 7.5 Upgrading ODI Metadata

Argus Mart 7.0.3 does not support upgrade of existing Argus Mart 1.0 - ODI repositories. Instead, you can import new ODI metadata.

**Note:** Before importing new ODI metadata, verify the ODI version from the supported technology stack. See Table 2–1.

To import new ODI metadata perform steps through Section 5.2, Before Configuring ODI Settings to Section 5.9, Managing the ODI Agent.

## 7.6 Post Upgrade Processes

After you have upgraded from Argus Mart 1.0 to Argus Mart 7.0.3, you can perform the following actions:

- Upgrading SM Tables
- Extracting, Transforming, and Loading Data

### 7.6.1 Upgrading SM Tables

The new columns for the SM tables are populated using the scripts. These scripts create new revisions in SM table by copying data of the latest version of case, and calculating data for the new columns.

Argus Mart 7.0.3 provides the following scripts to upgrade the columns of the SM tables:

Table 7–1Scripts to upgrade SM Tables

Script Name	Table Name	Column Name
AM_UPGRADE_EVENT_LIST.BAT	SM_CASE	EVENT_LIST_DV
AM_UPGRADE_PSUR_GROUP.BAT	SM_PRODUCT	PROD_PSUR_GROUP_NAME
		EXPOS_PSUR_GROUP_NAME
		PROD_EXPOS_PSUR_GROUP_NAME
		PREF_PSUR_PRODUCT_NAME

At the end of the upgrade process, the new high watermark value populated for new revisions is updated in the tables SOURCE\_INFO and ETL\_ENTERPRISE.

**Note:** The SM tables can be updated by executing either these scripts or incremental ETL.

- If script is executed, all the cases of SM tables are updated.
- If incremental ETL is executed, cases to be processed in that ETL are updated.

Since upgrade script is a standalone process, it should not be run while ETL is in progress.

This section comprises the following sub-sections:

- Pre-requisites
- Executing the Scripts

#### 7.6.1.1 Pre-requisites

Before you upgrade the SM tables, go through the following pre-requisites:

 The scripts to upgrade SM tables are supported on the Argus Mart version where the higher version of Argus Mart (in this case, Argus Mart 7.0.3) has been installed. The following error message is displayed if Argus Mart is not the upgraded version:

Figure 7–11 Upgrade Script Error Screen

Connecting To AM_ETL_USER@ARGMART
Connected.
If user failed to connect to database then stop here and rerun the upgrade. To stop processing close current window.
Press ENTER if the script successfully connected as AM_ETL_USER@ARGMART
Starting the Upgrade Process for PSUR Group Name on 26-JUL-2013 13:07:32 Argus Mart version should be greater than 1.0 to run this upgrade. Exiting without upgrade

#### 7.6.1.2 Executing the Scripts

To execute a script:

- 1. Go to <Argus Mart Install>\Database\Upgrades\10\_TO\_703\Scripts.
- 2. Double-click the applicable script, as listed below:
  - For table SM\_CASE AM\_UPGRADE\_EVENT\_LIST.BAT
  - For table SM\_PRODUCT AM\_UPGRADE\_PSUR\_GROUP.BAT
- **3.** Enter the values for the following parameters:
  - Argus Mart DB Instance TNS Name
  - Argus Mart User Name
  - Argus Mart User Password
  - ETL User Password

Figure 7–12 List of Parameters

annananananananananananananananananana	
Enter the TNS name to connect to AM database : ARGMART Enter Argus Mart User : AM_MART_USER : AM_MART_USER Enter Password for User AM_MART_USER : Enter Password for AM ETL User : Enter log file name [eg. am_psur_group.log] (Default log file name am_psur_group.log will be taken if no value is entered) : sm_	_prod_upg.log
Connecting to AM_MART_USER	
Connected.	

- **4.** A background process is executed to find any open-ended records (a record with column VALIDEND equal to 31-Dec-9999).
  - For table SM\_CASE Find records where column EVENT\_LIST\_DV is equal to NULL.
  - For table SM\_PRODUCT Find records where column PREF\_PSUR\_ PRODUCT\_NAME is equal to NULL.
- **5.** If such records exist, create a new revision of the identified records by copying the data of all columns, except the following columns:

Table 7–2 Columns of SM	I_CASE Table
Column Name	Description
VALIDSTART	Populates Last ETL High Watermark of the corresponding enterprise + 1 second.
VALIDEND	Populates the date as 31-Dec-9999.
EVENT_LIST_DV	Populates aggregation of the event terms at a case level.

Table 7–2 Columns of SM\_CASE Table

Table 7–3 Columns of SM\_PRODUCT Table

Column Name	Description
VALIDSTART	Populates Last ETL High Watermark of the corresponding enterprise + 1 second.
VALIDEND	Populates the date as 31-Dec-9999.
PROD_PSUR_GROUP_ NAME	Displays the PSUR Group Name of the Product.
EXPOS_PSUR_GROUP_ NAME	Displays the PSUR Group Name of the Exposure Product.
PROD_EXPOS_PSUR_	Displays the PSUR Group Name for one of the following:
GROUP_NAME	The Exposure Product if its value is NOT NULL
	The Product, if the value of Exposure Product is NULL
PREF_PSUR_PRODUCT_	Displays one of the following values:
NAME	<ul> <li>PROD_EXPOS_PSUR_GROUP_NAME if its value is NOT NULL</li> </ul>
	<ul> <li>PREFERRED_PRODUCT_NAME_DV, if the value of PROD_EXPOS_PSUR_GROUP_NAME is NULL</li> </ul>

- **6.** If the script encounters any errors during execution, an error message is displayed as "Error during execution of <column name> Upgrade script" followed by the actual error.
- 7. After completion of the upgrade script, a message is displayed as shown below:

Figure 7–13 Event List Upgrade Script: Completion Screen



# Extracting, Transforming, and Loading Data

This chapter describes the steps required to run the Extract, Transform, and Load (ETL) process using the Oracle Data Integrator (ODI) Studio and ODI Console.

The following table illustrates some of the terms along with the name of the Load Plan that has been used to refer the different types of ETL in the later sections of this chapter:

Type of ETL	Description	Name of the Load Plan
Initial ETL	The Initial ETL process involves full load of data from Argus Safety and DLP to Argus Mart. It can be described as the first ETL run that is executed for a fresh setup.	LP_INI_AM
Incremental ETL	The Incremental ETL brings changed case data, from last ETL run till start of current ETL run, from Argus Safety and DLP. The LM/CFG data is reloaded only if any change in record(s) is identified. Dictionary data is always reloaded in case of an Incremental ETL.	LP_INC_AM
	If a new enterprise is added, the Incremental ETL loads complete data of the new enterprise along with delta data of other enterprises.	

Table 8–1 Describing ETL Types

The following figure depicts your progress in the complete installation process:



Figure 8–1 Installation Progress: Extracting, Transforming, and Loading Data

This chapter comprises the following sub-sections:

- Managing Initial ETL Process: ODI Studio
- Monitoring Initial ETL Process: ODI Studio
- Managing Initial ETL Process: ODI Console
- Monitoring Initial ETL Process: ODI Console
- Running the Incremental ETL

## 8.1 Managing Initial ETL Process: ODI Studio

This section describes the steps required to manage the ETL process using the Database Integrator Studio.

This section comprises the following sub-sections:

- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Failed ETL

#### 8.1.1 Running the ETL

To run the Initial ETL, execute the following steps:

 Open the ODI Studio, and click Connect to Repository. This displays the Oracle Data Integrator Login window, as depicted in the following figure:

Login Name:	odi_work 👻 💠 🥒	×
User:	SUPERVISOR	
Password:	•••••	

Figure 8–2 Oracle Data Integrator Login Window

- 2. In the Oracle Data Integrator Login window:
  - a. Select the ODI Work Repository name from the Login Name drop-down list.
  - **b.** Enter the name of the ODI user in the **User** field.
  - **c.** Enter the password for the ODI user in the **Password** field. The password for the SUPERVISOR user was specified by you in the Creating Master Repository section while configuring the ODI settings.
  - d. Click OK. This displays the Oracle Data Integrator Screen.
- **3.** Select the **Operator** tab in the left pane.
- **4.** Expand the **Load Plans and Scenarios** section, as highlighted in the following figure:

Figure 8–3 Load Plans and Scenarios

🛼 [ODI_Work703] Oracle Data Integrator 11g	
<u>File Edit View Search ODI Tools Window Help</u>	
😗 🖩 🗊 🕌 💼 🕨	
🕞 Designer × 🔣 Operator × 🌆 Topology × 🍰 ×	
® 7 ® 5≑	<b>Z</b> •
Session List	-
Hierarchical Sessions	•
N Load Plan Everytions	-
N Scheduling	
✓ Load Plans and Scenarios	-
▷ Solutions	•
SCN_LP_ARGUSMART703	

**5.** Expand **SCN\_LP\_ARGUSMART703** and scroll-down to **LP\_INI\_AM**. This option in this section represents the load plan for the initial ETL process for Argus Mart.



Figure 8–4 Load Plan for Initial ETL

**6.** Right-click the **LP\_INI\_AM** option. This displays a menu, as shown in the following figure:

Figure 8–5 Executing the Initial ETL



**7.** Click **Execute**. This displays the **Start Load Plan** window, as shown in the following figure:

Context:	CTX_ARGUSMART
Logical Agent:	LA_AM
Log Level: Assign startur:	<use level="" log="" session="" task=""> <use level="" log="" session="" task=""></use></use>
Variable	1 2 3 4 5 6

Figure 8–6 Start Load Plan Window

- 8. In the Start Load Plan window:
  - a. Select CTX\_ARGUSMART from the Context drop-down list.
  - b. Select LA\_AM from the Logical Agent drop-down list.
  - c. Select the desired log level from the Log Level drop-down list.
  - **d.** Click **OK**. This displays the **Information** dialog box with the **Load Plan Started** confirmation message, as shown in the following figure:

Figure 8–7 Load Plan Started Confirmation Message

Informati	on	×
i	Load Plan started.	
		ОК

9. Click OK.

You can verify the status of the ETL process by navigating to the **Load Plan Executions** section and expanding the **Load Plan** folder. You can view the status of the Load Plan in **Green** color with tilted **s**, which signifies that the ETL session is in progress, as highlighted in the following figure:

🍬 [odi_work] Oracle Data Integrator 11g	
<u>File Edit Yiew Search ODI Tools Window H</u> elp	
晴 Designer 🗴 🔣 Operator 🗴 🎢 Topology 🗴   🝰 Security 🗴	6
62 7 63 5€	-
Session List	1
Hierarchical Sessions	1
🕆 Load Plan Executions	4
ter V Keywords	
All Executions	

Figure 8–8 Status of the Load Plan

### 8.1.2 Stopping the ETL

To stop the initial ETL, execute the following steps:

1. Right-click the Load Plan, which you want to stop, in the Load Plan folder of the Load Plan Executions section. This displays a menu, as shown in the following figure:

Figure 8–9 Stopping the Initial ETL

🖕 [odi_work] Oracle Data Integrator 11g		
<u>File E</u> dit <u>Y</u> iew <u>S</u> earch <u>O</u> DI <u>T</u> ools <u>W</u> indow <u>H</u> e	lp	
3 E 🗗 X 🖻 🛍 🕩		
- Designer × 🔣 Operator × 🎢 Topology ×   🙈 Security	/ × [_]	
₩ 7 % 5≑	- 🗵	
Session List		
Hierarchical Sessions	1	
Zoad Plan Executions	1	
Date     Date     Agent     Date     Date     Date     Date     Status     Status     Keywords	Open View	
🗄 📸 User	X <u>D</u> elete	Delete
	Stop Normal	
	Stop <u>I</u> mmedi Restart	iate

**2.** Select **Stop Normal**. This displays the **Stop Load Plan** dialog box, as depicted in the following figure:

Stop Load Plan	(	X
Choose a Physic from the list of a	al Agent to Stop "LP_INC, I running agents.	_AM", 😽
Physical Agent:	PA_AM	•
Help	ОК	Cancel

Figure 8–10 Selecting the Physical Agent

- 3. Select PA\_AM from the Physical Agent drop-down list.
- 4. Click OK. This stops the execution of the Load Plan.

You can verify the status of the ETL process by navigating to the **Load Plan Executions** section and expanding the **Load Plan** folder. You can view the status of the Load Plan in **Red** color with the X symbol, which signifies that the ETL session is not in progress, as highlighted in the following figure:

Figure 8–11 Stopped Initial ETL Session

🔩 [odi_work] Oracle Data Integrator 11g	
<u>File Edit Yiew Search ODI Tools Window H</u> elp	
🔩 Designer 🗴 🔣 Operator 🗴 🞢 Topology 🗴   🚵 Security 🗴	
62 7 63 5€	- 🔊
Session List	1
Hierarchical Sessions	1
✓ Load Plan Executions	1
Date     Agent     Represents Stopped ETL     Date	
end and the second se	

**Note:** You must verify in Argus Mart database if the ETL session has been successfully ended after this step.

#### 8.1.3 Restarting the ETL

Restarting the Initial ETL process enables you to start the ETL process from the last execution step where it was stopped or failed.

To restart the Initial ETL, execute the following steps:

 Right-click the Load Plan, which you want to restart, in the Load Plan folder of the Load Plan Executions section. This displays a menu, as shown in the following figure:

<u>File Edit Yiew S</u> earch <u>O</u> DI <u>T</u> ools <u>W</u> indow <u>H</u>	elp	
3 🖬 🗿 🕺 🛍 🛍 🕨 🖌 🖷 🖻 🕈		
💑 Designer 🗴 🔣 Operator 🗴 🔏 Topology 🗴   🚵 Securi	ty X 🗐	
n 7 0 5€	- 🖾	
> Session List		
Hierarchical Sessions		
Load Plan Executions	3	
⊕ Date		
⊞ 🔅 Agent		
E-CELP INI AM - 1		
🗄 👸 Status	View	
E View	Selete	D. Lat.
bio an		Delete
⊞™n user ⊞⊸n user	Territoria de la construction de la constru	
arrow and the secutions and the security of the secur	Stop Normal	Lana

Figure 8–12 Restarting the Initial ETL

**2.** Click **Restart**. This displays the **Restart Load Plan** dialog box, as shown in the following figure:

Figure 8–13 Restart Load Plan Dialog Box

Restart Load Plai	n 📃 🔀
Choose a Physic "LP_INI_AM", fro	al Agent and a Log Level to Restart om the list of all running agents.
Physical Agent:	PA_AM 👻
Log Level:	PA_AM
Help	OK Cancel

- 3. Select PA\_AM from the Physical Agent drop-down list.
- 4. Select the required log level from the Log Level drop-down list.
- **5.** Click **OK**. This displays the **Information** dialog box with the **Load Plan restarted** message, as depicted in the following figure:

Figure 8–14 Loan Plan restarted Confirmation Message

formatio	n	
i	Load Plan restarted.	
		ОК

6. Click OK.

This adds another Load Plan, with the same name as that of the stopped ETL, in the **Load Plan** folder of the **Load Plan Executions** section. However, this instance

of the ETL Process is in Green color with a tilted S, which signifies that the ETL is in progress, as highlighted in the following figure:

Figure 8–15 Restarted Load Plan

🛼 [odi_work] Oracle Data Integrator 11g	
<u>File Edit Yiew Search DDI Tools Window H</u> elp	
🖣 Designer 🗴 🔣 Operator 🗴 🔏 Topology 🗴   🞥 Security 🤉	× (,
R2 7 R3 5€	B
Session List	1
Hierarchical Sessions	1
T Load Plan Executions	1
Date     Agent     Restarted ETL in progress     Joad Plan     DILP INLAM - 2	
🗊 🧭 9001 - 2 - LP_INI_AM - Oct 3, 2012 6:44:21 PM	
H 00 9001 - 1 - LP_INI_AM - Oct 3, 2012 6:01:52 PM	
E Vices	
🕀 📲 User	
All Executions	

Once the ETL process is complete, the Load Plan is displayed in Green color with a completed symbol, as highlighted in the following figure:

Figure 8–16 Completed Load Plan



#### 8.1.4 Processing a Failed ETL

If an ETL process fails, you have the option of continuing the process from the failed step or executing it again from the beginning of ETL.

This section explains the steps to continue a failed ETL from the failed step and to execute it again from the beginning of ETL.

This section comprises the following sub-sections:

- Continuing the Failed Initial ETL
- Restarting the Failed Initial ETL

#### 8.1.4.1 Continuing the Failed Initial ETL

The process to continue the failed Initial ETL from the failed step is exactly the same as that of the process of restarting the Initial ETL after stopping it.

See the Restarting the ETL section for the step-by-step procedure to continue the failed Initial ETL from the failed step.

#### 8.1.4.2 Restarting the Failed Initial ETL

The process to restart the failed Initial ETL from the beginning is exactly the same as that of the process of running the Initial ETL.

However, before restarting the ETL you must log on to the Oracle SQL Developer using the Argus ETL User credentials and execute the following statements:

EXEC pkg\_sm\_stage\_util.p\_set\_cmn\_profile\_value ('DATABASE', 'ODI\_ETL\_STATUS', '0');

EXEC pkg\_sm\_stage\_util.p\_set\_cmn\_profile\_value ('DATABASE', 'ETL\_SM\_ ITERATION\_NUMBER', NULL);

COMMIT;

To verify the successful execution of these statements, you can execute the following Select statements:

SELECT \* FROM rm\_cmn\_profile\_global WHERE KEY = 'ODI\_ETL\_STATUS';

The entry for the **Value** column must be **0** after executing this statement, as depicted in the following figure:

Figure 8–17 Select Statement 1 to Verify Successful Execution

Oue	ry Regit X									
* 📇	R) 🗟 501	All Rows Fetched: 1	in O	.051 sec	ond	5				
-	SECTION	KEY	1	VALUE	1	TREE_NAME	8	KEY_TYPE	1	KEY_LABE
1	DATABASE	ODI ETL STATUS	0		-		-		-	marriananan insuhana

 SELECT \* FROM rm\_cmn\_profile\_global WHERE KEY = 'ETL\_SM\_ITERATION\_ NUMBER';

The entry for the **Value** column must be blank after executing this statement, as depicted in the following figure:

Figure 8–18 Select Statement 2 to Verify Successful Execution

Que	y Result X									
*		All Rows Fetched: 1 in 0.051 seco	onds							
	SECTION	KEY	1	VALUE	AZ	TREE_NAME	2	KEY_TYPE	P	KEY_LABE
1	DATABASE	ETL SM ITERATION NUMBER								

See the Running the ETL section for the step-by-step procedure to restart the failed Initial ETL from the beginning of ETL.

### 8.2 Monitoring Initial ETL Process: ODI Studio

This section describes the steps required to monitor the ETL process using the Database Integrator Studio.

This section comprises the following sub-sections:

- Viewing the Steps of Load Plan
- Monitoring the ETL
- Debugging the Failed ETL
- Monitoring the Restarted ETL (Resume)

#### 8.2.1 Viewing the Steps of Load Plan

Before executing the Initial ETL, you can view the steps of the Load Plan for the Initial and the Incremental ETL.

To view the Load Plan steps, execute the following steps:

- 1. Open the Oracle Data Integrator Studio and click **Connect To Repository**.
- 2. Log on to the ODI Work Repository using the ODI User credentials.
- **3.** Select the **Designer** tab and expand the **Load Plans and Scenarios** section, as shown in the following figure:

Figure 8–19 Navigating to the LP\_INC\_AM Load Plan



- 4. Double-click the LP\_INC\_AM load plan.
- **5.** Select the **Steps** option in the right pane. This displays all the steps of the Load Plan, as depicted in the following figure:
| tion  |    |  |         |  |                          | (46)  | 30) B B A. M O B A |
|-------|----|--|---------|--|--------------------------|-------|--------------------|
| 15    |    |  |         | 1  |                          | 60    | - 03)              |
| tions | X  | Steps Hierarchy  | Enabled | Scenario/Variable                                | Restart                  | Conte | xt Logical Agent   |
| oles  | 0  | E s root_step  | 2       |  | Restart from failure     |       |                    |
| ges   | 1  | - SCN_comple_schema_stage  | 9       | SCN_compile_schema_stage Version 001             | Restart from failed step |       |                    |
| n     | 2  | SCN_comple_schema_mart   |         | SCN_compile_schema_mart Version 001              | Restart from failed step |       |                    |
| 44    | 3  | SCN_compile_schema_rls   |         | SCN_compile_schema_rls Version 001               | Restart from failed step |       |                    |
| ~     | 4  | SCN_etl_pre_reg_checks_incremental   | -       | SCN_etl_pre_req_checks_incremental Version 001   | Restart from failed step |       |                    |
|       | 5  | SCN_mark_etl_state_to_started  | 1       | SCN_mark_etl_state_to_started Version 001        | Restart from falled step |       |                    |
|       | 6  | — @ SON_set_etl_status_incremental_start   | 2       | SCN_set_etl_status_incremental_start Version 001 | Restart from failed step |       |                    |
|       | 7  | - 🚱 SCN_maintain_logs_history  | 1       | SCN_maintain_logs_history Version 001            | Restart from failed step |       |                    |
|       | 8  | - 🚱 SCN_eti_log_start_time   |         | SCN_etl_log_start_time Version 001               | Restart from failed step |       |                    |
|       | 9  | - 🚱 SCN_update_etl_jobs_stage_start  | 1       | SCN_update_etl_jobs_stage_start Version 001      | Restart from failed step |       |                    |
|       | 10 | - 🚱 SCN_populate_control_table   | 9       | SCN_populate_control_table Version 001           | Restart from failed step |       |                    |
|       | 11 | SCN_truncate_dct_tables  |         | SCN_truncate_dict_tables Version 001             | Restart from failed step |       |                    |
|       | 12 | SCN pop etl enterprise to proces   |         | SCN pop etJ enterprise to proces Version 001     | Restart from failed step |       |                    |
|       | 13 | SCN populate profile switches  | 191     | SCN populate profile switches Version 001        | Restart from Faled step  |       |                    |
|       | 14 | SCN p exec et oustom hooks PRE STAGE TABLES POPUL  | 1       | SCN p exec eti custom hooks PRE STAGE TA         | Restart from failed step |       |                    |
|       | 15 | - CA solution of the state of the state of the solution of the state o |         | SCN calc eti high water mark Version 001         | Restart from failed step |       |                    |
|       | 16 | SCN populate dict to process   | 121     | SCN populate dct to process Version 001          | Restart from failed step |       |                    |
|       | 17 | - 5 SCN populate medica tables   | 121     | SCN populate meddea tables Version 001           | Restart from failed step |       |                    |
|       | 10 | 7 SCN populate who tables  | 121     | SCN non-late who tables Version 001              | Restart from failed step |       |                    |
|       | 10 | C SCN manage on stage independent 0 0 00   |         | SCH manage on stage indexe(0.0.0) Version        | Report from falled stop  |       |                    |

Figure 8–20 Viewing Steps of the Load Plan

Similarly, you can also view the steps for the Incremental Load Plan by double-clicking the LP\_INC\_AM Load Plan from the Load Plans and Scenarios section of the Designer tab.

### 8.2.2 Monitoring the ETL

🗄 💮 Agent E Load Plan E IP INT AM - 1

Status 🗄 🏈 Keywords 🗄 🔒 User All Executions

<u>ن</u>

To monitor the progress of the Initial ETL after executing the LP\_INI\_AM Load Plan, execute the following steps:

- Select the **Operator** tab and expand the **Load Plan** folder in the **Load Plan** 1. Executions section.
- 2. Expand the LP\_INI\_AM load plan to view the ETL process in progress. You can view a tilted **s** in Green color, which signifies that the process is running properly, as depicted in the following figure:



🗄 🕝 🐼 17589 - 1 - LP\_INI\_AM - Oct 12, 2012 4:13:27 PM

Figure 8–21 Viewing the Status of the ETL Process

3. Double-click the ETL session, highlighted in the figure above, and select **Steps** in the right pane. This displays the list of steps for the Load Plan. It also displays the steps that have been completed successfully, as depicted in the following figure:

ecution							
anc	#  S	teps Hierarchy	Status	Duration	Start	End	Scenario/Va Session I
iables	0	💶 🛢 root_step	6	00:22	16:13:28	- diamo	Lesson and an
ilococ	1		0	00:01	16:13:28	16:13:29	SCN_compil 1372589
lieges	2	SCN_compile_schema_mart	0	00:03	16:13:30	16:13:33	SCN_compil 1373589
	3	SCN_compile_schema_rls	0	00:00	16:13:34	16:13:34	SCN_compil 1374589
	4		0	00:02	16:13:35	16:13:37	SCN_etl_pre 1375589
	5	SCN_mark_etl_state_to_started	0	00:00	16:13:38	16:13:38	SCN_mark 1376589
	6	SCN_set_etl_status_initial_start	0	00:01	16:13:39	16:13:40	SCN_set_etl 1377589
	7	SCN_maintain_logs_history	0	00:05	16:13:40	16:13:45	SCN_maintai 1378589
	8		0	00:00	16:13:46	16:13:46	SCN_etl_log 1379589
	9		0	00:00	16:13:47	16:13:47	SCN_update 1380589
	10	SCN_populate_control_table				1	
	11	SCN_truncate_dict_tables					
	12	SCN_delete_stage_schema_stats					
	13	SCN_pop_etl_enterprise_to_proc	e				N
	14	SCN_populate_profile_switches					
	15	SCN_p_exec_etl_custom_hooks_I	F			Steps	Lompleted
	16	SCN_change_schema_tables_log					
	17	SCN_calc_etl_high_water_mark					
	18	SCN_populate_dict_to_process					
	19						
	20	SCN populate who tables					

Figure 8–22 Viewing Completed Steps in the ETL Process

### 8.2.3 Debugging the Failed ETL

You can view the step where the ETL process failed and also view the error message related to the ETL process failure, using the following procedure:

1. In the **Operator** tab, expand the **Load Plan** folder in the **Load Plan Executions** section to view the current status of the ETL process, as shown in the following figure:

Figure 8–23 Viewing the Failed ETL Process

🐴 Designer X 🔣 Operator X	<b>A</b>	x 🌆	x	_
🔁 🍸 🚷 🛛 10 🖨				₫
▼ Session List				-
Hierarchical Sessions				-
V Load Plan Executions				
Agent     Load Plan     Load Plan     Load Plan     Tross9 - 1 - LP_INI_     Status     Keywords     Keywords     User	_AM - Oct	t 12, 20:	12 4: 1	13:27

You can view the status of the Load Plan in Red color with the **X** symbol, which signifies that the ETL session is not in progress.

**2.** Double-click the Load Plan and select **Steps**. This displays the list of steps for the Load Plan in the right pane. The step because of which the ETL process has failed, is highlighted in Red color with the X symbol, as highlighted in the following figure:

Luuon									
l Plan		7	ui.		- 11	- 07			
	#	Steps Hierarchy	Status	Duration	Start	End	Scenario/V Session ID	Return Error M	essage
s	0	⊟- \$ root_step	10	00:22	16:13:28	16:13:50		ODI-1519 ODI-15	19: Serial step "root_step (InternalI.
s	1	SCN_compile_schema_stage	0	00:01	16:13:28	16:13:29	SCN_compi 1372589	0	
	2	SCN_compile_schema_mart	0	00:03	16:13:30	16:13:33	SCN_compi 1373589	0	
	3	SCN_compile_schema_rls	0	00:00	16:13:34	16:13:34	SCN_compi 1374589	0	
	4	SCN_etl_pre_req_checks_initia	0	00:02	16:13:35	16:13:37	SCN_etl_pr 1375589	0	
	5	SCN_mark_etl_state_to_start	e 🧿	00:00	16:13:38	16:13:38	SCN_mark 1376589	0	
	6	SCN_set_etl_status_initial_sta	0	00:01	16:13:39	16:13:40	SCN_set_e 1377589	0	
	7	SCN maintain logs history	0	00:05	16:13:40	16:13:45	SCN maint 1378589	0	
	8	SCN et log start time	0	00:00	16:13:46	16:13:46	SCN etl lo 1379589	0	
	9	SCN update ett jobs stage i		00:00	16:13:47	16:13:47	SCN updat 1380589	0	
	10	SCN populate control table	0	00:02	16:13:48	16:13:50	SCN popul 1381589	20010 ODI-12	17: Session SCN populate control t.
	111	SCN truncate dict tables			ACT CONTRACTOR OF CONTRACT	ACTIVATION OF A			2, 2 2
	12	SCN delete stage schema st	1	X					
	13	SCN non et enterprise to n		1					
	14	SCN populate profile switche		1					
	15	SCN p exec et autom boo	- 1						
	15	SCN chapped schema tables		200	19 (c)				

Figure 8–24 Viewing the Failed Step for the ETL Process

You can move the mouse cursor over the error message to view the complete message, as shown in the following figure:

Figure 8–25 Viewing the Error Message

Load Plan												
Steps	#	Steps Hierarchy	Status	Duration	Start	End	Scenario/V Session ID	Return .	. Error Message	Row Count	Insert Co	Update Co.
Variables	9	SCN_update_etl_jobs_stage	. 0	00:00	16:13:47	16:13:47	SCN_updat 1380589	0		0	0	0
Privileges	10	- 🔆 SCN_populate_control_table	0	00:02	16:13:48	16:13:50	SCN_popul 1381589	20010	ODI-1217: Session SCN_populate_control_t.	0	0	0
	11 12 13 14 15 16 17 18 19 20	SCI, Unicke J, Skop J, Jens J, Sci O, Bellson J, Sci O, Jens J, Sci O, Jens J, Sci O, Long J, Hinterinke LD, Sci D, populate profile until M SCI (populate profile until M SCI (populate profile until M SCI (populate profile until M SCI (populate media public SCI (populate media public SCI (populate media public)	it pre k J r s s				ODI-12 with re fails at (Proce Cause during line 19 at 11-0 line 12 at line	117: Session turn code ter 1 attern ion fails.OI dure) fails f By: java.s data popu ERROR v Oct-2012 22 30RA-0651 3at oracle.j	APPC population control static 1983/599 had 2010.001-1226 Step Proc. populate, control 101.001-1227 had Proceedure PRC, populate, control 101-1226 in task PRC, populate, control Labie no the target ORACL Connection DS, AMA A 4J, SQL Exception: URA-2010: ORA-2001: D- 101.011 (Control Control Labie) initiation in SCONTROL TABLE ORA-40531: at 1 hild processing p. populate, control Labie 2-2152/ORA-40532: at YAM, MARTPKG, SNL 2-2 at YAM, STARE PRG, SNL DTOS', Inte 2000 ideudrouer, AFC Theory recentor (IACTIO	table ntrol_table RGUSMART_I ror AM_STAGE.F DGGING*, IA-06512: er,java:462)	(R. KG_SM_DTC	15",

You can also select **Execution** for more information about the error message, as depicted in the following figure:

Figure 8–26 Viewing the Error Message using the Execution Section

3 17589 - 1	- LP_INE_AM - Oct 12,	2012 4:13:27 PM ×			
	B B 50				-
Execution	🔕 Load Plan Ru	in			
Steps	Instance ID:	17589	Run #:	1	
Variables	Load Plan Name:	LP_INC_AM	Started By:	SUPERVISOR	
Privileges	Physical Agent:	PA_AM	Context:	CTUR	
	Start:	Oct 12, 2012 4:13:27 PM IST	End:	Oct 12, 2012 4:13:50 PM IST	
	Duration:	00:00:23			
	Status:	Error	Return Code:	001-1519	
	Error Message:				
	ODI-1519: Serial ODI-1217: Sensis ODI-1226: Step ODI-1222: Frank ODI-1222: Trank ODI-1222: Trank ORA-06512: at " 	sten "host, step (hternatil):20099)" faled because this step "SCU pupular, or no SCU pupular, ported, able (13) step (3) step (3) step (3) RCC, pupular, ported, able (14) step (3) RCC, pupular, pupu	ntrol_table (InternalID:211589)" is in error.		
	ORA-06512: at ORA-06512: at ORA-06512: at l at c at c	AM_MARTING_3M_LOGGING", Inc 123 AM_STAGE PKG_SM_DTOS", Inc 29 nrade jabc.driver.T4CTTGer.grocess[incr(T4CTTGer.java:462) zrade jabc.driver.T4CTTGer.grocess[incr(T4CTTGer.java:462)			

You can also log on to the Oracle SQL Developer using the Argus ETL user credentials and execute the queries to view the error message, as shown in the following figure:

VOIKSD	eet Query Builder	
1 2 3	SELECT * FROM etl_stage_log ORD SELECT * FROM etl_mart_log ORDE	ER BY id DESC; Queries
Scrip	ot Output X Query X	
* 😃		
1	GON BR SQL   All Rows Fetched: 6 in 0.055 secon     D B TABLE_NAME     5203 p populate control table	B DESCRIPTION Error during data population in SCONTROL TABLE.
1	Government     G	B DESCRIPTION     Error during data population in SCONTROL TABLE.     Data population for SCONTROL TABLE started.
1 2 3	All Rows Fetched: 6 in 0.055 secont     ID I TABLE_NAME     5203 p_populate_control_table     5202 p_populate_control_table     5201 p etl jobs	DESCRIPTION Error during data population in SCONTROL_TABLE. Data population for SCONTROL_TABLE started. Updation of table ETL JOBS (Stage ID - 1) complete
1 2 3 4	<ul> <li>[1] ID [2] TABLE_NAME</li> <li>5203 p_populate_control_table</li> <li>5202 p_populate_control_table</li> <li>5201 p_etl_jobs</li> <li>5200 p etl_jobs</li> </ul>	DESCRIPTION Error during data population in SCONTROL_TABLE. Data population for SCONTROL_TABLE started. Updation of table ETL_JOBS (Stage ID - 1) complete Updation of table ETL JOBS (Stage ID - 1) started.
1 2 3 4 5	All Rows Fetched: 6 in 0.055 secont ID TABLE_NAME     5203 p_populate_control_table     5202 p_populate_control_table     5201 p_etl_jobs     5200 p_etl_jobs     5198 p_etl_status_log	Mds Error during data population in SCONTROL_TABLE. Data population for SCONTROL_TABLE started. Updation of table ETL_JOBS (Stage ID - 1) complete Updation of table ETL_JOBS (Stage ID - 1) started. Execution of Initial ETL started.

Figure 8–27 Viewing Error Message using SQL Developer

The following are the queries that you can use to view the location of the error:

1. SELECT \* FROM etl\_stage\_log ORDER BY id DESC;

If you are not able to view any error message after executing this query, you can execute the query mentioned in point 2.

2. SELECT \* FROM etl\_mart\_log ORDER BY id DESC;

### 8.2.4 Monitoring the Restarted ETL (Resume)

Once you have restarted a stopped ETL process, you can view the status of the process using the following procedure:

1. In the **Operator** tab, expand the **Load Plan** folder in the **Load Plan Executions** section to view the current status of the ETL process, as shown in the following figure:

Designer X 🛛 🖾 Operator X 🖉 Security X 🖉 Topology X	-
₩ 7 ₩ 10 €	<b>B</b> .
<sup>7</sup> Session List Hierarchical Sessions	
Load Plan Executions	
Agent Coad Plan Coad Plan Coa	
Scheduling	

Figure 8–28 Viewing the Restarted ETL Process Status

This restarted ETL Process is in Green color with a tilted **s**, which signifies that the ETL is in progress again.

You can view the status of the remaining steps in the process by double-clicking the Load Plan in the **LP\_INI\_AM** folder and selecting **Steps**, as depicted in the following figure:

#	Steps Hierarchy	Status	Duration	Start	End	Scenario/ Session ID	Return	Error Message
0	🖃 😫 root_step	6	01:26	16:24:56				
1	SCN_compile_schema_s	t 😒	00:01	16:13:28	16:13:29	SCN_com 1372589	0	
2	SCN_compile_schema_n	1 🚱	00:03	16:13:30	16:13:33	SCN_com 1373589	0	
3	SCN_compile_schema_r	e 🚱	00:00	16:13:34	16:13:34	SCN_com 1374589	0	
4	SCN_etl_pre_req_ched	: 5	00:02	16:13:35	16:13:37	SCN_etl 1375589	0	Signifies Steps
5	SCN_mark_etl_state_to		00:00	16:13:38	16:13:38	SCN_mar 1376589	0	Completed befor Bestarting FTI
6	SCN_set_etl_status_ini	i 🚱	00:01	16:13:39	16:13:40	SCN_set 1377589	0	nestaring ETE
7	SCN_maintain_logs_hist	c 🚱	00:05	16:13:40	16:13:45	SCN_mai 1378589	0	
8	SCN_etl_log_start_time	3	00:00	16:13:46	16:13:46	SCN_etl_l 1379589	0	
9	SCN_update_etl_jobs_s	1 3	00:00	16:13:47	16:13:47	SCN_upd 1380589	0	
10	SCN_populate_control_	t 👩	11:09	16:13:48	16:24:57	SCN_pop 1381589	0	0: :: 0:
11	SCN_truncate_dict_tab	e 💿	00:07	16:24:57	16:25:04	SCN_trun 1382589	0	Completed afte
12	SCN_delete_stage_sch	0	00:19	16:25:05	16:25:24	SCIN_dele 1383589	0	Restarting ETL
13	SCN_pop_etl_enterprise	. 0	00:01	16:25:24	16:25:25	SCN_pop 1384589	0	
14	SCN_populate_profile_s	a 🔯	00:01	16:25:26	16:25:27	SCN_pop 1385589	0	
15	SCN_p_exec_etl_custor	r 💿	00:00	16:25:28	16:25:28	SCN_p_e 1386589	0	
16	SCN_change_schema_t	a 🧑	00:04	16:25:29	16:25:33	SCN_cha 1387589	0	
17	SCN_calc_etl_high_wat	e 🧑	00:01	16:25:33	16:25:34	SCN_calc 1388589	0	
18	SCN_populate_dict_to_	F 🔕	00:01	16:25:34	16:25:35	SCN_pop 1389589	0	
19	SCN_populate_meddra	0	00:10	16:25:36	16:25:46	SCN_pop 1390589	0	C:
20	SCN_populate_who_tat	ol 🌮	00:37	16:25:46		ECN_pep 1391589	-	Signifies the Current Step in
21	SCN_manage_sm_stage							Progress
22	SCN_truncate_stage_ta	al						
23	SCN_truncate_stage_ta	al						

Figure 8–29 Viewing the Steps of the Restarted ETL

# 8.3 Managing Initial ETL Process: ODI Console

This section describes the steps required to manage the ETL process using the Database Integrator Console.

This section comprises the following sub-sections:

- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Failed ETL

### 8.3.1 Running the ETL

To run the Initial ETL, execute the following steps:

**1.** Open the ODI Console. This displays the **Oracle Data Integrator Console Sign In** window, as depicted in the following figure:

Figure 8–30 Oracle Data Integrator Sign In Window

DRACLE Da	ita Integrati	or Console	
Repository			
Work Repository	•		
* User Id			
(I			
Password			
Sign In			

- 2. In the Oracle Data Integrator Sign In window:
  - a. Select the ODI Work Repository name from the Repository drop-down list.
  - **b.** Enter the name of the ODI user in the **User Id** field.
  - **c.** Enter the password for the ODI user in the **Password** field.
  - **d.** Click **Sign In**. This displays the **Oracle Data Integrator Console** Screen, as shown in the following figure:

#### Figure 8–31 Oracle Data Integrator Console Screen

	nsole
Browse Management 68	Search Search Form Search Form Design Time Topology To Runtime Sessions Load Plan Executions
Perion Time P ∰ Topology	Search Text Case sensitive Model Object Type All
	Project Object Type All

**3.** Select the **Management** tab in the left pane.

Expand the Runtime folder and navigate to Runtime > Scenarios/Load Plans > LP\_INI\_AM, as highlighted in the following figure:

Figure 8–32 Scenarios/Load Plans

Browse	Managemer	ıt
60 🕒	/ 💥 🖬	3 🔒 🔞
♥       Runtime         ♥       Scenario         ♥       Scenario	s/Load Plans arios Plans <u>PLINC_AM</u> P_INI_AM 75 /Load Plan Ex	Load Plan for Initial ETL

The **LP\_INI\_AM** option in this section represents the load plan for the initial ETL process for Argus Mart.

5. Click Execute, as highlighted in the following figure:

Figure 8–33 Executing the Initial ETL



This displays the Execute Load Plan window, as shown in the following figure:

Execute Load	Plan	
Load Plan	LP_INI_AM	
* Logical Agent	LA_AM	-
* Context	CTX_ARGUSMART	•
* Log Level	5	•
Assign startup valu	0	
Variable	2	tup Value
	3	
	6	
		_

Figure 8–34 Execute Load Plan Window

- 6. In the Execute Load Plan window:
  - a. Select LA\_AM from the Logical Agent drop-down list.
  - b. Select CTX\_ARGUSMART from the Context drop-down list.
  - c. Select the desired log level from the Log Level drop-down list.
  - **d.** Click **Execute**. This displays the **Information** dialog box with the **Load Plan Execution submitted successfully** confirmation message, as shown in the following figure:

Figure 8–35 Load Plan Started Confirmation Message

(i) Information	
Load Plan Execution submitted s	uccessfully.
	ОК

7. Click OK.

You can verify the status of the ETL process by expanding the **Load Plan Executions** folder in the **Sessions/Load Plan Executions** section. You can view the status of the Load Plan in **Green** color with tilted **s**, which signifies that the ETL session is in progress, as highlighted in the following figure:



Figure 8–36 Status of the Load Plan

## 8.3.2 Stopping the ETL

To stop the initial ETL, execute the following steps:

 Select the Load Plan, which you want to stop, by expanding the Load Plan Executions folder of the Sessions/Load Plan Executions section and click Stop, as shown in the following figure:

Figure 8–37 Stopping the Initial ETL



This displays the **Stop Load Plan Execution** dialog box, as depicted in the following figure:

Figure 8–38 Stop Load Plan Execution Dialog Box

Sto	p Load Plan Executio	1		6
	Load Plan Execution	LP_INI_AM		
	* Stop Type	Normal		]
	12. Cont. 19.	Normal		
	* Physical Agent	Immediate		
			Ca	Normal
			Stop	Cancel

- 2. Select Normal from the Stop Type drop-down list.
- 3. Select OracleDIAgent from the Physical Agent drop-down list.

4. Click **Stop**. This displays the **Information** dialog box with the **Load Plan was Stopped Successfully** confirmation message, as depicted in the following figure:

Figure 8–39 Load Plan Stopped Confirmation Message

ОК

5. Click OK.

You can verify the status of the ETL process by navigating to the **Load Plan Executions** folder in the **Sessions/Load Plan Executions** section. You can view the status of the Load Plan in **Red** color with the X symbol, which signifies that the ETL session is not in progress, as highlighted in the following figure:

Figure 8–40 Stopped Initial ETL Session



**Note:** You must verify in Argus Mart database if the ETL session has been successfully ended after this step.

### 8.3.3 Restarting the ETL

Restarting the Initial ETL process enables you to start the ETL process from the last execution step where it was stopped or failed.

To restart the Initial ETL, execute the following steps:

 Select the Load Plan, which you want to restart, in the Load Plan Executions folder of the Sessions/Load Plan Executions section and click Restart, as shown in the following figure:

Figure 8–41 Restarting the Initial ETL



This displays the **Restart Load Plan Execution** dialog box, as depicted in the following figure:

Figure 8–42 Restart Load Plan Execution Dialog Box

📓 Restart Load Plan Execution	
Load Plan Execution LP_INI_AM	
* Physical Agent OracleDIAgent 💌	
* Log Level 🗵 💌	
Restart Ca	ancel

- 2. Select OracleDIAgent from the Physical Agent drop-down list.
- 3. Select the required log level from the Log Level drop-down list.
- **4.** Click **Restart**. This displays the **Information** dialog box with the **Load Plan restarted** message, as depicted in the following figure:

Figure 8–43 Loan Plan restarted Confirmation Message

Informatio	on	×
i	Load Plan restarted.	
		ОК

5. Click OK.

This adds another Load Plan, with the same name as that of the stopped ETL, in the **Load Plan Executions** folder of the **Sessions/Load Plan Executions** section. However, this instance of the Load plan is in Green color with a tilted S, which signifies that the ETL is in progress.

### 8.3.4 Processing a Failed ETL

If an ETL process fails, you have the option of continuing the process from the failed step or executing it again from the beginning of ETL.

This section explains the steps to continue a failed ETL from the failed step and to execute it again from the beginning of ETL.

This section comprises the following sub-sections:

- Continuing the Failed Initial ETL
- Restarting the Failed Initial ETL

### 8.3.4.1 Continuing the Failed Initial ETL

The process to continue the failed Initial ETL from the failed step is exactly the same as that of the process of restarting the Initial ETL after stopping it.

See the Restarting the ETL section for the step-by-step procedure to continue the failed Initial ETL from the failed step.

### 8.3.4.2 Restarting the Failed Initial ETL

The process to restart the failed Initial ETL from the beginning is exactly the same as that of the process of running the Initial ETL.

However, you need to execute certain steps before restarting the Failed Initial ETL, refer to the Restarting the Failed Initial ETL section for the complete details.

See the Running the ETL section for the step-by-step procedure to restart the failed Initial ETL from the beginning of ETL.

# 8.4 Monitoring Initial ETL Process: ODI Console

This section describes the steps required to monitor the ETL process using the Database Integrator Console.

This section comprises the following sub-sections:

- Viewing the Steps of Load Plan
- Monitoring the ETL
- Debugging the Failed ETL
- Monitoring the Restarted ETL (Resume)

### 8.4.1 Viewing the Steps of Load Plan

Before executing the Initial ETL, you can view the steps of the Load Plan for the Initial and the Incremental ETL.

To view the steps of Load Plan, execute the following steps:

- 1. Log on the Oracle Data Integrator Console and select the Management tab.
- 2. Navigate to Runtime > Scenarios/Load Plans > Load Plans.
- **3.** Right-click **LP\_INI\_AM** (Load Plan for Initial ETL) or **LP\_INC\_AM** (Load Plan for Incremental ETL) and select **View**, as shown in the following figure:



Figure 8–44 Navigating to the Load Plans

This displays the steps for the Load Plan in the **Relationships** section in the right pane, as depicted in the following figure:

Figure 8–45 Viewing the Steps of the Load Plan

elationships						
🔄 Steps	🐻 Exceptions	? Variables	Executions			
Step Number	Steps Hierarchy	Enabled	Scenario/Variable	Restart	Context	Logical Agent
0	V 🕏 root_step			Restart From Failure		
1	🍪 SCN_co	Image: A start and a start	SCN_compile_sche	Restart from failed		
2	🍪 SCN_co	<ul> <li>Image: A start of the start of</li></ul>	SCN_compile_sche	Restart from failed		
3	🍪 SCN_co	<ul> <li>Image: A start of the start of</li></ul>	SCN_compile_sche	Restart from failed		
4	SCN_etl	<ul> <li>Image: A start of the start of</li></ul>	SCN_etl_pre_req	Restart from failed		
5	🍪 SCN_m	<ul> <li>Image: A start of the start of</li></ul>	SCN_mark_etl_sta	Restart from failed		
6	🐝 SCN_se	<ul> <li>Image: A start of the start of</li></ul>	SCN_set_etl_statu	Restart from failed		
7	🍪 SCN_m	¥	SCN_maintain_log	Restart from failed		
в	SCN_etl	~	SCN_etl_log_start	Restart from failed		
9	🍪 SCN_up	~	SCN_update_etl_j	Restart from failed		
10	🍪 SCN_po	<b>v</b>	SCN_populate_co	Restart from failed		
11	SCN_tr	~	SCN_truncate_dict	Restart from failed		

### 8.4.2 Monitoring the ETL

To monitor the progress of the initial ETL after executing the **LP\_INI\_AM** Load Plan, execute the following steps:

 Select the Management tab and navigate to Runtime > Sessions/Load Plan Executions > Load Plan Executions.

You can view a tilted **s** in Green color, which signifies that the ETL process is running properly, as depicted in the following figure:



Figure 8–46 Initial ETL in Progress

**2.** Double-click the session to view the list of steps in the **Relationships** section in the right pane. It also displays the list of steps that have been completed, as depicted in the following figure:

Figure 8–47 Viewing Completed Steps in the ETL Process

elationships									
Step Number	Variables	Status	Ssions	Start	End	Scenario/Variable	Session ID	Return Code	Error Message
47	🚱 SCN_m	0	00:01	9:43:49 PM	9:43:50 PM	SCN_manage_con	48013	0	
48	6 SCN_m	0	00:09	9:43:51 PM	9:44:00 PM	SCN_manage_sm	49013	0	
49	SCN_lo	0	00:14	9:44:01 PM	9:44:15 PM	SCN_load_meddra	50013	0	
50	SCN_lo	0	00:01	9:44:15 PM	9:44:16 PM	SCN_load_who Ve	51013	0	
51	G SCN_po	0	00:00	9:44:17 PM	9:44:17 PM	SCN_populate_rm	52013	0	
52	SCN_se	0	00:07	9:44:17 PM	9:44:24 PM	SCN_set_smq_ter	53013		
53	SCN_po	10.F		X		SCIV_populace_hei			
54	SCN_lo					SCN_load_lm_cfg			
55	SCN_lo			Chana Camala		SCN_load_reports			
56	6 SCN_po			steps comple	ieu	SCN_populate_cas			
	404								

### 8.4.3 Debugging the Failed ETL

You can view the step where the ETL process failed and also view the error message related to the ETL process failure, using the following procedure:

In the Management tab, navigate to Runtime > Sessions/Load Plan Executions > Load Plan Executions, to view the current status of the ETL process, as shown in the following figure:



Figure 8–48 Viewing the Failed ETL Process

You can view the status of the Load Plan in Red color with the **X** symbol, which signifies that the ETL session is not in progress.

**2.** Double-click the Load Plan. This displays the list of steps for the Load Plan in the **Relationship** section in the right pane. The step because of which the ETL process has failed, is highlighted in Red color with the **X** symbol, as highlighted in the following figure:

Figure 8–49 Viewing the Failed Step for the ETL Process

elationships								
📑 Steps	📍 Variables	Sessions						
Step Number	Status	Duration	Start	End	Scenario/Variable	Session ID	Return Code	Error Message
114		00:02	9:46:32 PM	9:46:34 PM	SCN_populate_cas	115013	0	
115	. 0	00:01	9:46:34 PM	9:46:35 PM	SCN_populate_cas	116013	0	
116	. 🧿	00:01	9:46:36 PM	9:46:37 PM	SCN_populate_cas	117013	0	
117		00:00	9:46:37 PM	9:46:37 PM	SCN_fr_ins_dumm	118013	0	
118	. 🙆	00:01	9:46:38 PM	9:46:39 PM	SCN_pop_fr_consi	119013	ODI-1530	ODI-1530: Load p
119					SCN_pop_fr_conci			
120					SCN_pop_etl_su_c			
121					SCN_pop_rm_su_c			
122			Failed S	tep	SCN_populate_cas			
123					SCN manage sm			

You can move the mouse cursor over the error message to view the complete message, as shown in the following figure:

Figure 8–50 Viewing the Error Message

lationships											
Steps	? Variables	📑 Sessio	ns								
ep Number	eps Hierarchy	Status	Duration	Start	End	Scenario/Variable	Session ID	Return Code	Error Message	Row Count	Insert Cou
4	( SCN_00	0	00:02	9:46:32 PM	9:46:34 PM	SCN_populate_cas	115013	0		0	0 1
5	SCN_po	0	00:01	9:46:34 PM	9:46:35 PM	SCN_populate_cas	116013	0		0	0
6	SCN_po	0	00:01	9:46:36 PM	9:46:37 PM	SCN_populate_cas	117013	0		0	0
7	SCN_fr	0	00:00	9:46:37 PM	9:46:37 PM	SCN_fr_ins_dumm	118013	0		0	0
8	SCN_00	0	00:01	9:46:30 PM	9:46:39 PM	SCN_pop_fr_consi	119013	ODI-1530	00I-1530: Load pl	0	0
9	SCN_po					SCN_pop_fr_consi					
D	\$ SON_po					SCN_pop_etl_su_c				COI-1530: Load pl	an instance was stoppe
1	SCN_00					SON_pop_rm_su_c				- Copyreite	
2	SCN_po					SCN_populate_cas					
3	@ SON_m					SCN_manage_sm					
4	ALCON M					SCN manage rop					

You can also navigate to **Runtime > Sessions/Load Plan Executions > Sessions**, right-click the stopped session, highlighted in Red color with the ! symbol, and select **View**, as depicted in the following figure:

Browse Management		
	60 🦻	1 % %
Runtime		
E E Scenarios/Load Plans		
V 📴 Sessions/Load Plan Executions		
V Jy Sessions		
119013 - SCN_pop_fr_consistency_lc	8	
💋 118013 - SCN_fr_ins_dummy_record	View	Alt+V
💋 117013 - SCN_populate_case_tables_RM_	Create	Alt+N
116013 - SCN_populate_case_tables_RM_	Edit	Alt+U
💋 115013 - SCN_populate_case_tables_RM_	Delete	Del
💋 114013 - SCN_populate_case_tables_RM_	Dectart	015-LS
💟 113013 - SCN_populate_case_tables_RM_	Restart	ALLE
🔯 112013 - SCN_populate_case_tables_RM_	Refresh	AIL+R
💋 111013 - SCN_populate_case_tables_RM_	Collogae	
💋 110013 - SCN_populate_case_tables_RM_	Collapse	
109013 - SCN_populate_case_tables_RM_	Expand All Bel	ow
🛛 108013 - SCN_populate_case_tables_RM_	Collapse All Be	slow
107012 SCN seculate area tables DM	-	
M TOYOTS - SCN_DUDUIALE_Case_Cables_RM_		

Figure 8–51 Viewing the Stopped Session

This displays the error details in the right pane, as depicted in the following figure:

Figure 8–52 Viewing the Error Details



You can also log on to the Oracle SQL Developer using the Argus ETL user credentials and execute the queries to view the error message, as shown in the following figure:

 Workspeet
 Query Builder

 1
 SELECT \* FROM etl\_stage\_log ORDER BY id DESC;

 3
 SELECT \* FROM etl\_mart\_log ORDER BY id DESC;

 3
 SELECT \* FROM etl\_mart\_log ORDER BY id DESC;

 Script Output ×
 Query... ×

 Image: Solid State in the stat

Figure 8–53 Viewing Error Message using SQL Developer

The following are the queries that you can use to view the location of the error:

1. SELECT \* FROM etl\_stage\_log ORDER BY id DESC;

If you are not able to view any error message after executing this query, you can execute the query mentioned in point 2.

2. SELECT \* FROM etl\_mart\_log ORDER BY id DESC;

### 8.4.4 Monitoring the Restarted ETL (Resume)

Once you have restarted a stopped ETL process, you can view the status of the process using the following procedure:

In the Management tab, navigate to Runtime > Sessions/Load Plan Executions > Load Plan Executions section, to view the current status of the ETL process, as shown in the following figure:

Figure 8–54 Viewing the Restarted ETL Process Status

A CI Contra Taka maken Consela

Browse Management	
	60 🥝 🥢 💥 🔀 🕅
7 🔣 Runtime	
🕞 醴 Scenarios/Load Plans	
V 🔯 Sessions/Load Plan Executions	
Sessions	
V 🛅 Load Plan Executions	
3013 - 2 - LP_INI_AM	
3013 - 1 - LP_INI_AM	
Folders	
> 🛃 Design Time	
> 🚰 Topology	

This restarted ETL Process is in Green color with a tilted **s**, which signifies that the ETL is in progress again.

You can view the status of the steps completed before restarting the ETL and the steps after restarting the ETL, by double-clicking the session in progress.

The steps display in the **Relationship** section in the right pane, as depicted in the following figure:

Figure 8–55 Viewing the Steps of the Restarted ETL

telationships			Steps befor	e Restarting ETL			
📑 Steps	🥐 Variables 🛛 📑 Sessions		1				
Step Number	ps Hierarchy	Status	Duration	Start	End	Scenario/Variable	Session ID
113	SCN_populate_case_tables_RM_CASE_USER	3	00:02	9:46:30 PM	9:46:32 PM	SCN_populate_cas.	. 114013
114	SCN_populate_case_tables_RM_CASE_VACC	3	00:02	9:46:32 PM	9:46:34 PM	SCN_populate_cas.	. 115013
115	SCN_populate_case_tables_RM_CASE_VACC	100	00:01	9:46:34 PM	9:46:35 PM	SCN_populate_cas.	. 116013
116	SCN_populate_case_tables_RM_CASE_VACC	3	00:01	9:46:36 PM	9:46:37 PM	SCN_populate_cas.	117013
117	SCN_fr_ins_dummy_record	4	00:00	9:46:37 PM	9:46:37 PM	SCN_fr_ins_dumm	. 118013
118	SCN_pop_fr_consistency_log	0	08:12	9:46:38 PM	9:54:50 PM	SCN_pop_fr_consi	. 119013
119	SCN_pop_fr_consistency_log_hist	0	00:00	9:54:51 PM	9:54:51 PM	SCN_pop_fr_consi.	. 120013
120	SCN_pop_etl_su_cases_to_process	Steps a	ter Restarting FTI	9:54:52 PM	9:54:52 PM	SCN_pop_etl_su_c.	. 121013
121	<pre>\$     SCN_pop_rm_su_case_study_drug </pre>	Steps a	ter nestarting EIL	9:54:53 PM	9:54:53 PM	SCN_pop_rm_su_c.	. 122013
122	\$\$ SCN_populate_case_locked_rev	0	00:00	9:54:57 PM	9:54:57 PM	SCN_populate_cas.	. 123013

# 8.5 Running the Incremental ETL

For step-by-step information related to the Incremental ETL tasks such as Running, Stopping, and Restarting the Incremental ETL through:

- ODI Studio, see Section 12.3, "Managing Incremental ETL Process"
- ODI Console, see Section 13.3, "Managing Incremental ETL Process"

# **Uninstalling the Argus Mart Application**

This section of the guide introduces you to the procedure to uninstall the Argus Mart application.

To uninstall the Argus Mart application, execute the following steps:

**1.** Double-click **Setup.exe** to open the Oracle Universal Installer, available at the following location:

```
<ArgusMart_HOME>\Disk1\install
```

**2.** Click **Deinstall Products** on the **Welcome** screen of the Argus Mart Installer, as depicted in the following figure:

Figure 9–1 Uninstalling Argus Mart

😹 Oracle Universal Installer: Welcome	
Welcome	HEALTH SCIENCES
The Oracle Universal Installer guides you through the ins	stallation and configuration of your
Oracle products.	
Click "Installed Products" to see all installed products.	Deinstall Products About Qracle Universal Installer)
Help Installed Products Back	Next Install Cancel

This displays the **Inventory** screen, as depicted in the following figure:

You have the following Oracle p	roducts installed:
⊕-Independent Products	1
⊖-Oracle Homes	
⊕⊡ OraClient11g_home1	
Not Available	
If you want to remove Oracle so	fware, please check the items and click "Remove".
To see the languages installed component and then click "Deta	and other details of a component,select the

Figure 9–2 Inventory Screen

- **3.** Expand **Independent Products** in the **Contents** tab. This displays Argus Mart in the list of Independent Products.
- **4.** Select the checkbox adjacent to **Oracle Argus Mart 7.0.3.0.0**, as depicted in the following figure:

You have the follow	wing Oracle products installed:
-Independent F	rgus Mart 7.0.3.0.0
Product Informa Location: C:\ArgusMart703\	ation oracle.hsgbu.am
Show empty he If you want to remo "Remove".	omes. ove Oracle software, please check the items and click
To see the langua	id then click "Details"

Figure 9–3 Selecting Argus Mart for Uninstallation

5. Note the installation location displayed under the **Product Information** frame.

Example - Location C:\ArgusMart703\oracle.hsgbu.am specifies installation path as C:\ArgusMart703

6. Click **Remove**.

This displays the following confirmation message:

-Independent Pr	oducts (1 product)	
L Oracle Argu	s Mart 7.0.3.0.0	

Figure 9–4 Confirmation to Un-install Argus Mart

- **7.** Click **Yes**. This displays a progress bar and subsequently removes Argus Mart from the list of Independent Products.
- 8. Click **Close** to exit from the **Inventory** window.
- 9. Click **Cancel** in the Oracle Universal Installer window to exit.
- **10.** Delete the folder, where the Argus Mart was installed, from the local file system. Example: C:\AM
- **11.** Navigate to **start > All Programs > Oracle > Oracle Argus Mart**.
- **12.** Right-click **Oracle Argus Mart**. This displays a menu, as depicted in the following figure:

Figure 9–5 Deleting Oracle Argus Mart through Start Menu

🗑 Oracle	۱.	💼 Oracle Argus Mart 🔸	🧧 Schema Creation Too
			<b>Open</b> Explore
			Relete Kename
			Sort by Name Properties

- 13. Click Delete.
- **14.** Remove the TNS entry of the Argus Mart database from the given Oracle Home path (Figure 2–6) located at

..\network\admin\tnsnames.ora

**15.** Restart the system.

**Note:** If you are re-installing Argus Mart on the same server, you must provide the same folder path that was specified during the previous installation process.

For example, if you installed Argus Mart at the **C:\AM** location and uninstall it using the steps mentioned above, you must enter the same folder path (for example, **C:\AM**) that was entered in the previous installation process.

=

# Part II Administration

This part of the Oracle Argus Mart Installation and Administration Guide describes administrative tasks that enables you to manage Oracle Argus Mart.

Part II contains the following chapters:

- Chapter 10, Setting Context in Multi-tenant Environment
- Chapter 11, Secure Unblinding in Argus Mart
- Chapter 12, Incremental ETL: ODI Studio
- Chapter 13, Incremental ETL: ODI Console
- Chapter 14, Re-initializing the ETL Process
- Chapter 15, Troubleshooting

# Setting Context in Multi-tenant Environment

In a multi-tenant setup, you can view only one enterprise data at a time for which context has been set.

To set the context for an enterprise, execute the following steps:

- 1. Connect to the Argus Mart User (AM\_MART\_USER).
- 2. Execute the following command:

```
pkg_rls.set_context(:LoginUserName, :Enterpriseid, 'ARGUS_MART', NULL);
```

Where,

- LoginUserName refers to the User Name
- Enterpriseid refers to the ID for the enterprise
- ARGUS\_MART refers to the Application Name

This completes the steps to set the context for the enterprise.

#### Example 10–1 Setting Context for an Enterprise

Execute pkg\_rls.set\_context('admin',3,'ARGUS\_MART',NULL);

# **Secure Unblinding in Argus Mart**

This chapter explains the concept of Blinded Security for certain table columns in Argus Mart for a drug study.

The value for some of the table columns in Argus Mart is dependent upon the selection of the **Study is eligible for Unblinding** checkbox, which is present in **Studies Configuration** under the **Business Configuration** section in Argus Safety, as shown in the following figure:

Figure 11–1 Study is eligible for Unblinding Checkbox in Argus Safety

ORACLE						Welcome Ritu Gupta, Monday, December	17, 2012 (AS72Q2M1-Ent_SH_2)	Home Help Close
Code Lists Business Configuration	Access Management	System Configuration	Tools					
STUDIES CONFIGURATION								
Browser	CC Charles ID							
Occupied By Desirate / Studies / Destude	GG Stedy ID		W Designed ID		04b 10			
organized by Projects / Studies / Products	CC Shiel D		CC Project ID		other to	Observe study Ty	pe (L2D)	î
Contains - Filter	and a		Study Development P	hase	I			
Displaying Rows 1-43 (43)	Template only				-			
(a) B Proi D 5 (1)	Arms (1)						Crev	Delete
a B Proi D.6 (1)	Y Study Name		Y Study Type		Product License			
B.Prol.D.7 (1)	GG Study Name		Double Bloded		(USA Lie 123) Test Drug 2 - Trade Name			
+ DB B.Proj.D.8 (1)	Products (2)						Add WHO Drup Add Prod	Delete
🖶 🧰 B. Proj. D. 9 (1)	E Product Name				Dosene Fr	orm Strength	linita Bi	and and
🚽 📴 Begin_ çünik(ş'yeÅÁtÁtÁtá çünik(ş_Dbin	Test Days 0. Destant	News			County I	ann an engin		2
e) - 📴 Begin_ pEnW§'yeAAbAbAbA pEnW§_Nbin	<ol> <li>Test brug 2 - Product</li> </ol>	name			Granue	20	83 [	0
🚽 🛅 Begin_ ¢EnW§'yeÀÁbÁbÁbÁ ¢EnW§_Sblin	2. prod1				Injection	50	mi	2
1 CURE (20)								
1 DAB (3)								
GG Project (1)	GG Study Name (0)	(New)						
G GG Study ID (1)	Clinical References (0)						A	Id Delste #
GG_PROJECT01 (0)	Reference Type			Cou	intry		Reference Number	
A MMR Project DB (3)	No records to display.							
A MAR Project ND (3)								
Desired D 1 (1)								
<ul> <li>Project D 7 (1)</li> <li>Project D 2 (1)</li> </ul>	Selected Countries (0)			Add Delete,	Product Abbreviation			
Project D 3 (1)	End Date	Selected Countries			GG Pr			
Project D 4 (1)					Study Centers(1)			Modify
Project ID 5 (1)					Canada (Relsys-Canada)			ĉ.
+- D Project ID 6 (1)					Study Description			
					attas description			
e Project ID 8 (1)					ulus			÷
n Project ID 9 Non Company (1)					Investigator Alert			
n- 🔁 Study 1 (1)					(None)			• 🔎 🗚
Study 2 (1)					Study is eligible for Unblinding			
n- 🔁 Study 3 (1)					Enable Study Specific Encoding		Study Encoding	
4- Study 4 (1)	Study Reporting (0)						A44	Delete
A- Study 5 (1)	Inherit reporting rules fo	om templete				-		
A- TEST PROJECT D (5)	inners reporting rules in	om template				•		
WOND (5)	Always report Country	у	Licens	е Туре	Reporting Destination	Time Fram	e Possible Re	port Forms
a a A - 22 (4)	No records to display.							
							Reporting Rules in Diue are inherited a	and cannot be modified *
						Save Add Study Copy	Gopy with Products De	Vere Print
Done						📢 Local intra	net   Protected Mode: Off	- 100% ·

If the **Study is eligible for Unblinding** checkbox is checked, the actual values for all the blinded columns is displayed in Argus Mart tables.

However, if the **Study is eligible for Unblinding** checkbox is not checked, the actual values for all the blinded columns are replaced by NULL, Blinded, or any other value in the Argus Mart tables.

In case of the Reporting Mart, there are three views which comprise the Blinded information: v\_rm\_su\_case\_product, v\_rm\_su\_case\_prod\_drugs, and v\_rm\_su\_case\_ dose\_regimens. These views display the actual data only if the **Study is eligible for Unblinding** checkbox is checked.

Similarly, in case of a Signal Mart, there are certain table columns which comprise the Blinded information. The name of these columns end with \_su, which represents Secure Unblinding. These table columns display the actual data only if the **Study is eligible for Unblinding** checkbox is checked.

# **Incremental ETL: ODI Studio**

This chapter describes the steps required to administer the ETL process using the Oracle Data Integrator Studio (ODI Studio).

This chapter comprises the following sub-sections:

- Scheduling Incremental ETL
- Monitoring Incremental ETL Process
- Managing Incremental ETL Process

### 12.1 Scheduling Incremental ETL

The AM.zip file contains pre-configured ETL scheduling in Inactive mode.

The Incremental ETL is used to load the delta data. You can execute an Incremental ETL either by executing Load Plan **LP\_INC\_AM**, or scheduling an ETL to run at the configured time interval.

To schedule a Load Plan, execute the following steps:

- 1. In the **Designer** tab, navigate to **Load Plans and Scenarios** section and expand **LP\_INC\_AM** (Load Plan for Incremental ETL).
- **2.** Right-click **Scheduling** and select **New Scheduling**, as depicted in the following figure:

Figure 12–1 Scheduling ETL



This displays the **Load Plan Scheduling** dialog box, as depicted in the following figure:

Definition	Scheduling [Load Plan: LP_INC_AM]
Execution Cycle Variables Privileges Version	Context: CTX_ARGUSMART  Agent: LA_AM
	<ul> <li>Active</li> <li>Inactive</li> <li>Active for the period:</li> </ul>
	□ Starting:       Date:       Dec 24, 2012       ▼       Time:       10:26:38 AM ♀       □         □ Ending       Date:       Dec 24, 2012       ▼       Time:       10:26:38 AM ♀       □         □ Every day between:       from:       10:26:38 AM ♀       to:       10:26:38 AM ♀       □
	Except these days of the month
	Except these days of the week: Monday Tuesday Wednesday Thursday
	Execution
	On startup       Monday       Tuesday       Wednesday       Thursday         Simple       ✓       Friday       Saturday       Sunday         Hourly       Time:       12:00:00 AM ◆         Ø Weekly       Monthly (day of the month)
	<ul> <li>○ Monthly (week day)</li> <li>○ Yearly</li> </ul>

Figure 12–2 Scheduling the Load Plan Dialog Box

You can set options given in the **Status** and **Execution** sections, according to the requirements to schedule the Load Plan.

# 12.2 Monitoring Incremental ETL Process

The process of monitoring the Incremental ETL using the Oracle Database Integrator Studio is same as the process of monitoring the Initial ETL.

For step-by-step information related to monitoring the Incremental ETL process using the ODI Studio, see Section 8.2, "Monitoring Initial ETL Process: ODI Studio."

### 12.3 Managing Incremental ETL Process

This section describes the steps required to manage the Incremental ETL process using the Oracle Database Integrator Studio.

This section comprises the following sub-sections:

- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Stopped or a Failed ETL

### 12.3.1 Running the ETL

To run the Incremental ETL, execute the following steps:

1. Open the Oracle Data Integrator Studio and click **Connect to Repository**. This displays the **Oracle Data Integrator Login** window, as depicted in the following figure:

Figure 12–3 Oracle Data Integrator Login Window

Oracle Data I	Integrator Login		Þ
Login Name:	odi_work	 - 1	×
User:	SUPERVISOR		
Password:			

- 2. In the Oracle Data Integrator Login window:
  - a. Select the ODI Work Repository name from the Login Name drop-down list.
  - **b.** Enter the name of the ODI user in the **User** field.
  - **c.** Enter the password for the ODI user in the **Password** field.
  - d. Click OK. This displays the Oracle Data Integrator Screen.
- 3. Select the **Operator** tab in the left pane.
- **4.** Expand the **Load Plans and Scenarios** section, as highlighted in the following figure:



Figure 12–4 Load Plans and Scenarios

The **LP\_INC\_AM** option in this section represents the load plan for the Incremental ETL process for Argus Mart.

**5.** Right-click the **LP\_INC\_AM** option. This displays a menu, as shown in the following figure:



Figure 12–5 Executing the Incremental ETL

**6.** Click **Execute**. This displays the **Start Load Plan** window, as shown in the following figure:

Figure 12–6 Start Load Plan Window

- 7. In the Start Load Plan window:
  - a. Select CTX\_ARGUSMART from the Context drop-down list.
  - b. Select LA\_AM from the Logical Agent drop-down list.
  - c. Select the desired log level from the Log Level drop-down list.
  - **d.** Click **OK**. This displays the **Information** dialog box with the **Load Plan Started** confirmation message, as shown in the following figure:

Figure 12–7 Load Plan Started Confirmation Message

Informati	on	×
i	Load Plan started.	
		ОК

8. Click OK.

You can verify the status of the ETL process by navigating to the **Load Plan Executions** section and expanding the **Load Plan** folder. You can view the status of the Load Plan in **Green** color with tilted **s**, which signifies that the ETL session is in progress, as highlighted in the following figure:

File Edit View Search QDI Tools Window Help	
ADesigner × 🗷 Operator × 🖾 Topology × 🍰 Security ×	G
@ 7 @ 5€	-
Session List	J
Hierarchical Sessions	1
Toad Plan Executions	1
Keywords	

Figure 12–8 Status of the Load Plan

### 12.3.2 Stopping the ETL

To stop the Incremental ETL, execute the following steps:

1. Right-click the Load Plan, which you want to stop, in the Load Plan folder of the Load Plan Executions section. This displays a menu, as shown in the following figure:

Figure 12–9 Stopping the Incremental ETL

🔩 [odi_work] Oracle Data Integrator 11g	
<u>File Edit Yiew Search ODI Tools Window H</u>	elp
ң Designer 🗴 🔣 Operator 🗴 🎢 Topology 🗴   🔏 Securi	ty X 🔔
₩ 7 ₩ 5€	-
Session List	
Hierarchical Sessions	i i
👕 Load Plan Executions	
	<u>Open</u> <u>Vjew</u>
🗄 🚔 User	💥 Delete 🛛 🛛 Delete
Image: All Executions	Stop Normal
	Stop Immediate

**2.** Select **Stop Normal**. This displays the **Stop Load Plan** dialog box, as depicted in the following figure:

Figure 12–10 Selecting the Physical Agent



- 3. Select PA\_AM from the Physical Agent drop-down list.
- 4. Click OK. This stops the execution of the Load Plan.

You can verify the status of the ETL process by navigating to the **Load Plan Executions** section and expanding the **Load Plan** folder. You can view the status of the Load Plan in **Red** color with the X symbol, which signifies that the ETL session is not in progress, as highlighted in the following figure:

Figure 12–11 Stopped Incremental ETL Session



**Note:** You must verify in Argus Mart database if the ETL session has been successfully ended after this step.

### 12.3.3 Restarting the ETL

Restarting the Incremental ETL process enables you to start the ETL process from the last execution step where it was stopped or failed.

To restart the Incremental ETL, execute the following steps:

 Right-click the Load Plan, which you want to restart, in the Load Plan folder of the Load Plan Executions section. This displays a menu, as shown in the following figure:

<u>File E</u> dit <u>Y</u> iew <u>S</u> earch <u>O</u> DI <u>T</u> ools <u>W</u> indow	<u>H</u> elp		
🔥 Designer 🗴 🔣 Operator 🗴 🔏 Topology 🗴   🙈 S	iecurity ×		
₦ 7 % 5≑		- 🖾	
Session List			
Hierarchical Sessions		1	
Load Plan Executions		1	
E — ∰ Date E → ∰ Agent E → ∰ Load Plan E → ∭ LP_INC_AM → ₩ (♥ 9001 - 1 - LP_INC_AM - Dec 3, 2012 6:01 \$	52 PM		
E Status		Open View	
User	×	<u>D</u> elete	Delete
Himado Ali Execucions		Stop Normal Stop Immedi	ate
		Second and second	

Figure 12–12 Restarting the Incremental ETL

**2.** Click **Restart**. This displays the **Restart Load Plan** dialog box, as shown in the following figure:

Figure 12–13 Restart Load Plan Dialog Box

Choose a Physics "LP_INC_AM" , fro	al Agent and a Log Level to Restart
Physical Agent:	PA_AM -
2	PA_AM

- 3. Select PA\_AM from the Physical Agent drop-down list.
- 4. Select the required log level from the Log Level drop-down list.
- **5.** Click **OK**. This displays the **Information** dialog box with the **Load Plan restarted** message, as depicted in the following figure:

Figure 12–14 Loan Plan restarted Confirmation Message

formati	on	
i	Load Plan restarted.	
		ОК

6. Click OK.

This adds another Load Plan, with the same name as that of the stopped ETL, in the **Load Plan** folder of the **Load Plan Executions** section. However, this instance of the ETL Process is in Green color with a tilted S, which signifies that the ETL is in progress, as highlighted in the following figure:

File Edit View Search ODI Tools Window Help	
3 🖩 🗗 🗶 🖷 💼 🕨	
	(
@ 7 @ _ 5€	10
Session List	
Hierarchical Sessions	1
✓ Load Plan Executions	1
Date     Agent     Control Plan     Date     Control Plan     Date     Date	
9001 - 2 - LP_INC_AM - Dec 3, 2012 6:44:21 PM	
9001 - 1 - LP_INC_AW - Dec 5, 2012 6.01.52 PW	
🖽 😵 Status	
Bi Status Bi ∰ Keywords	

Figure 12–15 Restarted Load Plan

Once the ETL process is complete, the Load Plan is displayed in Green color with a completed symbol, as highlighted in the following figure:

Figure 12–16 Completed Load Plan



### 12.3.4 Processing a Stopped or a Failed ETL

The complete ETL process is divided into two major phases: Staging and Mart. The Mart phase starts only when the Staging phase is complete.

If an ETL process fails, you have the option of continuing the process from the failed step or executing it again from the beginning of ETL.

This section explains the steps to resume a failed ETL from the failed step and to execute it again from the beginning of ETL.

This section comprises the following sub-sections:

- Continuing the Failed Incremental ETL
- Restarting the Failed Incremental ETL

#### 12.3.4.1 Continuing the Failed Incremental ETL

If the last execution step of the failed or stopped ETL belongs to the Staging phase, the ETL resumes from the failed or stopped point, as shown in the following figure:
Failed Step	Step belongs to Staging, ETL continues from the failed step	1 .
cript Output * P Query *	1	1
D D TABLE NAME	CESCRUPTION	ORA_ERR_DESC
1 17717 p_populate_control_table - CONTROL_TABLE	Data population for SCONTROL_TABLE started.	
2 17718 p_populate_control_table	Error during data population in SCONTROL_TABLE.	ORA-00942: table or view does not existORA-06512: at "AM_STAGE
3 17719 p_populate_control_table - CONTROL_TABLE	Data population for SCONTROL_TABLE started.	
4 17720 p_populate_control_table - CONTROL_TABLE	Data population for SCONTROL_TABLE completed successfully. 1 row(s) processed.	
5 17721p_truncate_dict_tables	Truncation of Dictionary tables started.	
6 17722 p_truncate_dict_tables	Truncation of Dictionary tables completed successfully.	

Figure 12–17 Staging Phase: Incremental ETL Resumes from Failed or Stopped Point

If the last execution step of the failed or stopped ETL belongs to the Mart phase, the ETL resumes from the first step of the Mart phase and not from the failed or stopped point, as depicted in the following figure:

Figure 12–18 Mart Phase: Incremental ETL Resumes from the First Step of Mart

SELECT * FROM etl_mart_log where id>=4	3405 GEDER BY ID :	
Script Output X P Query X	Failed Step Step belongs to the Mart stage, ETL resumes from	the first step of the Mart stage
📌 📇 🍓 🙀 😒 🛛 Al Rows Fetched: 79 in 0.062 seco		
ID TABLE_NAME	DESCRIPTION	GRA_ERR_DESC
1 43405 p_pop_rm_su_case_study_drug	Data population for SN_SU_CASE_STUDY_DRUG started.	
2 43406 p_pop_rm_su_case_study_drug	Error meing data population in RM_SU_CASE_STUDY_DRUG.	ORA-00911: invalid characterORA-06512: at "AM_MART.PKS_SP
3 43407 p_populate_smq_backup_table	Fopulating Data in ETL_MEDDRA_SNQ_HELFER_TABLE for enterprises whose global_dict_id mapping has changed/Not changed	
4 43408 p_populate_smq_backup_tables	Fopulating Data in etl_meddra_smq_helper_table for enterprises whose global_dict_id mapping has changed/Not changed completed	
5 43409 p_populate_smq_backup_tables	Populating Data for ETL_MED_SNO_TERN_DETAIL_DATA	
6 43410 p_populate_smq_backup_tables	Data population for ETL_MED_SNO_TERN_DETAIL_DATA completed successfully 406180 row(s) processed.	
7 43411 p_populate_rm_tables	Data deletion for RM_MEDORA_SHO_CONTENT started.	

The process to continue the failed Incremental ETL from the failed step is exactly the same as that of the process of restarting the Incremental ETL after stopping it.

See the Restarting the ETL section for the step-by-step procedure to continue the failed Incremental ETL from the failed step.

## 12.3.4.2 Restarting the Failed Incremental ETL

The process to restart the failed Incremental ETL from the beginning is exactly the same as that of the process of running the Incremental ETL.

However, before restarting the ETL, you must log on to the Oracle SQL Developer or SQLPlus (or SQL Prompt) using the Argus ETL User credentials and execute the following statements:

EXEC pkg\_sm\_stage\_util.p\_set\_cmn\_profile\_value ('DATABASE', 'ODI\_ETL\_STATUS', '0');

EXEC pkg\_sm\_stage\_util.p\_set\_cmn\_profile\_value ('DATABASE', 'ETL\_SM\_ ITERATION\_NUMBER', NULL);

COMMIT;

To verify the successful execution of these statements, you can execute the following Select statements:

SELECT \* FROM rm\_cmn\_profile\_global WHERE KEY = 'ODI\_ETL\_STATUS';

The entry for the **Value** column must be **0** after executing this statement, as depicted in the following figure:

Figure 12–19 Select Statement 1 to Verify Successful Execution



 SELECT \* FROM rm\_cmn\_profile\_global WHERE KEY = 'ETL\_SM\_ITERATION\_ NUMBER';

The entry for the **Value** column must be blank after executing this statement, as depicted in the following figure:

Figure 12–20 Select Statement 2 to Verify Successful Execution

SELECT * FROM	rm_cmn_profile_global W	HERE KEY	= 'ETL_SM_ITH	ERATION_NUMB	ER';
Ouery Result X					
	All Rows Fetched: 1 in 0.051 seco	onds			
SECTION	KEY		TREE_NAME	KEY_TYPE	KEY_LABEL
1 DATABASE	ETL_SM_ITERATION_NUMBER				

See the Running the ETL section for the step-by-step procedure to restart the failed Incremental ETL from the beginning of ETL.

# **Incremental ETL: ODI Console**

This chapter describes the steps required to administer the ETL process using the Oracle Data Integrator Console (ODI Console).

This chapter comprises the following sub-sections:

- Scheduling an ETL
- Monitoring Incremental ETL Process
- Managing Incremental ETL Process

## 13.1 Scheduling an ETL

The ETL can be scheduled through ODI Studio only.

To schedule an ETL, see Section 12.1, "Scheduling Incremental ETL".

## **13.2 Monitoring Incremental ETL Process**

The process of monitoring the Incremental ETL using the Oracle Database Integrator Console is same as the process of monitoring the Initial ETL.

For step-by-step information related to monitoring the Incremental ETL process using the ODI Console, see Section 8.4, "Monitoring Initial ETL Process: ODI Console."

## 13.3 Managing Incremental ETL Process

This section describes the steps required to manage the Incremental ETL process using the Database Integrator Console.

This section comprises the following sub-sections:

- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Stopped or a Failed ETL

## 13.3.1 Running the ETL

To run the Incremental ETL, execute the following steps:

1. Open the Oracle Data Integrator Console. This displays the **Oracle Data Integrator Console Sign In** window, as depicted in the following figure:

Repository		
Work Repository		
* User Id		
<u>.</u>		
Password		

Figure 13–1 Oracle Data Integrator Sign In Window

- 2. In the Oracle Data Integrator Sign In window:
  - a. Select the ODI Work Repository name from the Repository drop-down list.
  - **b.** Enter the name of the ODI user in the **User Id** field.
  - c. Enter the password for the ODI user in the **Password** field.
  - **d.** Click **Sign In**. This displays the **Oracle Data Integrator Console** Screen, as shown in the following figure:

Figure 13–2 Oracle Data Integrator Console Screen

	Insole
Browse Management	Search
68 🔮 🖉 💥 🛯 🛍	Search Form
	😽 Design Time 🛛 🖉 Topology 🛛 🕏 Runtime 🖉 Sessions 🛛 📓 Load Plan Executions
	Search Text
	Case sensitive 🗖
	Model Object Type All
	Project Object Type All

- **3.** Select the **Management** tab in the left pane.
- Expand the Runtime folder and navigate to Runtime > Scenarios/Load Plans > LP\_INC\_AM, as highlighted in the following figure:



Figure 13–3 Scenarios/Load Plans

The **LP\_INC\_AM** option in this section represents the load plan for the Incremental ETL process for Argus Mart.

5. Click Execute, as highlighted in the following figure:

Figure 13–4 Executing the Incremental ETL



This displays the Execute Load Plan window, as shown in the following figure:

Load Plan	LP_INC_AM		
* Logical Agent	LA_AM	<u> </u>	
* Context	CTX_ARGUSMART	•	
* Log Level	5	•	
assign startup valu	0		
Variable	1	tup Value	
	3		
	4		
	5		
	0		
		1000	

Figure 13–5 Execute Load Plan Window

- 6. In the Execute Load Plan window:
  - a. Select LA\_AM from the Logical Agent drop-down list.
  - b. Select CTX\_ARGUSMART from the Context drop-down list.
  - c. Select the desired log level from the Log Level drop-down list.
  - **d.** Click **Execute**. This displays the **Information** dialog box with the **Load Plan Execution submitted successfully** confirmation message, as shown in the following figure:

Figure 13–6 Load Plan Started Confirmation Message

(i) Information	
Load Plan Execution submitted suc	cessfully.
	ОК

7. Click OK.

You can verify the status of the ETL process by expanding the **Load Plan Executions** folder in the **Sessions/Load Plan Executions** section. You can view the status of the Load Plan in **Green** color with tilted **s**, which signifies that the ETL session is in progress, as highlighted in the following figure:



Figure 13–7 Status of the Load Plan

## 13.3.2 Stopping the ETL

To stop the Incremental ETL, execute the following steps:

 Select the Load Plan, which you want to stop, by expanding the Load Plan Executions folder of the Sessions/Load Plan Executions section and click Stop, as shown in the following figure:

Figure 13–8 Stopping the Incremental ETL



This displays the **Stop Load Plan Execution** dialog box, as depicted in the following figure:

Stop Load Plan Execution	. 🕅
Load Plan Execution	LP_INC_AM
* Stop Type	Normal
* Physical Agent	Normal Immediate
	Normal
	Cancer

Figure 13–9 Stop Load Plan Execution Dialog Box

- 2. Select Normal from the Stop Type drop-down list.
- 3. Select OracleDIAgent from the Physical Agent drop-down list.
- 4. Click **Stop**. This displays the **Information** dialog box with the **Load Plan was Stopped Successfully** confirmation message, as depicted in the following figure:

Figure 13–10 Load Plan Stopped Confirmation Message

(i) Information	
Load Plan was Stopped Successfully	
	OK

5. Click OK.

You can verify the status of the ETL process by navigating to the **Load Plan Executions** folder in the **Sessions/Load Plan Executions** section. You can view the status of the Load Plan in **Red** color with the X symbol, which signifies that the ETL session is not in progress, as highlighted in the following figure:

Figure 13–11 Stopped Incremental ETL Session

Browse	Mai	nagem	ienc	-
	60	1	※ 🔮	62
Runtir	me			
⊳ 🔚 Sc	enarios/Lo	bad Plar	าร	
V 🙀 Se	ssions/Lo	ad Plan	Executio	ns
	Sessions			
7	Load Play	n Everi	tions	
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	The			
Desigi	n IIme	S		
P 📭 Pri	ojects	•		
	ndels	Sto	pped ET	L
🗁 🔚 Mo				
▷ <u> </u> ि Mo	obal Objec	:ts		

**Note:** You must verify in Argus Mart database if the ETL session has been successfully ended after this step.

## 13.3.3 Restarting the ETL

Restarting the Incremental ETL process enables you to start the ETL process from the last execution step where it was stopped or failed.

To restart the Incremental ETL, execute the following steps:

 Select the Load Plan, which you want to restart, in the Load Plan Executions folder of the Sessions/Load Plan Executions section and click Restart, as shown in the following figure:

Figure 13–12 Restarting the Incremental ETL



This displays the **Restart Load Plan Execution** dialog box, as depicted in the following figure:

Figure 13–13 Restart Load Plan Execution Dialog Box

📓 Restart Load Plan	Execution	2
Load Plan Execution	LP_INC_AM	
* Physical Agent	OracleDIAgent 🛒	
* Log Level	<b>3</b> -	
	Restart Cancel	

- 2. Select OracleDIAgent from the Physical Agent drop-down list.
- 3. Select the required log level from the Log Level drop-down list.
- **4.** Click **Restart**. This displays the **Information** dialog box with the **Load Plan restarted** message, as depicted in the following figure:

Figure 13–14 Loan Plan restarted Confirmation Message



5. Click OK.

This adds another Load Plan, with the same name as that of the stopped ETL, in the **Load Plan Executions** folder of the **Sessions/Load Plan Executions** section. However, this instance of the Load plan is in Green color with a tilted S, which signifies that the ETL is in progress.

## 13.3.4 Processing a Stopped or a Failed ETL

The processing of a stopped or a failed ETL in ODI Console is same as the processing of a stopped or a failed ETL in ODI Studio.

For detailed information, see Section 12.3.4, "Processing a Stopped or a Failed ETL".

## **Re-initializing the ETL Process**

Once you have sucessfully executed the Initial ETL process on a database, you cannot execute it again till the time you reset the mart environment. To facilitate this, you need to execute a Re-initial script. It is a Batch file, which re-initializes the database, so that you can run the Initial ETL on the database again.

**Note:** When you run the re-initial ETL, the data of Argus Mart is truncated and reloaded in RM and SM tables. Revision created due to reference data changes will be lost.

To execute the Re-initial script, execute the following steps:

1. Double-click the **am\_environment\_reset.bat** file available at the following path:

...\ArgusMart\Database\Utils\am\_environment\_reset.bat

This displays a warning message, which serves as a confirmation from you that you want to reset the Mart environment as shown in the following figure:

Figure 14–1 Confirmation of Resetting the Mart Environment



**2.** Enter **Y**, which represents **Yes**, in the **Do You Want to Continue (Y/N)**? field, if you want to continue with resetting the Mart environment to be able to run the Initial ETL on the database again.

Or

Enter **N**, which represent **No**, if you want to quit the process of resetting the Mart environment.

If you have entered **Y**, the **Reset Environment to Re-Run Initial ETL** Screen is displayed, as shown in the following figure:

Figure 14–2 Entering TNS Name to Connect to Database

C\Windows\system32\cmd.exe	
SQL*Plus: Release 11.2.0.3.0 Production on Tue Jul 23 15:15:27 2013	
Copyright <c> 1982, 2011, Oracle. All rights reserved.</c>	
	*##
Argus Mart 7.0.3	##
## Reset Environment To Re-Run Initial ETL	##
## Copyright F2013 UPacle Corporation. Hil Rights Reserved. ##	##
	*##
Enter Database TNS :	

- **3.** Enter the TNS Name to connect to the Argus Mart database in the **Enter Database TNS** field and press **Enter**.
- **4.** Enter the following parameters for the user who have administrator rights to access the ETL process.

**Note:** This user is referred to as Argus ETL User. If the user is not the database owner with the administrator rights for the ETL process, the system displays an error message.

- **a.** Enter the Argus Mart Database Owner in the **Enter Argus ETL User** field, and press **Enter**.
- b. Enter the password in the Enter Password for User field, and press Enter.
- c. Enter the name of the log file in the Enter log file name field, and press Enter.

The system displays a **Connecting** status message and once connected displays **Connected**, as shown in the following figure:

Figure 14–3 Connecting to the Database

G:\Windows\system32\cmd.exe	
SQL*Plus: Release 11.2.0.3.0 Production on Tue Jul 23 15:15:27 2013	
Copyright <c> 1982, 2011, Oracle. All rights reserved.</c>	
## Argus Mart 7.0.3 ##	
## ## ## Reset Environment To Re-Run Initial ETL ## ## Copyright -2013 Oracle Corporation. All Rights Reserved. ##	
Enter Argus ETL User : AM_ETL_USER Enter Password for user AM_ETL_USER : Enter log file name [eg. am_reset_environment.log] (Default log file name am_reset_environment.log will be taken if no value is entered) : env_reset_log 	.log
Connecting To AM_ETL_USER@ARGMART	
Connected.	
Reset of environment to execute re-initial ETL started. Reset of environment to execute re-initial ETL completed successfully.	
Environment Reset Logs written to env_reset_log.log	
Hit Enter to Finish:	

5. Press Enter to complete writing the logs.

ws\system32\cmd.exe Enter the TNS name to connect to AM database : ARGMART : AM\_ETL\_USER Enter Argus ETL User Enter Password for User AM\_ETL\_USER Enter comma separated enterprise short names [eg. ENT1,ENT2,ENT3] : ENT\_SH\_2, ENTEP\_3\_ENTERPRISE\_X Enter source enterprise short name for copying data (Default enterprise will be taken if no value is entered) : ENT SH 2 Enter log file name [eg. am\_create\_enterprise.log] (Default log file name am\_create\_enterprise.log will be taken if no value is entered) : am\_multi\_entprise.log Connecting to AM\_ETL\_USER onnected. If the connection to the database failed, stop and re-run the script. To stop processing, click the X icon on top right corner of the screen. Press Enter, if the status is Connected as AM\_ETL\_USERARGMART Verifying Argus Mart Application Type (single/multi tenant) Check existence of enterprises in Safety and Mart Enterprises existing in Safety : ENTEP\_3\_ENTERPRISE\_X,ENT\_SH\_2 Enterprises already existing in Mart : ENT\_SH\_2 ollowing enterprises will be created in Mart : ENTEP\_3\_ENTERPRISE\_X : Entep\_3\_Enterprise\_X Inserting data into rm\_cmn\_profile\_enterprise for enterprise Inserting data into safety cmn\_profile\_enterprise table for enterprise : Entep\_3\_Enterprise\_X Inserting data into etl\_sm\_fr\_mapping for enterprise : Entep\_3\_Enterprise\_X : Entep\_3\_Enterprise\_X Inserting data into etl\_sm\_ref\_mapping for enterprise The following enterprises have been created Successfully : ENTEP\_3\_ENTERPRISE\_X Enterprise creation log written to am\_multi\_entprise.log Press Enter to exit

Figure 14–4 Writing Enterprise Creation Logs

6. Press Enter to exit from the window.

# 15

# Troubleshooting

This chapter lists some of the error messages that might be displayed while working with Argus Mart, the cause for those messages, and the resolution.

The following is the list of error messages:

- Dictionary Reload Error
- ETL Execution Pre-Requisite Check Failed Error
- FR Consistency Log Error
- MedDRA Mismatch Error
- Multiple Enterprise Creation Messages
- SMQ-CMQ Loop Error

## 15.1 Dictionary Reload Error

## **Error Message**

The following error message is displayed during the ETL process, whenever the dictionary is reloaded in Argus Safety:

Figure 15–1	Dictionary	Reload Erro	r Message
-------------	------------	-------------	-----------

😳 Load Plan Ru	n			
Instance ID:	32589	Run #:	1	
Load Plan Name:	LP_INI_AM	Started By: SUPERVISOR		
Physical Agent:	PA_AM	Context:	CTX_ARGUSMART	
Start:	Dec 3, 2012 2:57:34 PM IST	End:	Dec 3, 2012 2:59:28 PM IST	
Duration:	00:01:54			
Status:	Error	Return Code:	ODI-1519	
Error Message:				
ODI-1519: Serial ODI-1217: Sessi ODI-1226: Step ODI-1232: Proce ODI-1228: Task Caused By: java ORA-06512: at ORA-06512: at	step "root_step (InternalID: 1589)" failed because child step "SCN_populate_meddra_ta an SCN_populate_meddra_tables (2043589) fails with return code 20010. PRC_populate_meddra_tables fails after 11 attempt(s). dure PRC_populate_meddra_tables execution fails. PRC_populate_meddra_tables execution fails. PRC_populate_meddra_tables execution fails. PRC_populate_meddra_tables (Procedure) fails on the target ORACLE connection DS_AI soll-SQLException: ORA-20010: ORA-20001: Unable to access Argus Safety table/view AM_STAGE_PKG_SM_DTOS", line 755	ables (InternalID:21589)" is in error. M ARGUSMART. MEDDRA_HLGT_HLT_COMP. Check all	required grants are present.	

You can also view this error message by logging on to the SQL Developer as the AM\_MART\_USER, as shown in the following figure:

Figure 15–2 Dictionary Reload Error Message: SQL Developer

Workst	Norsheet Query Builder								
1	SELECT * FROM et_stage_log BRDER BY 1 DESC;								
Qu	OueryRealt ×								
📌 🗄	📌 🚨 😡 🙀 🕵 SQL   Al Rows Fetched: 134 in 0.175 seconds								
		ID	TABLE_NAME	DESCRIPTION	ORA_ERR_DESC				
15	0	62	p_populate_meddra_tables	Data population for MEDDRA dictionary tables started.					
15	1	61	p_populate_meddra_tables	Error during data population from MEDRA_150_USER.MEDDRA_HLGT_HLT_C	ORA-20001: Unable to access Argus Safety table/view MEDDRA_HLGT_HLT_COMP. Check all requir				
152 60 p_populate_meddra_tables Data population for MEDDRA dictionary tables started.				Data population for MEDDRA dictionary tables started.					

#### **Cause of Error**

Whenever there is a dictionary reload in Argus Safety, some of the required privileges for the Argus Safety user, which you created, using the Schema Creation Tool during the Installation Process, are lost.

## Resolution

You must give the required privileges to the Argus Safety user. To do so, click the **Argus User Creation** link on the Schema Creation Tool, select the user that you created during the installation process in the **Argus Safety User Creation** dialog box, enter the name of the log file and click **OK** to give the required privileges to the user.

You can refer to Section 3.5.1, Creating User for the Argus Safety Database, for more information.

## 15.2 ETL Execution Pre-Requisite Check Failed Error

#### Error Message

There are some Pre-requisite checks that you must do before the execution of the ETL. The following is the error message, which is displayed if any of the Pre-requisites checks are not done:

Figure 15–3 Pre-Requisite Check Failed Error

Execution	🔯 Load Plan Run							
\$	Instance ID:	3011	Run #:	1				
oles	Load Plan Name:	LP_INC_AM	Started By:	SUPERVISOR				
iges	Physical Agent:	PA_AM	Context:	CTX_ARGUSMART				
	Start:	Nov 27, 2012 6:04:55 AM EST	End:	Nov 27, 2012 6:06:42 AM ES				
	Duration:	00:01:47						
	Status:	Error	Return Code:	ODI-1519				
	Error Message:							
	ODI-1519: Serial step "root_step (InternalID:2589)" faled because child step "SCN_etI_pre_reg_checks_incremental (InternalID:156589)" is in error. ODI-1217: Session SCN_etI_pre_reg_checks_incremental (128011) fails with return code 20010. ODI-1225: Step PRC_etI_pre_reg_checks_incremental fails after 1 attempt(s). ODI-1232: Procedure PRC_etI_pre_reg_checks_incremental execution fails.							
	Caused By: Java							

## **Cause of Error**

The following are the possible causes of this error message:

- If you are trying to run the Initial ETL on a database again without executing the Re-initial script.
- If you are trying to execute the Incremental ETL prior to the Initial ETL.

- If you have not configured the First Human Language Profile Switch using the Argus Safety console for the enterprises configured in Argus Mart. You must not leave the value for the First Human Language Profile Switch, as Blank.
- If the previous instance of the ETL is still not complete for the Load Plan.

#### Resolution

To resolve this error message, you must:

- Ensure that you run the Initial ETL on a database again only if you have already executed the Re-initial script. For more information on Re-initial script, see Chapter 14, "Re-initializing the ETL Process."
- If you are trying to run the Incremental ETL on a database, ensure that the Initial ETL has already been executed on it.
- Ensure that you have not left the value for the First Human Language Profile Switch for the enterprises configured in Argus Mart, as Blank.
- Ensure that the Previous Instance of the ETL process is complete. You can either
  resume the ETL process if it is in Stopped state, or you can execute the re-initial
  script on the database and restart the ETL process from the first step.

For more information on resuming or restarting the ETL process, see Chapter 8, "Extracting, Transforming, and Loading Data."

## 15.3 FR Consistency Log Error

#### Error Message

You can run the following query using the SQL developer to view the Flexible Re-categorization (FR) Consistency warning message:

SELECT enterprise\_id, code\_list\_id, decode\_context, code, fr\_type, log\_message, log\_ date\_time FROM etl\_fr\_consistency\_log ORDER BY enterprise\_id, code\_list\_id

The following is the error message:

SE	SELECT enterprise_id, code_list_id, decode_context, code, fr_type, log_message, log_date_time FROM etl_fr_consistency_log ORDER BY enterprise_id, code_list_id								
cript ( 🛄 (	cript Output X Devery Result X								
1	ENTERPRISE_ID	DECODE_CONTEXT	CODE	FR_TYPE	DOG_MESSAGE				
1	3 ACTION_TAKEN	E2B	10000101	DISCRETE	Warning: The ACTION_TAKEN : 10000101 has display value as NULL in E2B decode_context				
2	3 ACTION_TAKEN	E2B	10000301	DISCRETE	Warning: The ACTION_TAKEN : 10000301 has display value as NULL in E2B decode_context				
3	3 ACTION_TAKEN	E2B	10000501	DISCRETE	Warning: The ACTION_TAKEN : 10000501 has display value as NULL in E2B decode_context				

#### Figure 15–4 FR Consistency Error

## **Cause of Error**

The display value for a codelist is NULL in the **rm\_code\_list\_detail\_discrete** table in Argus Safety.

#### Resolution

You must update the value for the codelist in the **rm\_code\_list\_detail\_discrete** table in Argus Safety and re-run the ETL.

## 15.4 MedDRA Mismatch Error

## **Error Message**

You can run the following query using the SQL developer to view the MedDRA mismatch warning message in the **etl\_mart\_log** table:

SELECT \* FROM am\_mart\_user.etl\_mart\_log WHERE table\_name = 'p\_check\_signal\_meddra\_ schema' ORDER BY 1 DESC;

The following is the error message:

Figure 15–5 MedDRA Mismatch Error

S	select * from AM_MART_user.etl_mart_log where table_name='p_check_signal_meddra_schema' order by 1 desc;						
Query	Result	x					
4	🖳 🔞 🙀 sol 🛛 All Rows Fetched: 2 in 0.004 seconds						
J.	ID 2	TABLE_	NAME	B DESCRIPTION	ORA_ERR_DESC		
1	40462	p_check_	signal_meddra_schem	Warning: The Empirica Signal MedDRA version is different from Argus Safety MedDRA version for Enterprise ID(s) 3			
2	40461	p_check_	signal_meddra_schem	Check MedDRA schema and version configuration for Empirical Signal			

## **Cause of Error**

During the ETL process, a check is done between the Argus Safety and the Argus Mart database to ensure that they are using the same MedDRA version. This warning message is displayed when these values do not match.

## Resolution

You must update the value for the MedDRA version in the **SIGNAL\_MEDDRA\_VER** table to ensure that it matches with the Argus Safety database value.

## **15.5 Multiple Enterprise Creation Messages**

The following is the list of validation messages that are displayed while creating multiple enterprises in Argus Mart:

- Source Enterprise Does Not Exist In Mart
- Enterprise Does Not Exist In Argus Safety
- Enterprise Does Not Exist For Configuration In Mart

## 15.5.1 Source Enterprise Does Not Exist In Mart

## **Error Message**

Given Source enterprise does not exist in Mart. Close the window and run application again.

## **Cause of Error**

While creating multiple enterprises in Argus Mart, you must enter an enterprise name which can be used as a template to create other enterprises. This enterprise is referred to as the Source Enterprise.

If the name of the Source Enterprise that you have entered while creating multiple enterprises does not exist in Argus Mart, this validation message is displayed.

## Resolution

The name of the Source Enterprise that you enter while creating multiple enterprises must exist in Argus Mart.

## 15.5.2 Enterprise Does Not Exist In Argus Safety

## Error Message

From the list provided, no enterprise exists in Argus Safety. Close the window and run application again.

#### **Cause of Error**

The name of the enterprises that you enter while creating multiple enterprises in Argus Mart must also exist in the Argus Safety database.

If these enterprise names do not exist in Argus Safety, this validation message is displayed.

### Resolution

You must ensure that the name of the enterprises that you enter while creating multiple enterprises in Argus Mart exist in the Argus Safety database.

## 15.5.3 Enterprise Does Not Exist For Configuration In Mart

## **Error Message**

From the list provided, no enterprise is valid for configuration in Mart. Close the window and run application again.

#### **Cause of Error**

This validation message is displayed if all the enterprise names that you have entered on the Multiple Enterprise Creation screen already exist in the Argus Mart database.

#### Resolution

You must ensure that the enterprise names that you want to create in Argus Mart using the Multiple Enterprise Creation screen do not already exist in Argus Mart.

## 15.6 SMQ-CMQ Loop Error

#### Error Message

Error in p\_set\_Child\_Record while processing term code self referencing parent child relationship leading to an infinite loop

## **Cause of Error**

There is an SMQ, which is a Parent in the hierarchy, and has also been referenced as a Child in the hierarchy. This is termed as the Self Referencing Parent Child relationship, which leads to an infinite loop.

#### Resolution

You must ensure that an SMQ, which serves as a Parent in the hierarchy, must not also be present as a Child in the hierarchy.