Oracle® Argus Mart

Installation and Administration Guide

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Oracle Argus Mart Installation and Administration Guide, Release 8.0

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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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Your source for the latest information about Oracle Argus Mart is Oracle Support's self-service Web site, My Oracle Support (formerly MetaLink).

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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.

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complete list of Oracle products and then select your product. This option lets you focus your browsing and searching on a specific product or set of products.

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

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To locate and download a patch:

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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.

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

   The right pane displays the certification information.
5. Select a certification to view the certification details.

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

The following text conventions are used in this document:

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

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:

1 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:

Table 1–1

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 (Cont.)

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	Rebuilding a Case in Argus Mart	This chapter explains how to re-populate certain cases from the scratch in Argus Mart.
13	Incremental ETL: ODI Studio	This chapter describes the steps required to administer the ETL process using the Oracle Data Integrator Studio (ODI Studio).
14	Incremental ETL: ODI Console	This chapter describes the steps required to administer the ETL process using the Oracle Data Integrator Console (ODI Console).
15	Re-initializing the ETL Process	This chapter describes the steps to re-initialize the ETL process.
16	Troubleshooting	This chapter explains the error messages that might be displayed while working with Argus Mart.

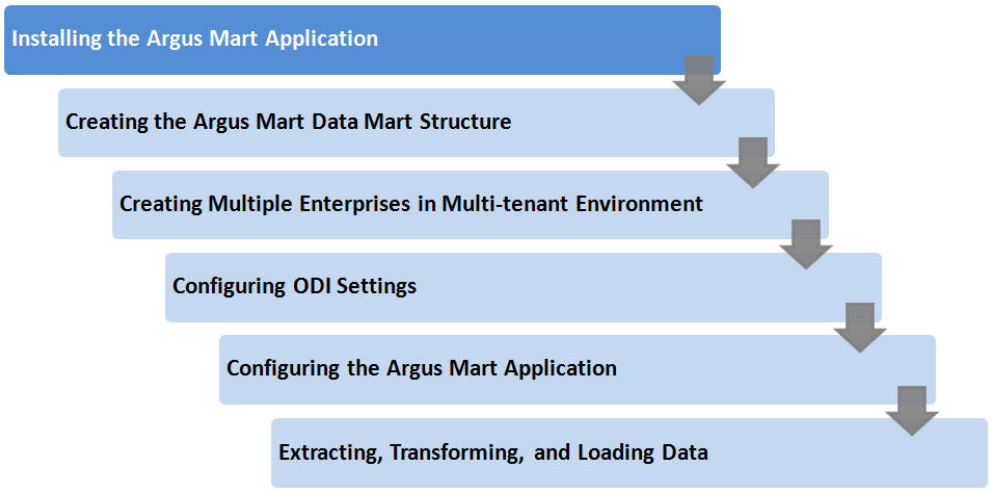
2

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



This chapter includes the following topics:

2.1 Before You Install the Argus Mart Application

Before you begin to install the Argus Mart application:

- Verify that the Argus Mart database instance has been created and 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:

Table 2–1 Argus Mart Software Requirements

Specification	Oracle Data Integrator Server	Database	DBInstaller	Client
Operating System	Windows Server 2008 (Standard/Enterprise) R2 SP1 (64 Bit) Windows Server 2012 Standard Oracle Enterprise Linux 5.11 (64 Bit) Oracle Enterprise Linux 6.2 UEK Oracle Enterprise Linux 6.4 UEK Oracle Sun Solaris 10 (64 Bit) Oracle Sun Solaris 11 (64 Bit)	Windows Server 2008 with SP1 or above (64 Bit) Windows Server 2008 R2 (64 Bit) Oracle Enterprise Linux 6.2 UEK Oracle Enterprise Linux 6.4 UEK Oracle Sun Solaris 10 (64 Bit) Oracle Sun Solaris 11 (64 Bit)	Windows 2008 (Standard/Enterprise) R2 SP1 (64 bit) Windows Server 2012 Standard Windows 7 (English) (32 bit) Windows 8 (English) (32 bit)	Windows 7 (English) (32/64 bit) Windows 8 (English) (32/64 bit)
Oracle Database		Oracle RAC 11g R2 Exadata 11g R2 Oracle 11.2.0.4 (Standard/Enterprise) Oracle 12c R1 (12.1) (Standard/Enterprise) **Note:** Oracle database standard edition is supported for single tenant deployment only.		
Browser				IE 9.0 (32 bit, latest version) IE 10.0 (32 bit)
Oracle Data Integrator (ODI)	12c (11.1.1.7 and 12.1.3.0)			

- Ensure that you have installed the Oracle 32 bit client (Administrator installation type) on the machine where Argus Mart is being installed.

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 Welcome screen of the installation wizard appears with the following options:

a. **About Oracle Universal Installer** — Specifies information about the Oracle Universal Installer.

b. **Installed Products** — Displays the list of installed products.

4. On the Welcome screen, click **Next**.

   The Specify Home Details screen appears.

5. In the **Name** field, enter the name for the product installation.

6. In the **Path** field, specify the location of the folder where the Argus Mart will be installed.

   - 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.**

   The Oracle Home Location screen appears.

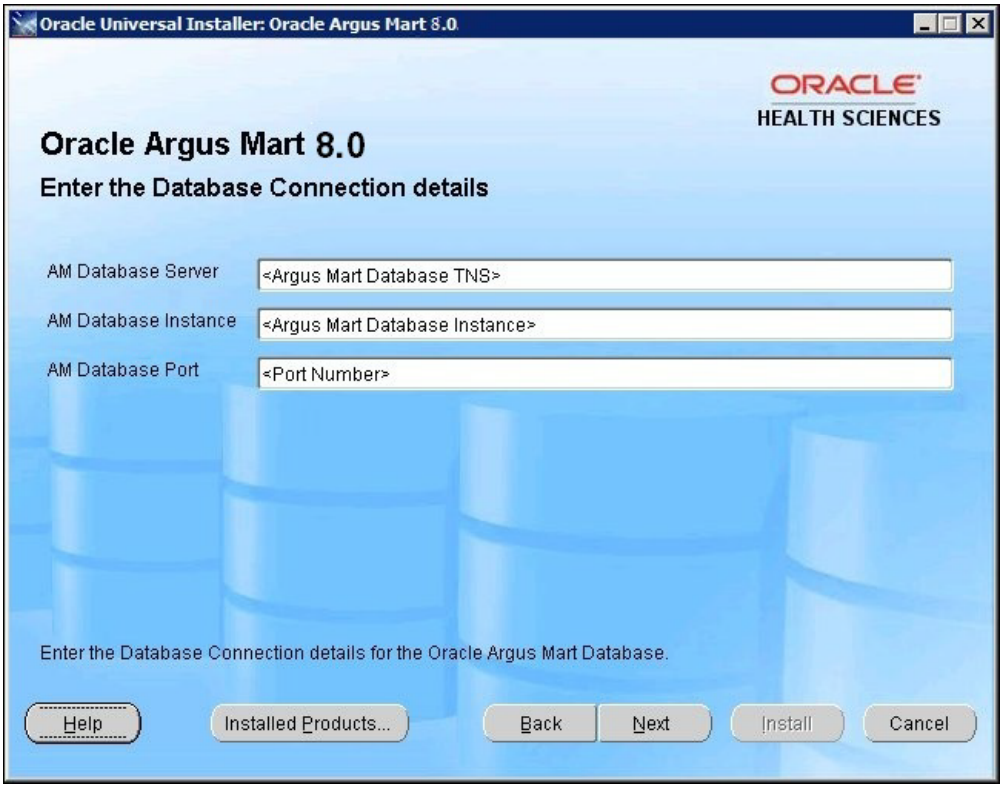
7. Click **Browse,** and navigate to the location of Oracle Home that identifies the TNSNAMES.ORA file.

   Example: C:\app\product\11.2.0\client_1

8. Click **Next**.

   The Database Details screen appears.

Figure 2–2 Database Details Screen



9. Enter the following parameters:

   - In the **AM Database Server** field, enter name or IP address.
   - In the **AM Database Instance** field, enter the database instance name.

- In the **AM Database Port** field, enter the database port number.

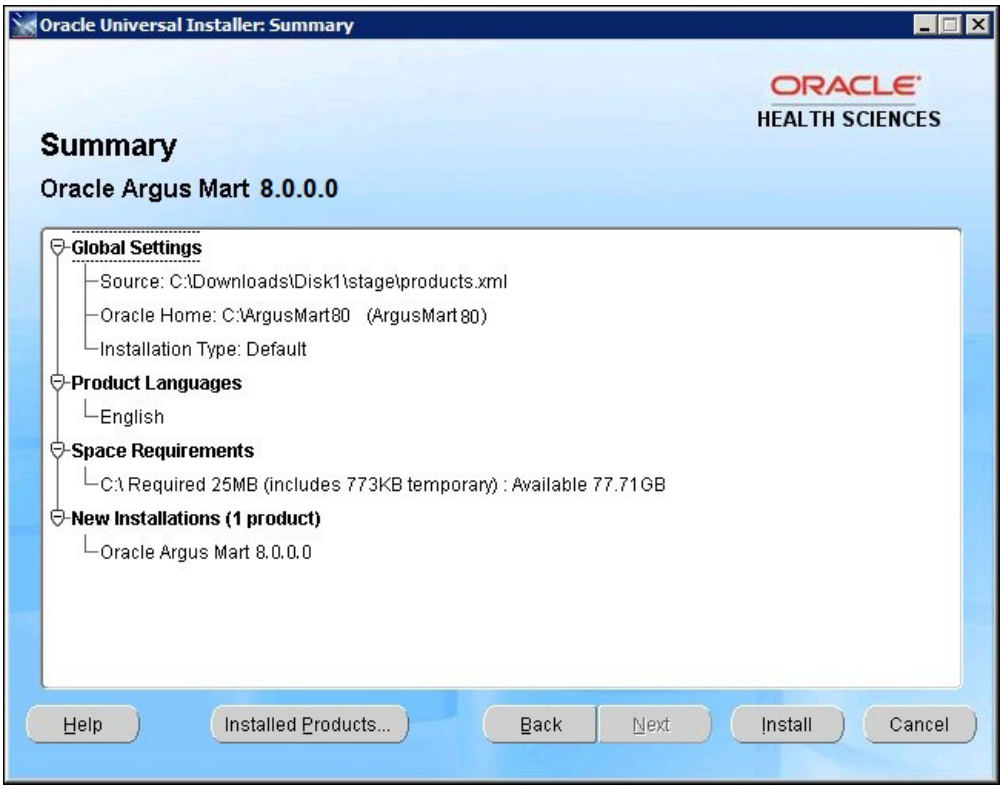
When the Installation process is complete, you may validate these database inputs by navigating to the **TNSNAMES.ORA** file, saved at the following path:

<ORACLE_HOME>\NETWORK\ADMIN

10. Click **Next**.

    The Summary screen appears.

Figure 2–3 Summary Screen



11. Click **Install** to start the installation.

    A message appears — Argus Mart is configuring your new software.

    When installation is complete, the End Of Installation screen appears.

12. To verify the successful installation of Argus Mart, click **Installed Products.**

    The Inventory screen appears.

13. Navigate to **Contents** > **Independent Products**.

    Oracle Argus Mart appears in the list of products.

14. Click **Close**.

15. Click **Exit**.

    A confirmation dialog box appears.

16. Click **Yes** to close the Installer wizard screen.

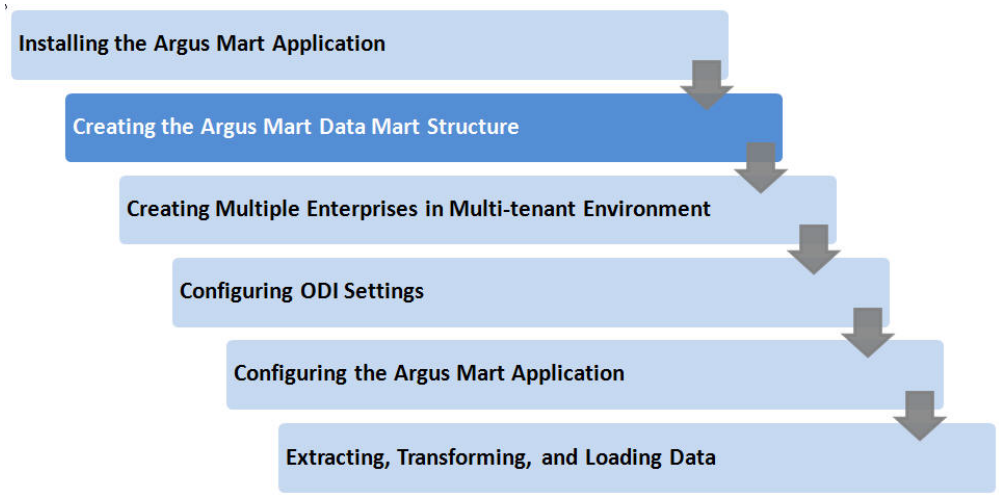
3

Creating the Argus Mart Database Structure

When you have installed the Argus Mart application, you may 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. When transferred, this data can be used for querying and reporting purposes.

This chapter comprises the following sub-sections:

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** to enable 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.

To create a DB user:

If you want to use a different user than SYSTEM user to execute the Schema Creation Tool, then create a DBA user by executing the following .bat file:

ARGUS_MART_INSTALL_PATH/Database/Utils/am_cloud_ro_user.bat

Besides creating the DBA user, this .bat file also provides minimum necessary privileges required for executing the Schema Creation Tool.

3.2 Argus Mart Tablespaces

The Schema Creation Tool creates the following tablespaces for the Argus Mart database, when you create Argus Mart schema:

Table 3–1 Tablespaces Created for the Argus Mart Database

AM_APP_DATA_01	AM_APP_INDEX_01	AM_APP_LOB_01
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, when you start the Argus Mart schema creation tool.

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

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.

   The Argus Mart Schema Creation Tool appears.

Figure 3–2 Schema Creation Tool

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

Table 3–2 Summary of Schema Creation Tool options

Option	Description	Reference
Argus User Creation	Enables you to create the users for the Argus Safety database.	Section 3.4.1, Creating User for the Argus Safety Database
Create Schema	Enables you to create a new database schema for Argus Mart.	Section 3.4.3, Creating a New Database Schema for Argus Mart
Factory Data	Loads data in to the newly created Argus Mart database schema.	Section 3.4.4, Loading Factory Data
Schema Validation	Enables you to validate a newly-created Argus Mart database schema.	Section 3.5, Validating the Schema
Insight DBLink	Enables you to link Argus Insight database with Argus Mart database.	Section 3.4.5, Creating Argus Insight Database Link
DB Upgrade	Enables you to upgrade existing database.	Section 7.3, Upgrading Argus Mart Database
Exit	Enables you to exit from the Argus Mart Schema Creation tool	N/A

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
- Creating Argus Insight Database Link
- Creating Argus Mart Read-Only User

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.

To to create a user for the Argus Safety database, execute the following steps:

1. Start the Argus Mart Schema Creation tool.

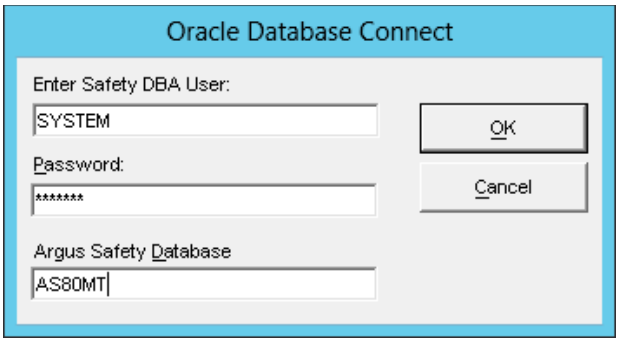
   See Section 3.3, Starting the Argus Mart Schema Creation Tool.

   The Argus Mart Schema Creation Tool screen appears. (Figure 3–2)

2. Click **Argus User Creation**.

   The Oracle Database Connect dialog box appears.

Figure 3–3 Oracle Database Connect Dialog Box



3. In the Oracle Database Connect dialog box:

   a. In the **User** field, enter the name of Argus Safety SYSTEM or DBA user.

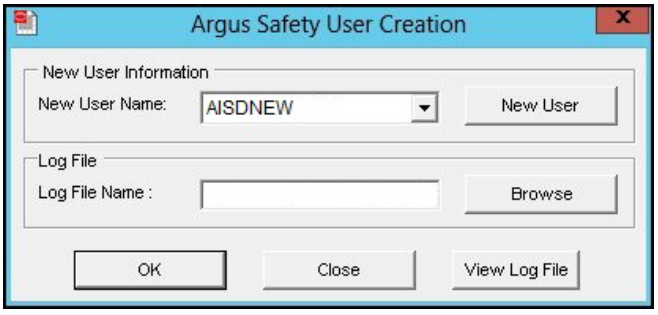
   b. In the **Password** field, enter the password for Argus Safety SYSTEM or DBA user.

   c. In the **Argus Safety Database** field, enter the name of the Argus Safety database that you want to connect to.

   d. Click **OK**.

      The Argus Safety User Creation dialog box appears.

Figure 3–4 Argus Safety User Creation Dialog Box



4. Click **New User**.

   The New User dialog box appears.

5. In the New User dialog box:

a. In the **New User Name** field, enter the name for the new user.

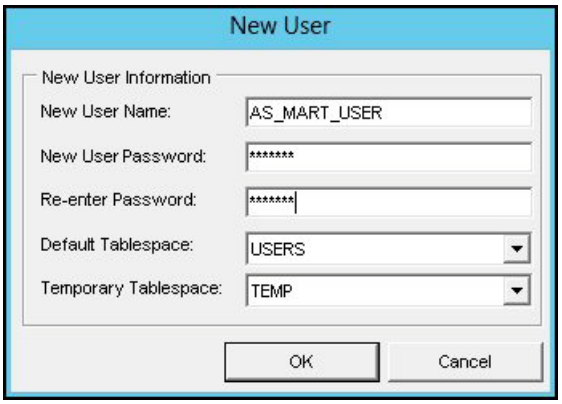
b. In the **New User Password** field, enter the password for the new user.

c. In the **Re-enter Password** field, re-enter the password for the new user.

d. From the **Default Tablespace** drop-down list, select the default tablespace, where you want to store the database objects.

e. From the **Temporary Tablespace** drop-down list, select the tablespace, where you want to store the database objects temporarily.

Figure 3–5 Argus Safety User Creation



6. Click **OK**.

   You return to Argus Safety User Creation dialog box.

7. In the **New User Name** drop-down list, select the name of the newly created user from the list of existing users.

8. To navigate to the location where you want to save the log file, click **Browse**.

   The Save Log File dialog box appears.

9. In the **File name** field, enter the name of the log file.

   You may enter the name of the file as **AS_MART_USER**, which is easier to remember, for reference later in the installation process.

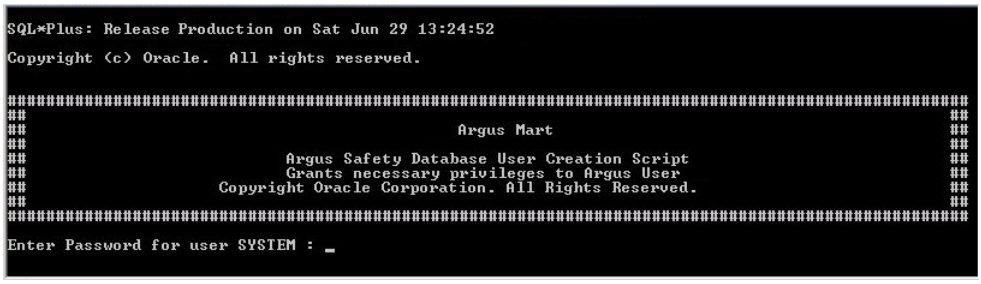
10. Click **Save**.

    You return to Argus Safety User Creation dialog box and the complete path of the log file appears in the Log File Name field.

11. Click **OK** to create the specified user.

    The command prompt screen appears.

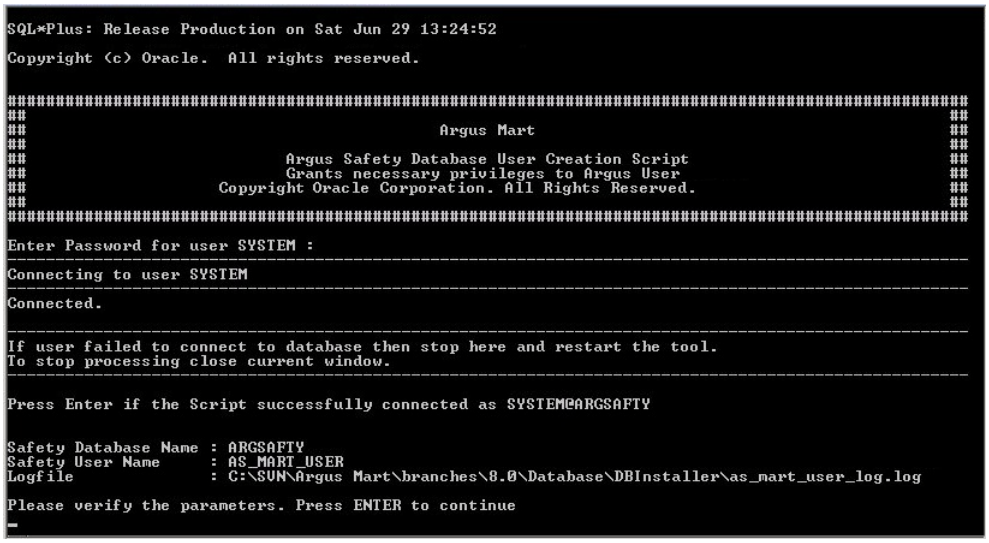
Figure 3–6 Entering Password for the Argus Safety SYSTEM or DBA User



12. Enter the password for the Argus Safety SYSTEM or DBA user, and press **Enter**.
13. Verify that the script is successfully connected as <Argus Safety SYSTEM/DBA User>@<Argus Safety Database Name>, and press **Enter**.

    The information about the Argus Safety database name, the name of the user to create, and the name of the log file appears.

Figure 3–7 Verifying AS Database, User, and Log File Details



14. Verify the information, and press **Enter** to continue.

    Wait till additional information about creating the user and granting privileges along with the log file details appears.
15. Press **Enter** to complete the installation.

    A message appears stating that the user account has been created successfully along with the folder location of the log files.
16. Click **OK** to close the message dialog box.

    You return to the Argus Safety User Creation dialog box.
17. Click **View Log File**.
18. Review the information in the log file and check for any errors.
19. Close the log file.
20. Click **Close** to exit from the Argus Safety User Creation dialog box.

Note: Whenever BIP is enabled in Argus Safety, re-create Argus Safety Read-only user for Argus Mart.

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 Reset Cache? dialog box appears.

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

After you have created the user for the Argus Safety database, you can now create a new database schema for Argus Mart as follows:

1. Start the Argus Mart Schema Creation tool.

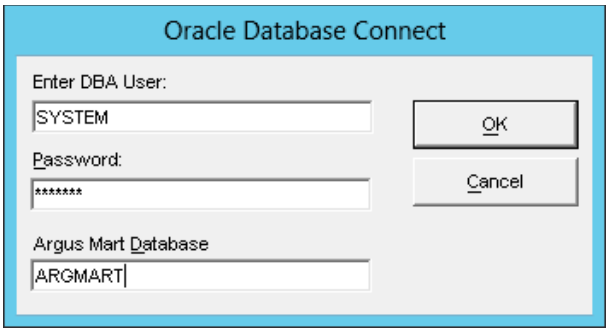
   See Section 3.3, Starting the Argus Mart Schema Creation Tool.

   The Argus Mart Schema Creation Tool appears. (Figure 3–2)

2. Click **Create Schema**.

   The Oracle Database Connect dialog box appears.

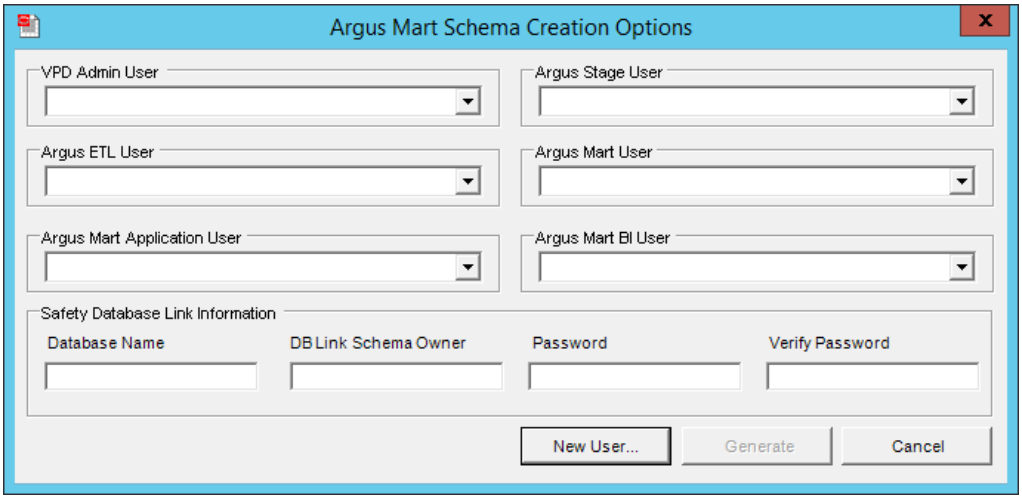
Figure 3–8 Connecting to Argus Mart Database



3. In the Oracle Database Connect:
   a. In the **User** field, enter the name of the Argus Mart SYSTEM or DBA user.
   b. In the **Password** field, enter the password for the Argus Mart SYSTEM or DBA user.
   c. In the **Argus Mart Database** field, enter the name of the Argus Mart database that you want to connect to.
   d. Click **OK**.

      The Argus Mart Schema Creation Options dialog box appears.

Figure 3–9 Argus Mart Schema Creation Options Dialog Box



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

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

Tip: You may create the users with names **AM_VPD_USER**, **AM_STAGE_USER**, **AM_ETL_USER**, **AM_MART_USER**, **AM_APP_USER**, and **AM_BI_USER** respectively so that you can easily remember and use them later in the installation process.

4. Click **New User**.

   The New User dialog box appears.

5. In the New User dialog box:

   a. In the **New User Name** field, enter the name for the new user.

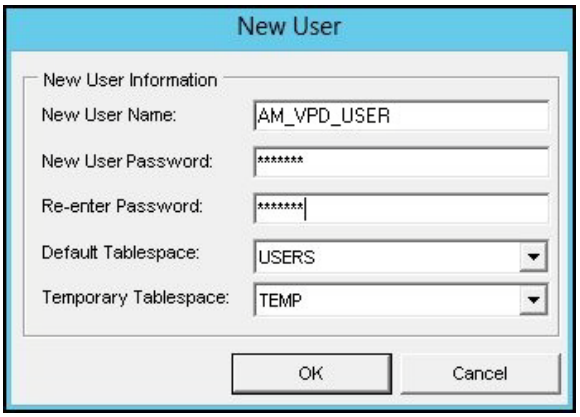
   b. In the **New User Password** field, enter the password for the new user.

   c. In the **Re-enter Password** field, re-enter the password for the new user.

   d. From the **Default Tablespace** drop-down list, select the default tablespace, where you want to store the database objects.

   e. From the **Temporary Tablespace** drop-down list, select the tablespace, where you want to store the database objects temporarily.

Figure 3–10 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, Argus Mart User, and Argus Mart Application User.

8. In the Argus Mart Schema Creation Options dialog box:

   a. From the **VPD Admin User** drop-down list, select the Argus VPD user.

   b. From the **Argus Stage User** drop-down list, select the Argus Stage user.

   c. From the **Argus ETL User** drop-down list, select the Argus ETL user.

   d. From the **Argus Mart User** drop-down list, select the Argus Mart user.

   e. From the **Argus Mart Application User** drop-down list, select the Argus Mart Application user.

   f. From the **Argus Mart BI User** drop-down list, select the Argus Mart BI user.

Note: All these users are created in step 5 of this procedure. Make sure you select these users only from each respective drop-down list.

9. In the **Safety Database Link Information** section:

   a. In the **Database Name** field, enter the Argus Safety Database name, which you have used while creating the user for the Argus Safety database.

      See step 3(b) of the section 3.4.1 , Creating User for the Argus Safety Database for detailed steps.

   b. In the **Database Link Schema Owner** field, enter the name of the user for the Argus Safety database.

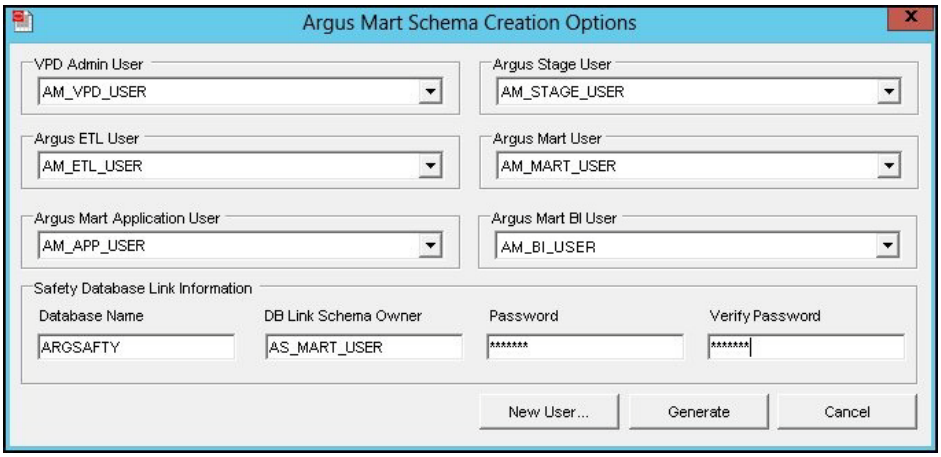
      See step 5(a) of the section 3.4.1 , Creating User for the Argus Safety Database for detailed steps.

   c. In the **Password** field, enter the password of the user for the Argus Safety database.

      See step 5(b) of the section 3.4.1 , Creating User for the Argus Safety Database for detailed steps.

   d. In the **Verify Password** field, re-enter the password.

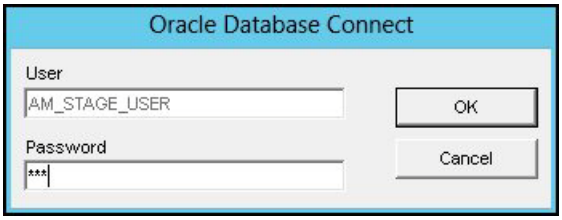
Figure 3–11 Safety Database Link Information Details



10. Click **Generate**.

    The Oracle Database dialog box appears.

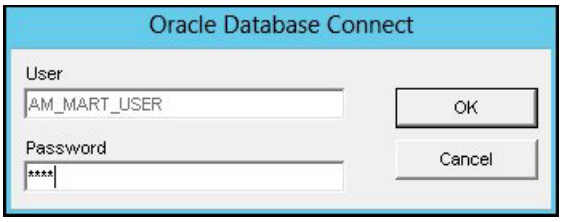
Figure 3–12 Oracle Database Connect: Argus Stage User Password



11. In the **Password** field, enter the password for the Argus Stage User.
12. Click **OK**.

    Again, the Oracle Database Connect dialog box appears.

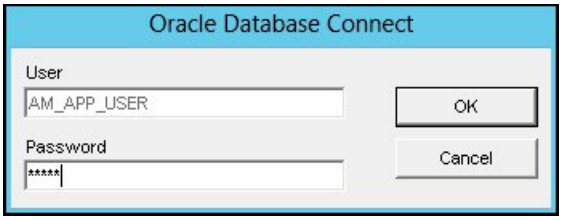
Figure 3–13 Oracle Database Connect: Argus Mart User Password



13. In the **Password** field, enter the password for the Argus Mart User.
14. Click **OK**.

    Once more, the Oracle Database Connect dialog box appears.

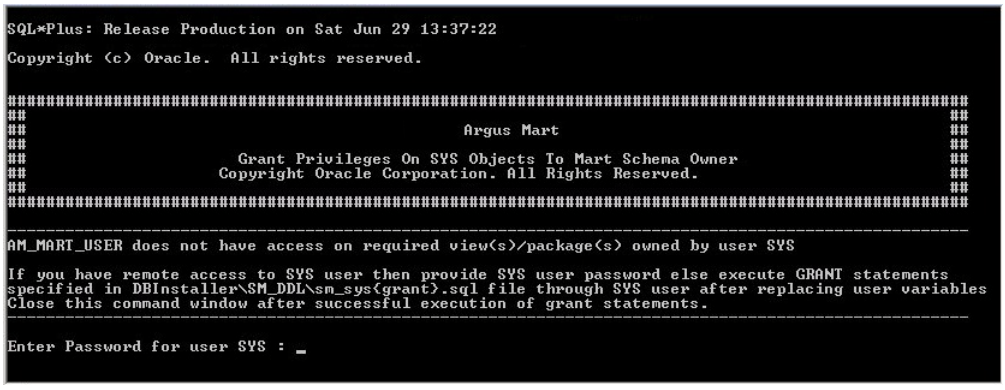
Figure 3–14 Oracle Database Connect: Argus Mart Application User Password



15. In the **Password** field, enter the password for the Argus Mart Application User.
16. Click **OK**.

    The command prompt screen appears.

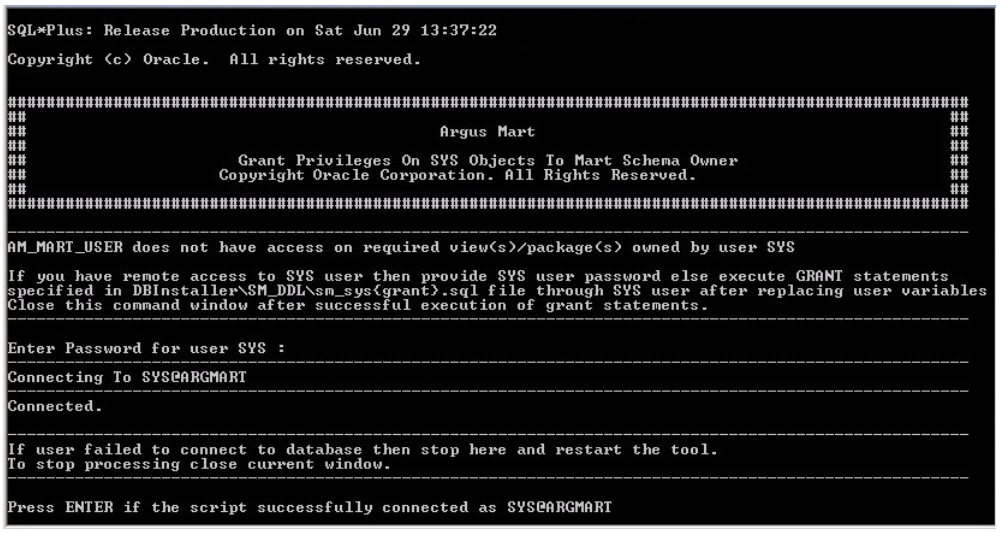
Figure 3–15 SYS User Details



17. If you have remote access to the SYS user, enter the password for the **SYS** user, and press **Enter** to continue.

    The following screen appears.

Figure 3–16 Verifying User and Argus Mart Database Details



> **Note:** If you have already executed the script **sm_sys{grant}.sql** through SYS user, the above screen does not appear.

18. Verify that the script is successfully connected as <SYS User Name>@<Argus Mart Database Name>, and press **Enter**.

    The **Grant succeeded** message appears multiple times on the command prompt screen and subsequently the location of the log file.

19. Verify the location of the log file, and press **Enter**.

    The Tablespace Creation dialog box appears.

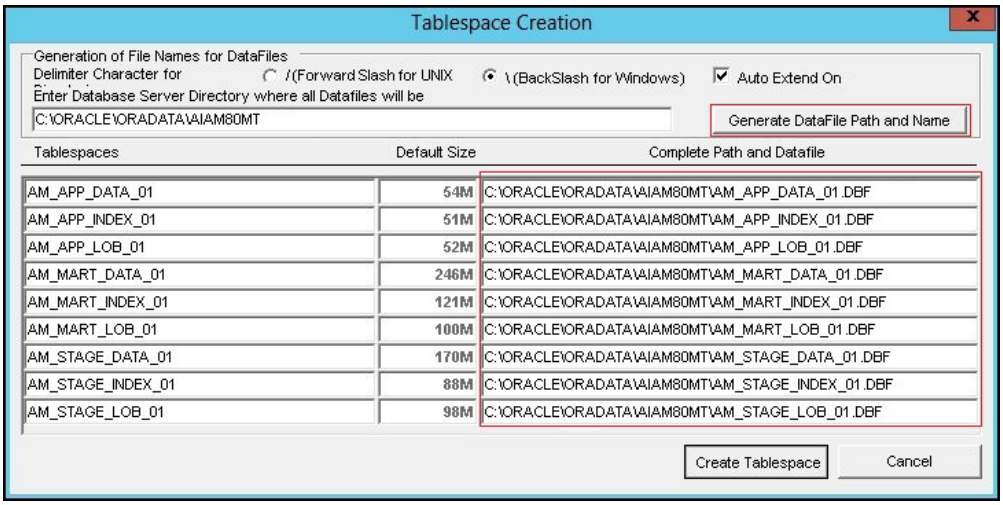
20. In the Tablespace Creation dialog box:

    a. In the **Enter Database Server Directory where all Data Files will be Created** field, enter the complete path to the directory for the tablespace data files used by Argus Mart.

    b. Click **Generate DataFile Path and Name**.

       The Complete Path and Datafile column for all tablespaces are auto-populated.

Figure 3–17 Generating DataFile Path and Name



c. Click **Create Tablespace** to create all Tablespaces.

If a Tablespace already exists, a warning message appears suggesting to use the existing Tablespace.

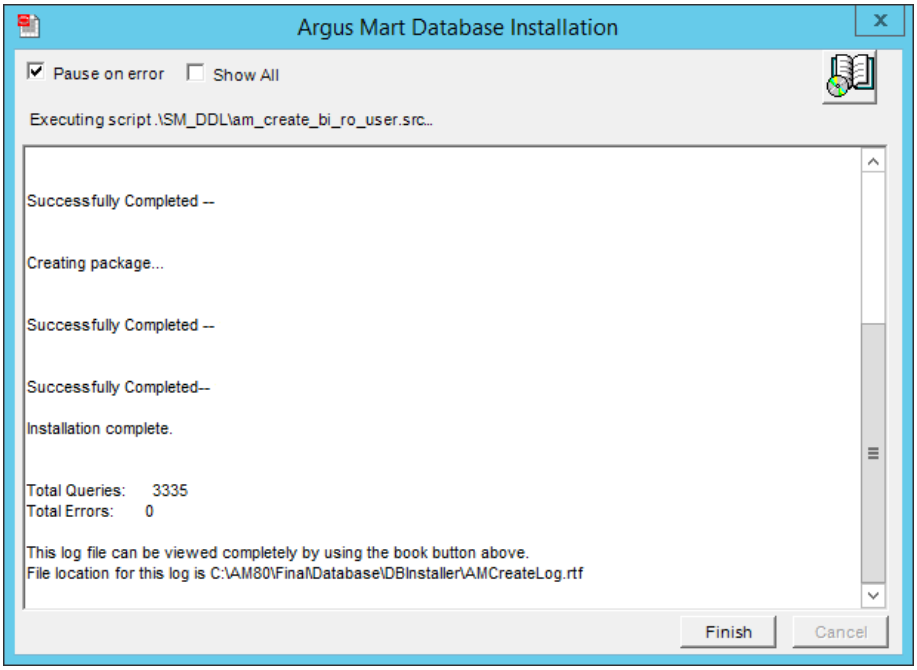
d. Click **Yes** to use the existing Tablespace.

21. Wait until the system creates the tablespaces and the Argus Mart Database Installation dialog box appears.

22. Click **Continue** to start the schema creation.

The execution of the scripts begin, a status information appears during the schema creation process, and a message appears when the update is complete.

Figure 3–18 Argus Mart Database Successful Installation: Confirmation Screen



23. 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
24. 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.

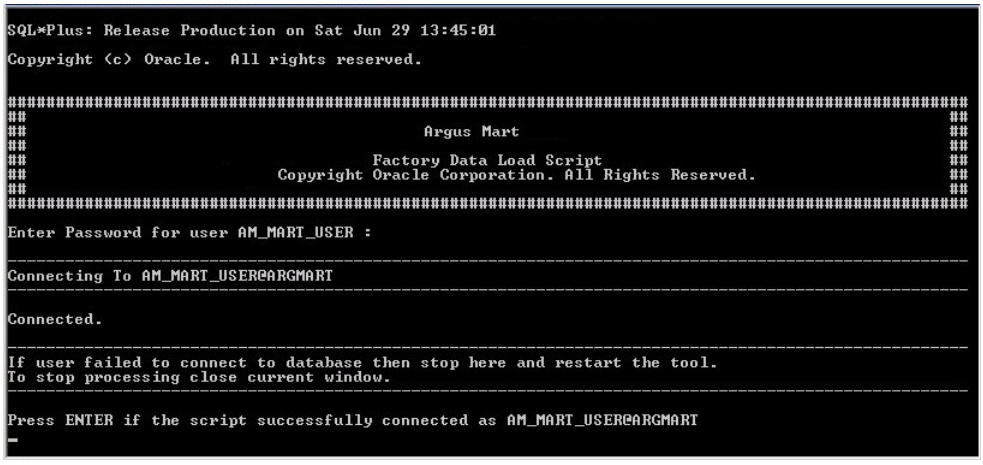
   The Argus Mart Schema Creation Tool appears.
2. Click **Factory Data**.

   The Oracle Database Connect dialog box appears.
3. Enter the following parameters:
   - Argus Mart Schema Owner
   - Password
   - Database
4. Click **OK**.

   The command prompt screen appears.
5. Enter the password for the Argus Mart user, and Press **Enter**.

   The following command prompt screen appears:

Figure 3–19 Verifying the Argus Mart User and Database Details



6. Verify that the script is successfully connected as <Argus Mart User Name>@<Argus Mart Database Name>, and press **Enter**.

   Multiple messages about the creation of rows appears.
7. Press **Enter**.

The confirmation message appears stating that the Factory Data is loaded and verify the log file.

8. Click **OK** to complete the procedure.

3.4.5 Creating Argus Insight Database Link

You may access Argus Insight database in Argus Mart whether they are on same database or different database.

- Working on Same Database Instance
- Working on Different Database Instance

3.4.5.1 Working on Same Database Instance

If Argus Insight and Argus Mart are on the same database instance, some additional privileges are required. To assign these permissions, refer to *Oracle Argus Insight Installation Guide > Section 3.9*.

3.4.5.2 Working on Different Database Instance

If Argus Insight and Argus Mart are on different database, create the following database links:

- DB_LINK_INSIGHT
- ARGUS_MART_TO_ARGUS_INSIGHT

To create DB_LINK_INSIGHT database link:

1. Start the Argus Mart Schema Creation tool.

   See Section 3.3, Starting the Argus Mart Schema Creation Tool.

   The Argus Mart Schema Creation Tool appears.

2. Click **Insight DBLink**.

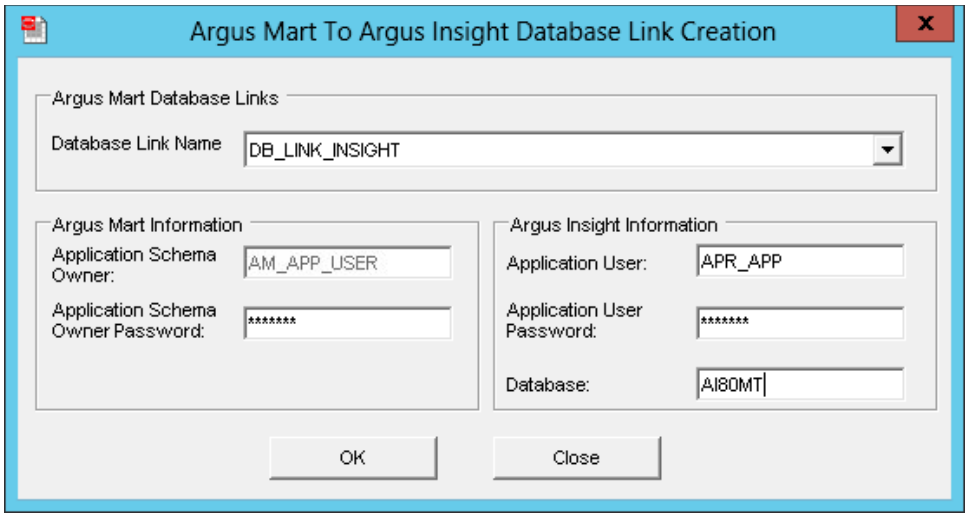
   The Oracle Database Connect dialog box appears.

3. Enter the following parameters:
   - Argus Mart Schema Owner
   - Password
   - Database

4. Click **OK**.

   The Argus Mart To Argus Insight Database Link Creation screen appears.

Figure 3–20 Argus Mart to Argus Insight Database Link Creation — DB_LINK_INSIGHT



5. From the **Database Link Name** drop-down list, select DB_LINK_INSIGHT.
6. In Argus Mart Information section:
   a. In the **Application Schema Owner** field, enter the Argus Mart application user name (AM_APP_USER).

      This is the same user than was created in step 8(e) of Section 3.4.3, Creating a New Database Schema for Argus Mart.

   b. In the **Application Schema Owner Password** field, enter the password of the Argus Mart application user.
7. In Argus Insight Information section:.
   a. In the **Application User** field, enter Argus Insight user name (APR_APP).
   b. In the **Application User Password** field, enter password of Argus Insight user.
   c. In the **Database** field, enter the Argus Insight database name that will be linked to Argus Mart database.
8. Click **OK**.

   The DBInstall screen appears with a confirmation message — DB_LINK_INSIGHT database link created successfully.
9. Click **OK** to complete the procedure for Insight DBLink.

To create ARGUS_MART_TO_INSIGHT_MART database link:

1. Start the Argus Mart Schema Creation tool.

   See Section 3.3, Starting the Argus Mart Schema Creation Tool.

   The Argus Mart Schema Creation Tool appears.
2. Click **Insight DBLink**.

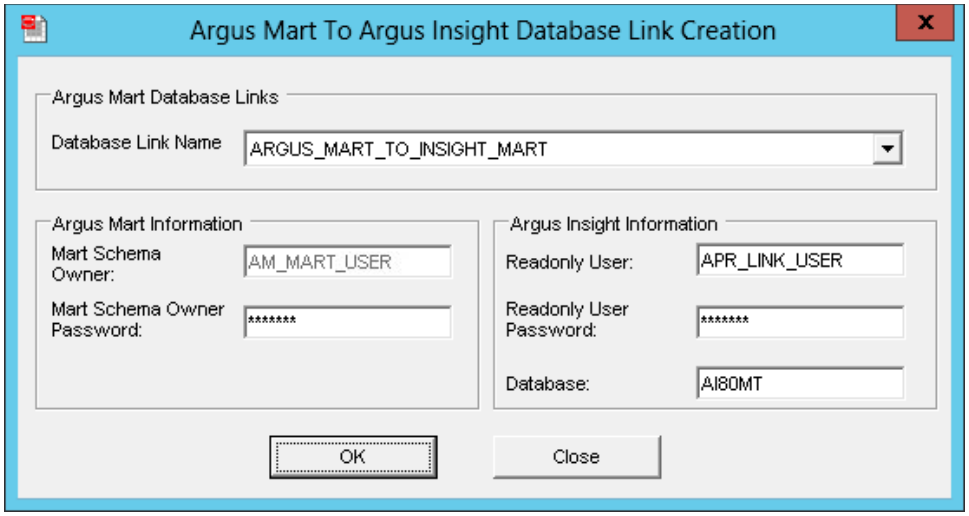
   The Oracle Database Connect dialog box appears.
3. Enter the following parameters:
   - Argus Mart Schema Owner
   - Password

- Database

4. Click **OK**.

   The Argus Mart To Argus Insight Database Link Creation screen appears.

Figure 3–21 Argus Mart to Argus Insight Database Link Creation — ARGUS_MART_TO_INSIGHT_MART



5. From the **Database Link Name** drop-down list, select ARGUS_MART_TO_INSIGHT_MART.
6. In Argus Mart Information section:
   a. In the **Mart Schema Owner** field, enter the Argus Mart database user name (AM_MART_USER).
   b. In the **Mart Schema Owner Password** field, enter the password of the Argus Mart database user.
7. In Argus Insight Information section:.
   a. In the **Readonly User** field, enter Argus Insight database user name (APR_LINK_USER).
   b. In the **Readonly User Password** field, enter password of Argus Insight database user.
   c. In the **Database** field, enter the Argus Insight database name that will be linked to Argus Mart database.
8. Click **OK**.

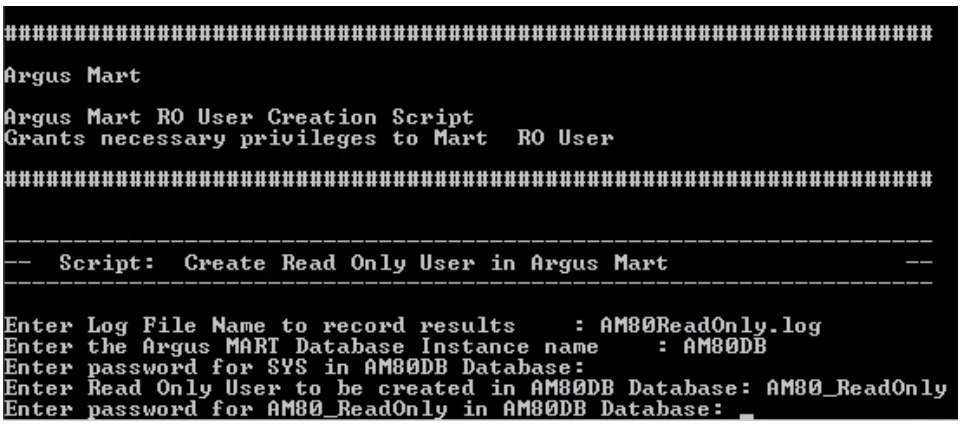
   The DBInstall screen appears with a confirmation message — ARGUS_MART_TO_INSIGHT_MART database link created successfully.
9. Click **OK** to complete the procedure for Insight DBLink.

3.4.6 Creating Argus Mart Read-Only User

You can create a read-only schema in Argus Mart. This schema will have read-only (SELECT) access on all the tables and views of the AM_MART schema. Besides, this read-only schema can also be used for customized reporting purpose.

To create Argus Mart Read-only user:

1. From the Utils folder, double click the MART_RO_USER.bat file.
2. Enter the following inputs:
   a. Name of the Log file
   b. Name of Argus Mart database instance
   c. Password of the SYS user
   d. Name of Argus Mart Read-only user that you want to create
   e. Password of Argus Mart Read-only user



On successful connection to the SYS user, the script provides read-only access to Reporting Mart (RM) and Signal Mart (SM) objects of Argus Mart schema to the read-only user.

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.

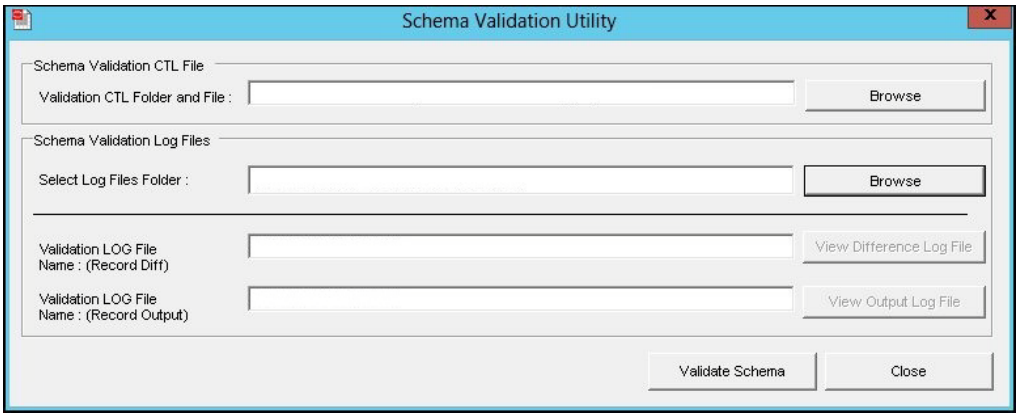
   See Section 3.3, Starting the Argus Mart Schema Creation Tool.

   The Argus Mart Schema Creation Tool appears.
2. Click **Schema Validation**.

   The Oracle Database Connect dialog box appears.
3. In the Oracle Database Connect dialog box:
   a. In the **User** field, enter the name of Argus Mart SYSTEM or DBA user.
   b. In the **Password** field, enter the password for Argus Mart SYSTEM or DBA user.
   c. In the **Argus Mart Database** field, enter the name of the Argus Mart database that you want to connect to.
   d. Click **OK**.

      The Schema Validation Utility dialog box appears.

Figure 3–22 Schema Validation Utility Dialog Box



4. In the Schema Validation Utility Dialog Box:

   a. In Schema Validation CTL File section, click **Browse** next to the **Validation CTL Folder and File** field.

      The Schema Validation CTL File Name dialog box appears.

   b. Select the CTL file (VLDN_AM_8.0) to validate the Argus Mart 80 instance, and click **Open**.

      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.

      The Select Folder dialog box appears.

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

   e. Click **OK**.

      Your return to Schema Validation Utility dialog box.

   f. Click **Validate Schema**.

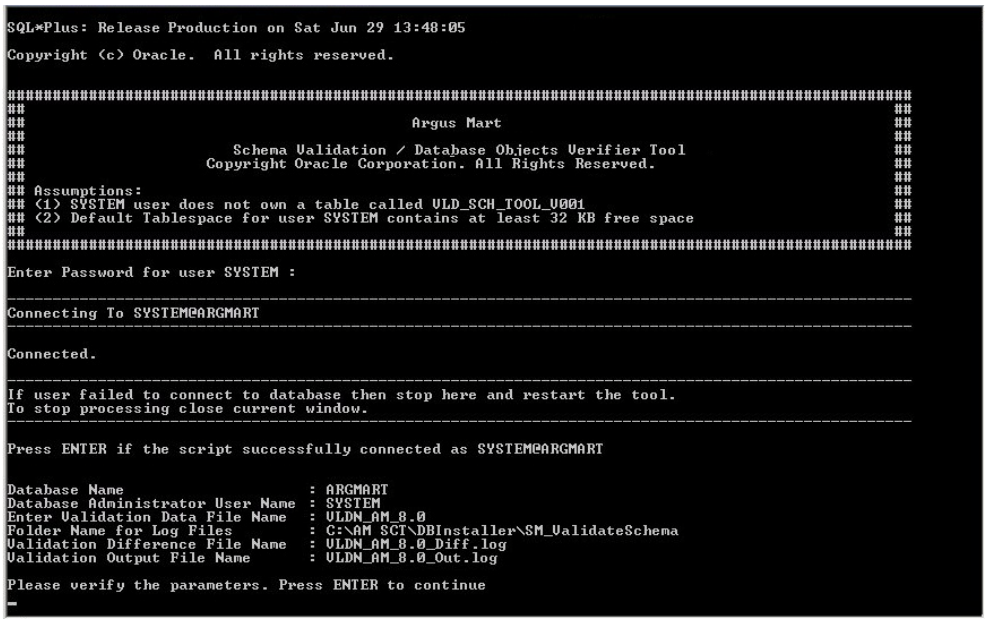
      The command prompt screen appears.

5. Enter the password for Argus Mart SYSTEM or DBA user, and press **Enter**.

6. Verify that the script is successfully connected as <Argus Mart SYSTEM or DBA User Name>@<Argus Mart Database Name>, and press **Enter**.

   The following command prompt screen appears:

Figure 3–23 Verifying other Details



7. Review the information on the command prompt screen, and press **Enter**.

   A message to enter database administrator password appears.

8. Enter the password for Argus Mart SYSTEM or DBA User, and press **Enter**.

9. Continue to review the information on each screen, and press **Enter** until the Schema Validation Utility dialog box appears along with the location of the log file.

10. Click **OK**.

    The Schema Validation Utility dialog box appears.

11. In the Schema Validation Utility dialog box:

    - To check for any schema discrepancies, such as missing objects, click **View Difference Log File**.
    - To see the list of errors, if any, which occurred during schema validation, click **View Output Log File**.

    If Argus Mart read-only user is created, ignore the schema validation differences, where:

    - Objects are V_RO_RM% views/columns
    - GRANTEE is Argus Mart Read-only user

12. Click **Close** to exit from the Schema Validation Utility dialog box.

4

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:

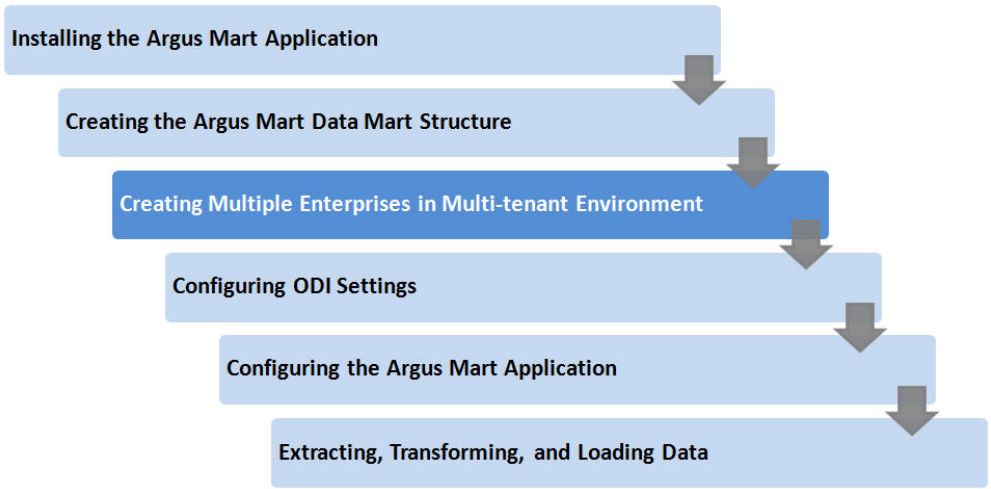
- The configuration of default enterprise.
- The configuration of any other existing enterprise in Argus Safety Database.

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:

Figure 4–1 Installation Progress: Creating Multiple Enterprises in Multi-tenant Environment



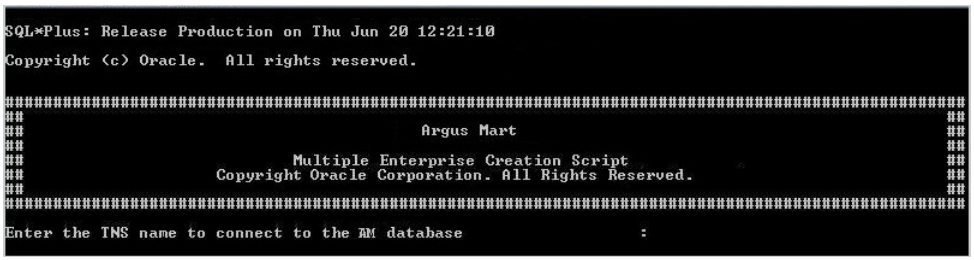
To create multiple enterprises in Argus Mart, execute the following steps:

1. Double-click the **am_create_enterprise.bat** file located at the following path:

   ...\ArgusMart\Database\Utils\am_create_enterprise.bat

The Argus Mart Enterprise Creation screen appears.

Figure 4–2 Entering TNS Name to Connect to Database



2. In the **Enter the TNS name to connect to the AM database** field, enter the TNS name to connect to the Argus Mart database, and press **Enter**.
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 Section 3.4.3, Creating a New Database Schema for Argus Mart. If the user is not the database owner with the administrator rights for the ETL process, an error message appears.

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

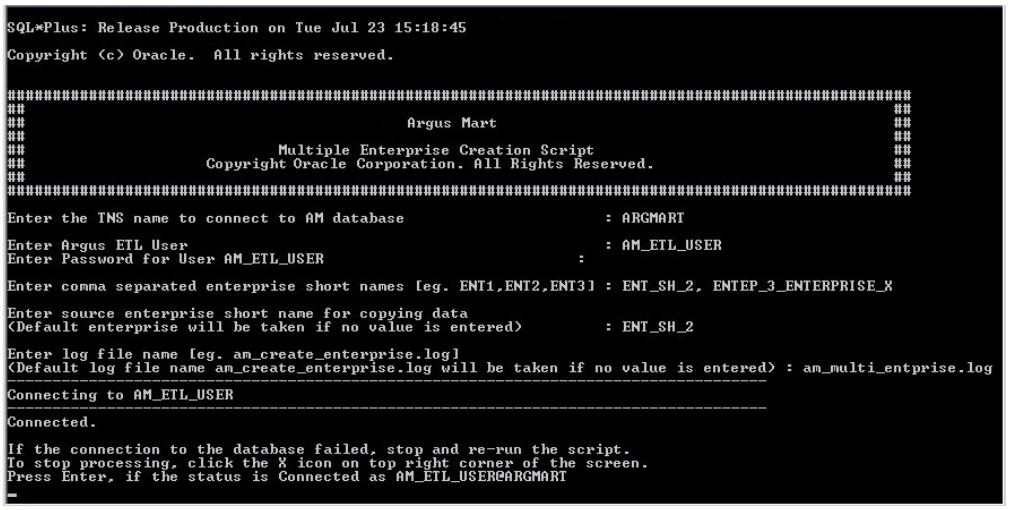
      You may enter multiple values in this field, separated by a comma.
   d. In the **Enter source enterprise short name for copying data** field, enter the source enterprise name using which you want to create new enterprises, and press **Enter**.

      If there is no input in this field, the Default Enterprise, configured during initial schema creation is considered as the source enterprise.
   e. In the **Enter log file name** field, enter the name of the log file, and press **Enter**.

      If there is no input in this field, the Default Log file, am_create_enterprise.log will be created.

      After entering all the above parameters, a status message appears.

Figure 4–3 Connecting to the Database

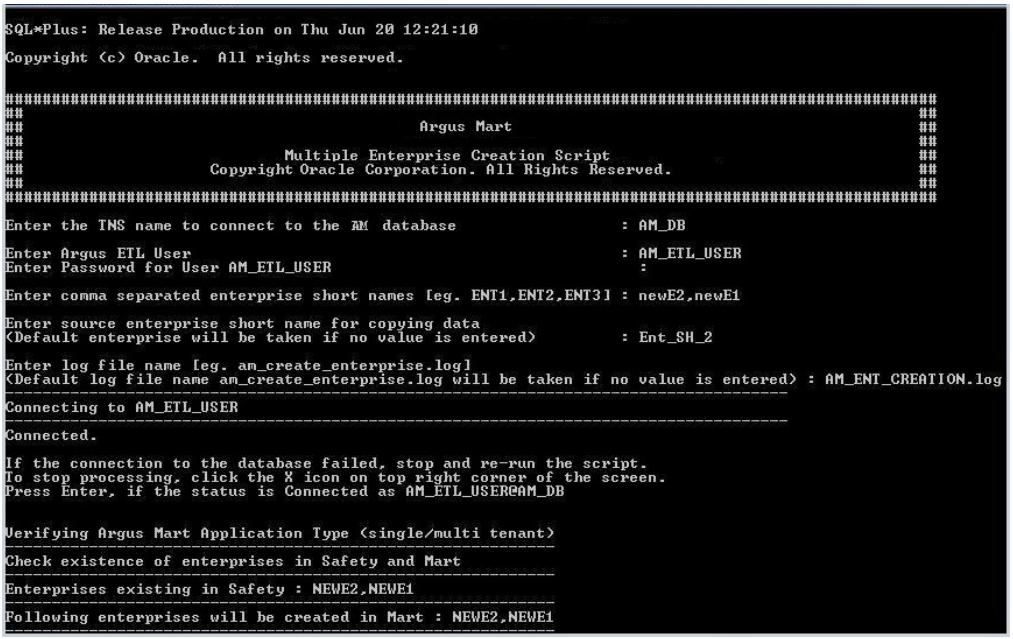


The system validates that the Argus Mart database is a multi-tenant database, which supports creation of multiple enterprises and the factory data has already been loaded to the database. If any of these requirements are not met, an error message appears.

Once done, the system verifies the status of enterprises created in Argus Safety and Argus Mart. The Enterprise Names that you have entered in Step 3c must exist in the Argus Safety database and should not be already created in Argus Mart.

After validation and verification, the name of the enterprises that exist in Argus Safety, and the enterprises that will be created in Argus Mart appears.

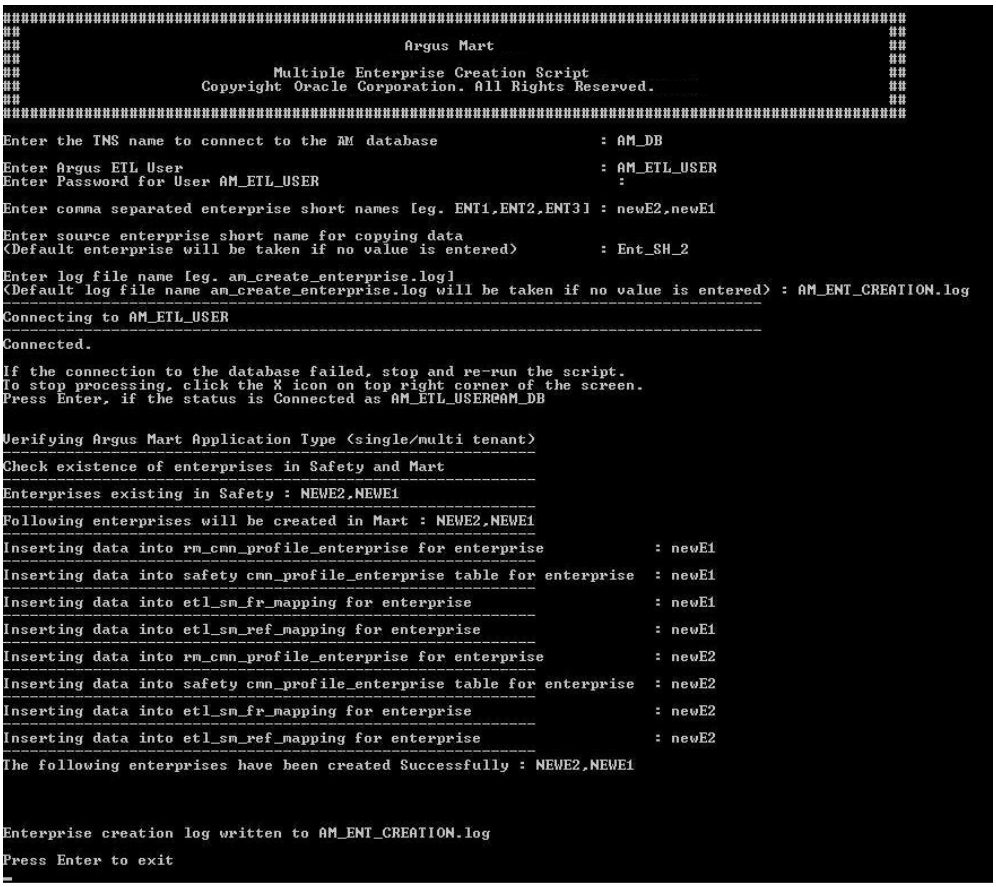
Figure 4–4 Displaying List of Enterprises to be Created in Argus Mart



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 names of the enterprises that have been created successfully appears along with the name of the log file.

Figure 4–5 Displaying Enterprise Creation Confirmation



4. Press **Enter** to exit from the screen.

5

Configuring ODI Settings

After you have installed Oracle Data Integrator (ODI), you must configure certain settings to be able to use it to run 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:

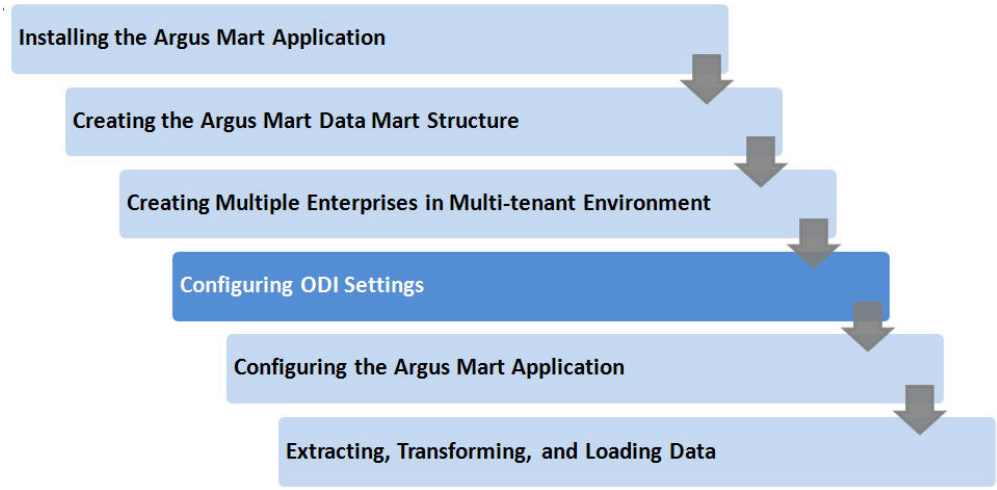
...\ArgusMart\ODI\AM.zip

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:

- 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

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

After 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**.

   The New Gallery dialog box appears.

2. Click **OK**.

   The Master Repository Creation Wizard screen appears with the **Repository Connection** selected in the left pane.

3. In the **Database Connection** section:

   a. In the **JDBC Driver** field, enter the required JDBC Driver.

      You may click the Search icon next to the **JDBC Driver** field to search for the available list of drivers.

   b. In the **JDBC Url** field, enter the required JDBC URL.

      You may click the Search icon close to the **JDBC Url** field to search for the available list of URL.

   c. In the **User** field, enter the name of the ODI Master Repository User Name.

      You have already created the ODI Master Repository User Name (for example, odi_master) in the Section 5.2.1, Creating the Database Users for Master and Work Repositories.

   d. In the **Password** field, enter the password for the ODI Master Repository User.

      You have already created the ODI Master Repository Password in the Section 5.2.1, Creating the Database Users for Master and Work Repositories.

   e. In the **DBA User** field, enter the name of the ODI DBA User Name.

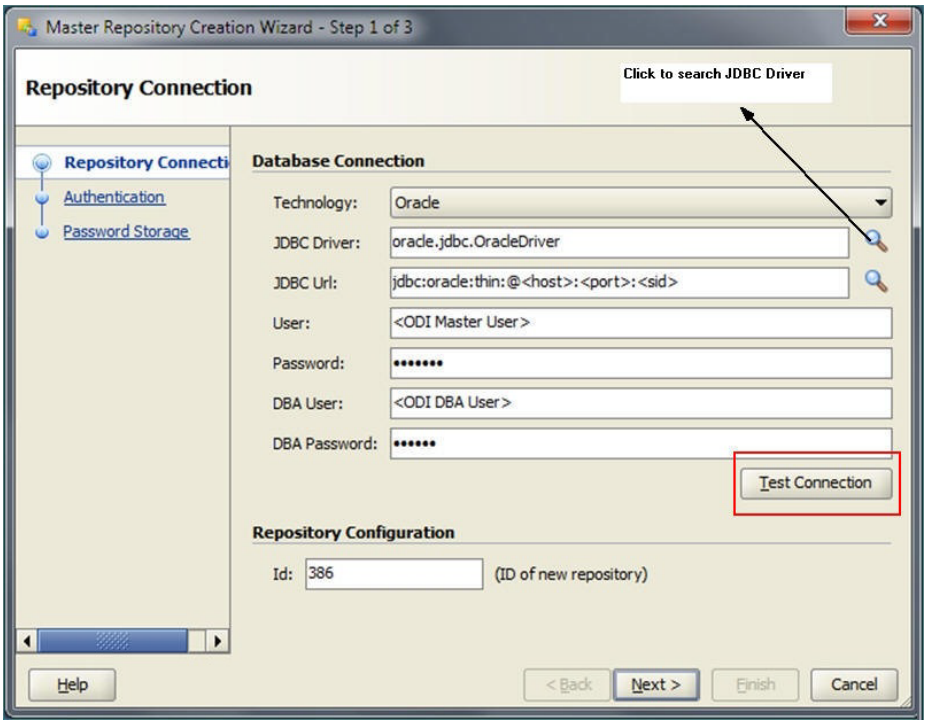
   f. In the **Password** field, enter the password for the ODI DBA User.

   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**.

Figure 5–2 Master Repository Creation Wizard



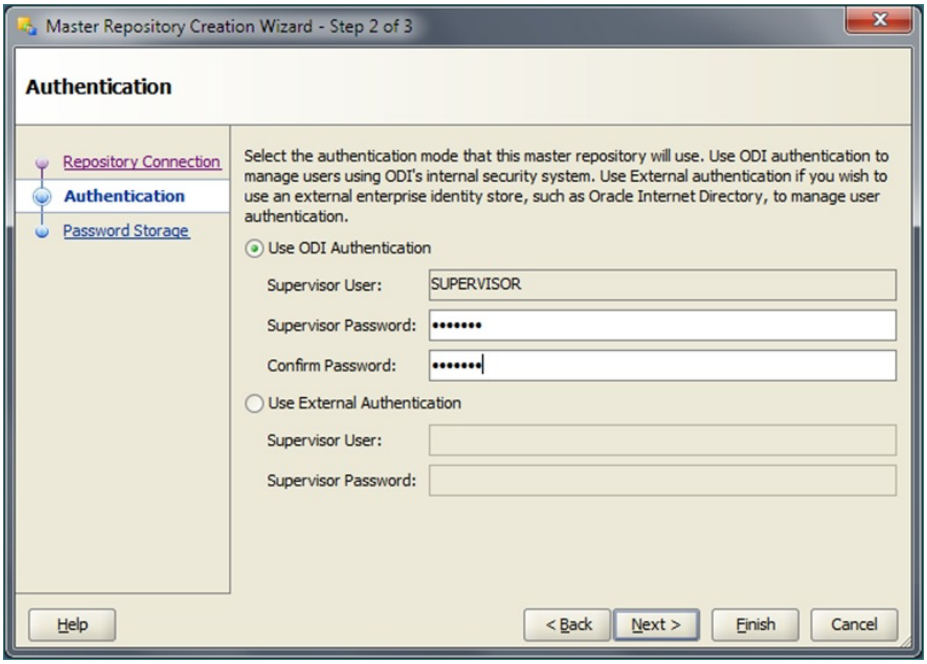
If successful, the Information dialog box appears with the **Successful Connection** message.

i. Click **OK**.

4. Click **Next**.

The Authentication screen appears.

Figure 5–3 Authentication Screen



5. On the **Authentication** screen:

   a. In the **Supervisor Password** field, enter the password for the SUPERVISOR user.

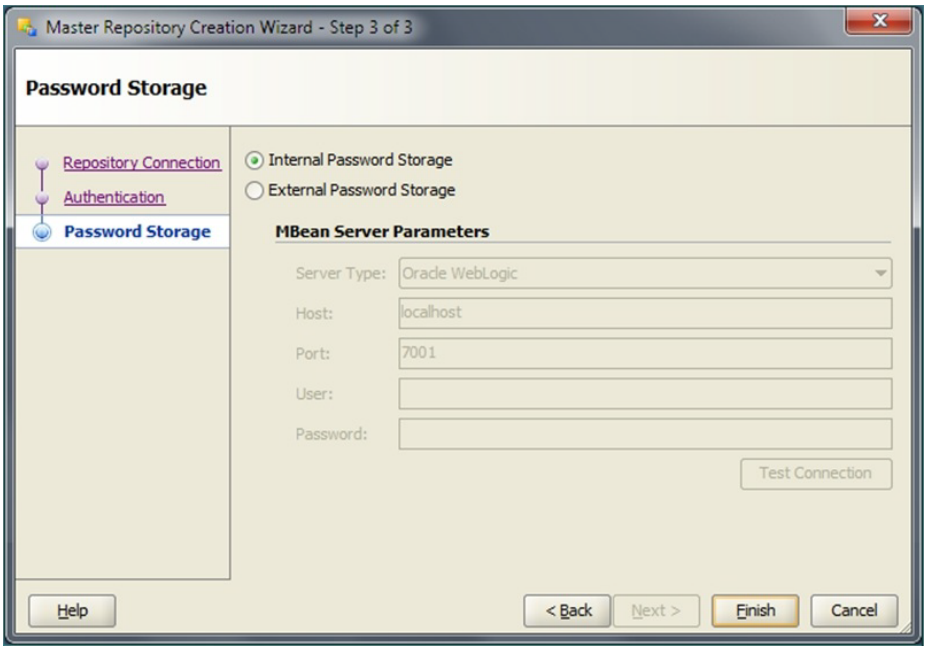
      The Password that entered in this field will be used later in the configuration process.

   b. In the **Confirm Password** field, re-enter the password.

   c. Click **Next**.

      The Password Storage screen appears.

Figure 5–4 Password Storage Screen



6. Click **Finish**.

   A message appears stating that ODI is creating your master repository.

   Subsequently, the Information dialog box appears with the confirmation of the successful Master Repository Creation. You can now connect to the Master Repository and create a Work Repository in the Topology Navigator, under the Repositories accordion.

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

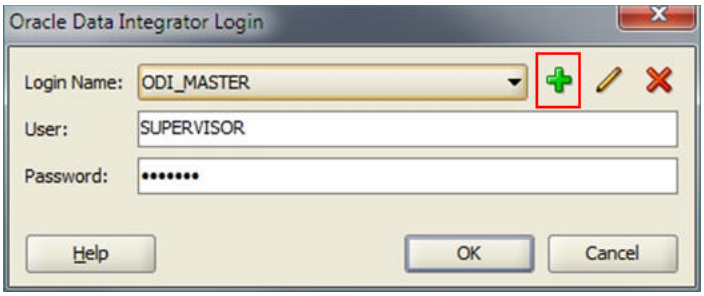
Once you have created the Master Repository, you also need to create a login name for the repository. See Section 5.3.1, Creating Repository Login.

5.3.1 Creating Repository Login

To create a login name for the Master or Work Repository, execute the following steps:

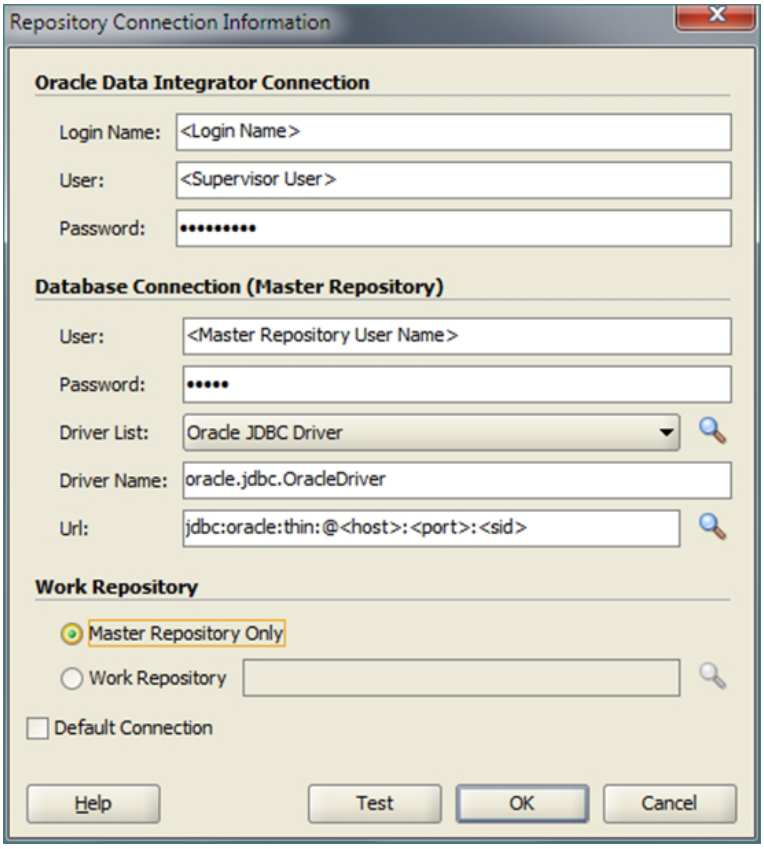
1. On the Oracle Data Integrator Login screen, click the + icon.

Figure 5–5 Creating Login for Repository



The Repository Connection Information screen appears.

Figure 5–6 Repository Connection Information



2. On the Repository Connection Information screen:
   a. In the **Login Name** field, enter a login name for the repository.
   b. In the **User** field, enter the name of the SUPERVISOR user.
   c. In the **Password** field, enter the password for the SUPERVISOR user.

      This password was specified in step 5 (a) of the steps to create the Master Repository section.
   d. In the Database Connection section, enter the Master Repository User Name and Password.

You have already created the ODI Master Repository User Name (for example, odi_master) and Password in Section 5.2.1, Creating the Database Users for Master and Work Repositories.

e. Enter the database details in the **Driver List**, **Driver Name** and **URL** fields.

You may also click the Search icon next to the **Driver List** and **URL** fields to search for the required Driver List and URL.

f. In **Work Repository** section:

— Select **Master Repository Only** option, if the login is being created for the Master Repository.

— Select the **Work Repository** option, and enter the name of the Work Repository in the adjacent text box (for example, AM_Work_Repository).

See Section 5.4, Creating Work Repository.

You may also click the Search icon next to the Work Repository name text box.

g. Click **OK**.

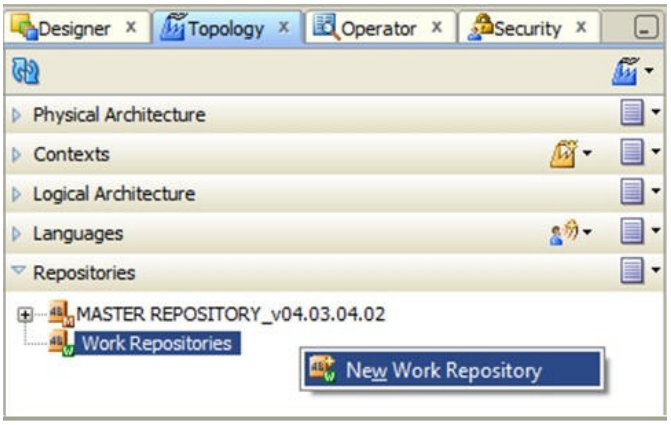
The login name is created.

5.4 Creating Work Repository

To create the Work Repository, execute the following steps:

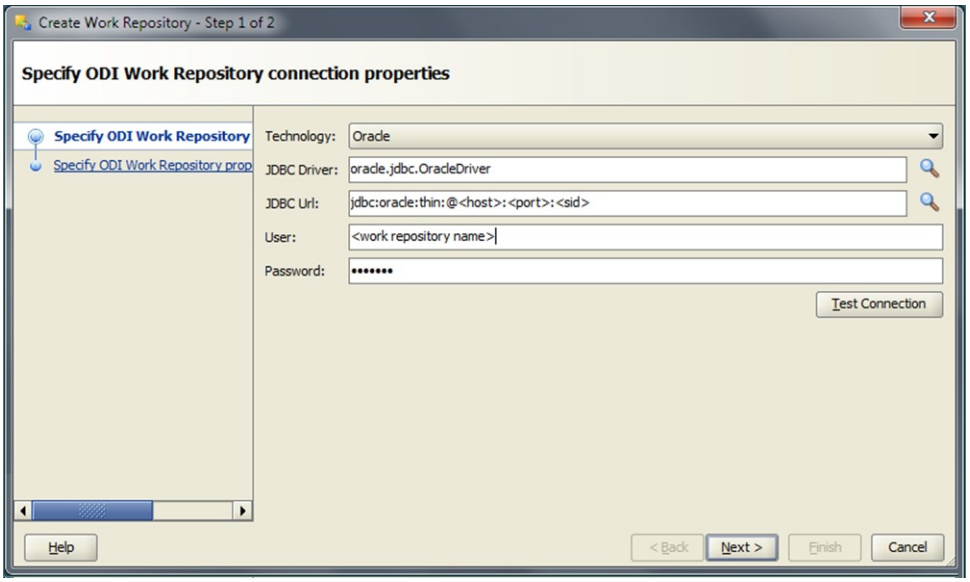
1. Open the ODI, and connect to the repository using the Master Repository credentials that you have just created, as mentioned in the previous section.
2. Select the **Topology** tab.
3. In the Repositories section, right-click **Work Repositories** and select **New Work Repository**.

Figure 5–7 New Work Repository Option



The Specify ODI Work Repository connection properties screen appears.

Figure 5–8 Specify ODI Work Repository connection properties screen



4. Enter the database details in the **JDBC Driver** and **JDBC Url** fields.

   You may also click the Search icon next to the fields to search for the required JDBC Driver and JDBC URL.

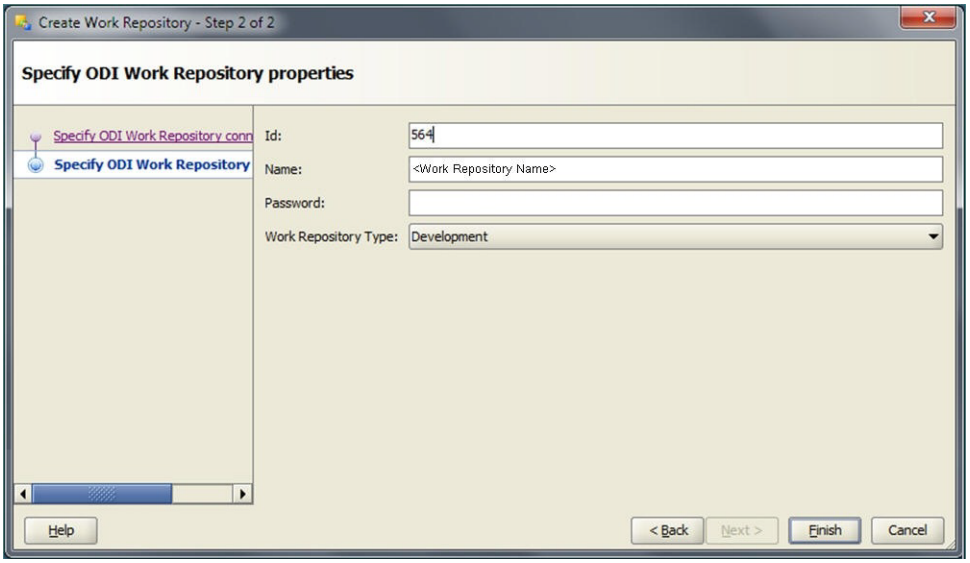
5. In the **User** and **Password** fields, enter the Work Repository User Name and password respectively.

   You have already created the ODI Work Repository User Name (for example, odi_work) in Section 5.2.1, Creating the Database Users for Master and Work Repositories.

6. Click **Next**.

   The Specify ODI Work Repository properties screen appears.

Figure 5–9 Specify ODI Work Repository properties screen



7. In the **Id** field, enter the ID for the Work Repository.

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.

8. Enter the **Name** and **Password** for the Work Repository.

   For example, AM_Work_Repository.

9. From the **Work Repository Type** drop-down list, select **Development**.

10. Click **Finish**.

    The Starting ODI Action dialog box appears with a message stating the ODI is creating your work repository.

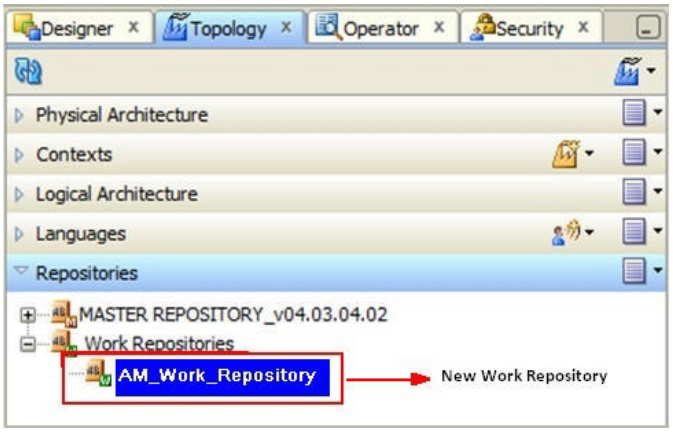
    Subsequently, the Confirmation dialog box appears with the option to create a login for the work repository.

11. Click **Yes** if you want to create a login for the Work Repository.

    If you click **No**, perform the steps of Section 5.3.1, Creating Repository Login, starting Step 2.

    Once done, a Work Repository is created in the **Work Repositories** folder of the **Repositories** section.

Figure 5–10 Viewing New Work Repository



After you have created the Work Repository, you also need to create a login for the repository. See Section 5.3.1, Creating Repository Login.

5.5 Importing Argus Mart Schema Object

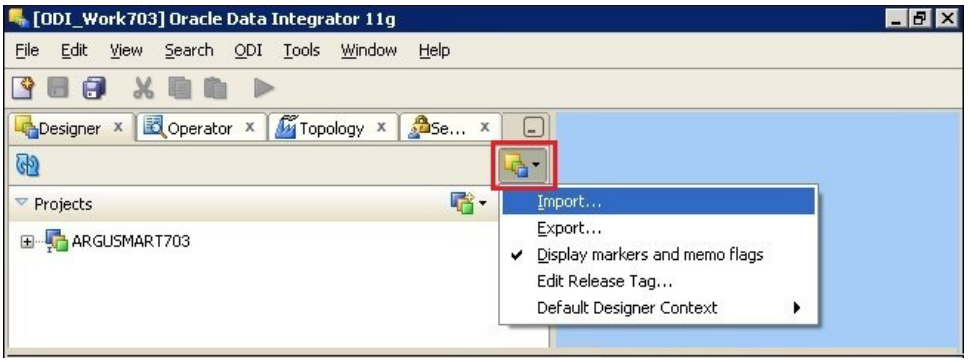
Once you have created the Master and Work Repositories, you can now import the **AM.zip** file using the following procedure:

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. From the Designer tab, click the down arrow.

   A drop-down menu appears.

Figure 5–11 Import Link



3. Click **Import**.

   The Import Selection dialog box appears.

4. Select **Smart Import**, and click **OK**.

   The Smart Import dialog box appears.

5. Click the Search icon next to the **File Selection** field.

   The Select an import file dialog box appears.

6. Navigate to the AM.zip file, saved at the following location:

   ...\ArgusMart\ODI\AM.zip

7. Select the **AM.zip** file, and click **Open**.

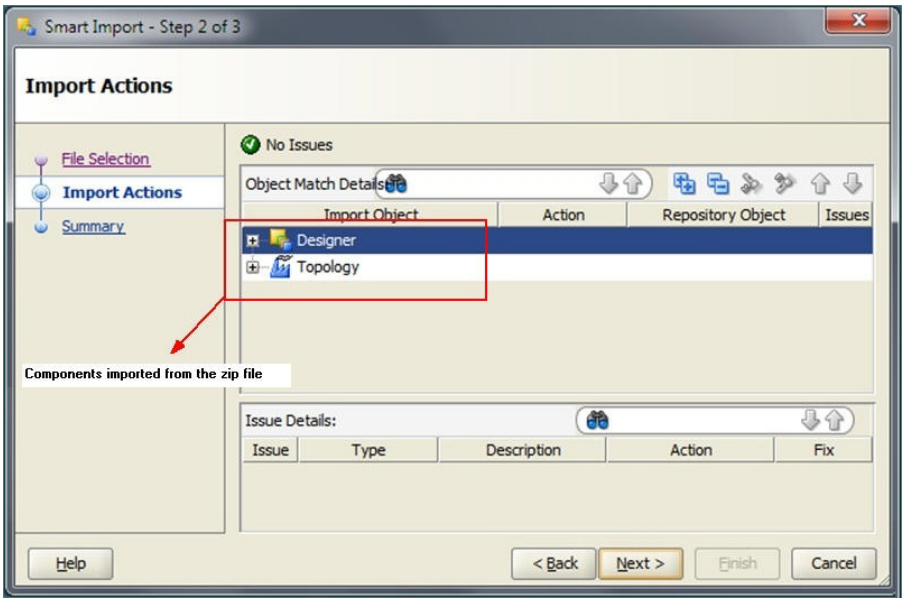
   The complete path of the zip file appears in the **File Selection** field. Keep the **Response file** field as blank.

8. Click **Next**.

   The Please wait dialog box appears with a Matching Import Objects message.

   Subsequently, the Smart Import dialog box appears listing the components that will be imported from the zip file using the Import Actions screen.

Figure 5–12 Displaying Components Imported from the Zip File



9. Click **Next**.

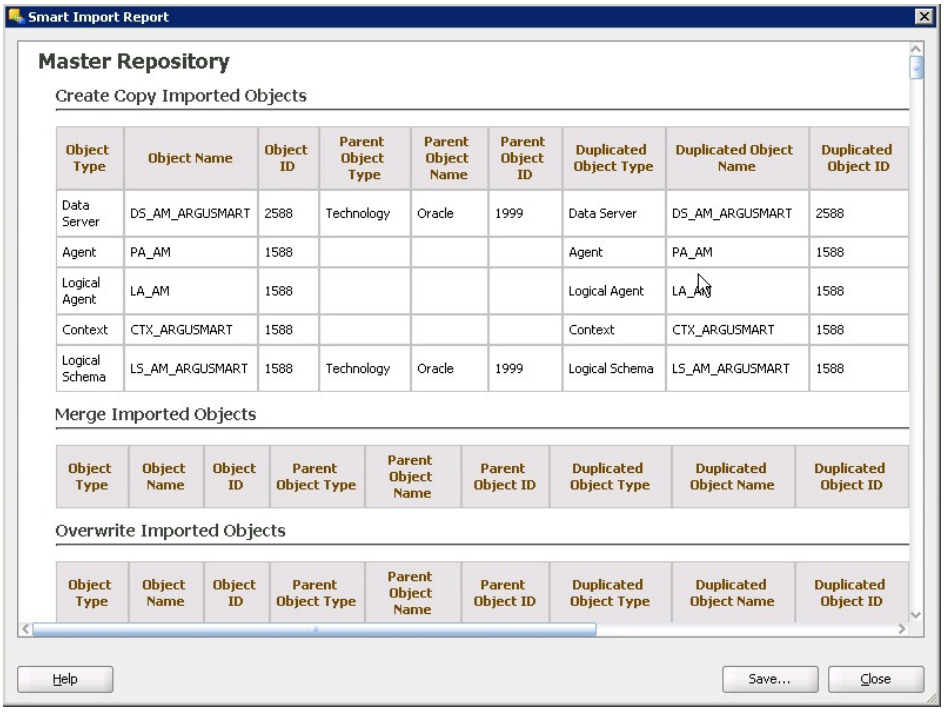
   The Summary screen appears with the No issues message if there are no errors in the import process.

10. Click **Finish**.

    The Please wait dialog box appears with a Import in progress message.

    Subsequently, the Smart Import Report screen appears listing the objects imported using the zip file.

Figure 5–13 Smart Import Report



11. Click **Save**.

    The Save Report dialog box appears.

12. Click the Search icon next to the **Name of the target file** field.

    The Save dialog box appears.

13. Navigate to the path where you want to save the report, and in the **File Name** field, enter the name for the report.

14. Click **Save**.

    The name of the report file appears along with the complete path in the **Name of the target file** field.

15. Click **OK**.

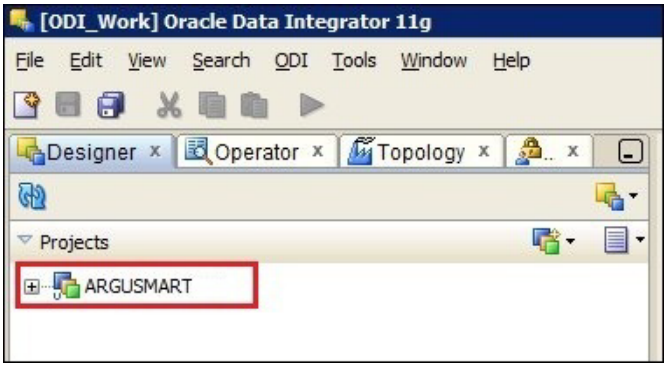
    The Information dialog box appears with the path where the report file has been saved.

16. Click **OK**.

    This completes the steps to import the AM zip file.

    You may verify this from ODI > Designer tab. The Argus Mart specific folders now appears in the Designer tab under Projects section, such as **ARGUSMART<version number>**.

Figure 5–14 Verifying the Smart Import



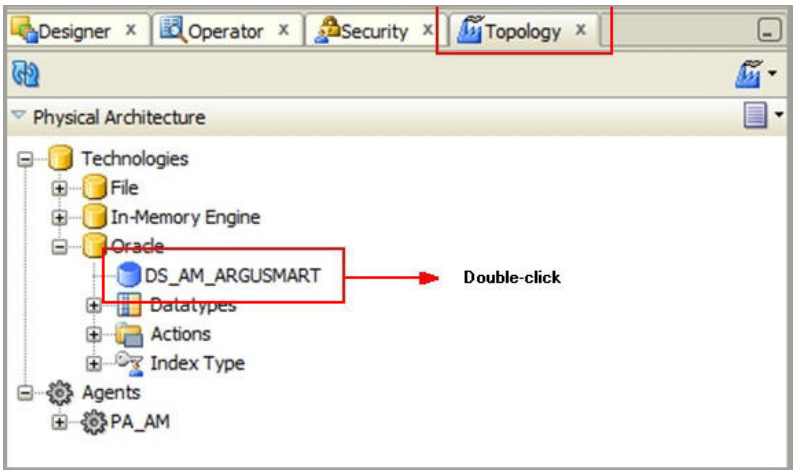
5.6 Creating and Testing Data Server Connection

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

1. Select the Topology tab.

   In the Physical Architecture section, under Oracle folder, double-click **DS_AM_ARGUSMART**.

Figure 5–15 Creating Data Server Connection



The connection details appears in the right pane, with **Definition** selected by default.

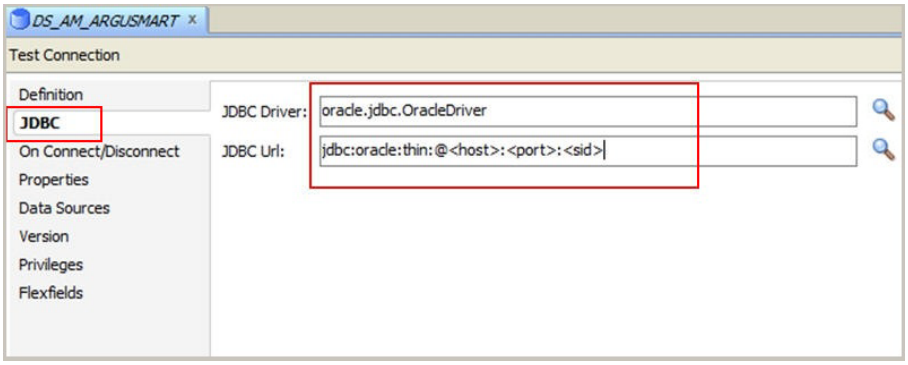
2. In the **User** field, enter the name of the Argus ETL user (**AM_ETL_USER**).

   This user was created in the Section 3.4, Creating the Database Schema.

3. In the **Password** field, enter the password for the Argus ETL User.

4. Select **JDBC** in the right pane, and enter database details of the Argus Mart schema in the **JDBC Driver** and **JDBC Url** fields, as depicted in the following figure:

Figure 5–16 Entering Database Details



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

5. Click **Test Connection**.

   A confirmation message appears to save data before testing the connection.

6. Click **OK**.

   The Test Connection dialog box appears.

7. From the **Physical Agent** drop-down list, select **Local** and click **Test**.

   The Information dialog box appears with the Successful Connection message.

8. Click **OK**.

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

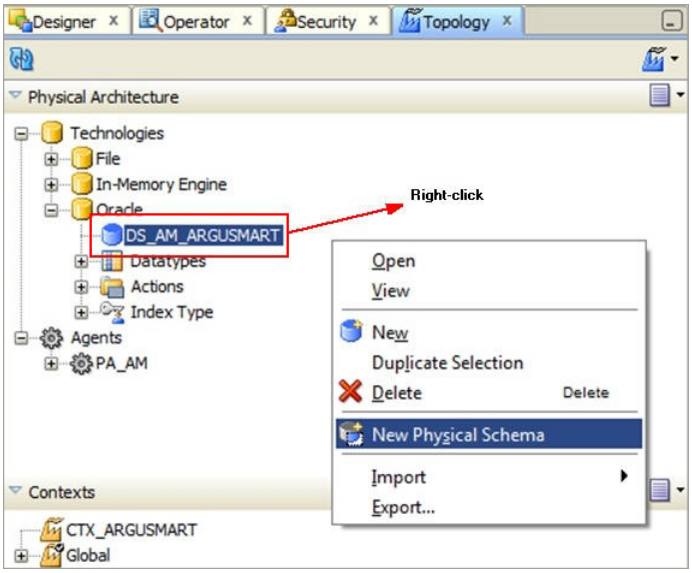
5.7 Creating New Physical Schema

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

1. Select the Topology tab.

   In the Physical Architecture section, under Oracle folder, right-click **DS_AM_ARGUSMART**.

Figure 5–17 Selecting New Physical Schema



2. Select **New Physical Schema**.

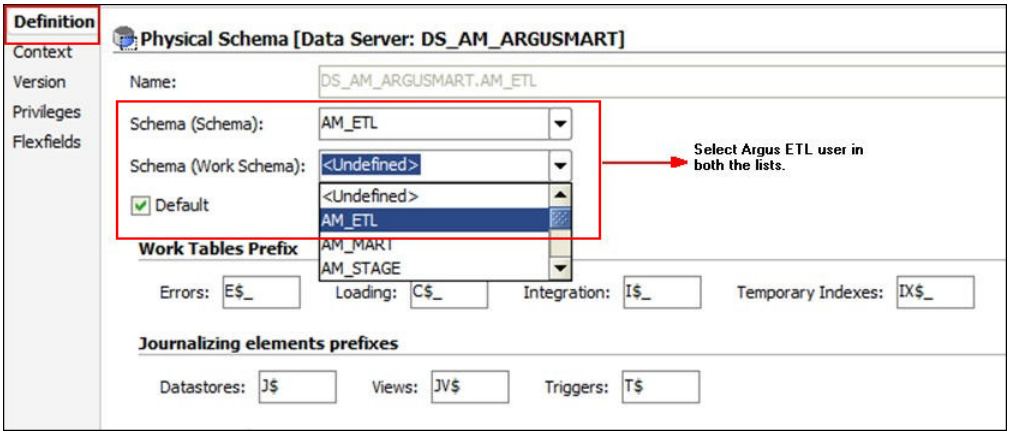
   The Physical Schema screen appears, where **Definition** is selected by default.

3. From the **Schema** drop-down list, select the Argus ETL User (**AM_ETL_USER**).

   This user was created in Section 3.4, Creating the Database Schema.

4. From the **Schema (Work Schema)** drop-down list, select the Argus ETL User (**AM_ETL_USER**) again.

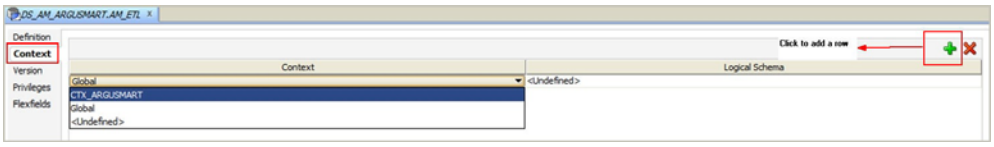
Figure 5–18 Selecting Argus ETL User in Definition Section



5. From the left-pane, select **Context**, and click the **+** symbol.

   A new row is added in the empty space below the **Context** and **Logical Schema** options.

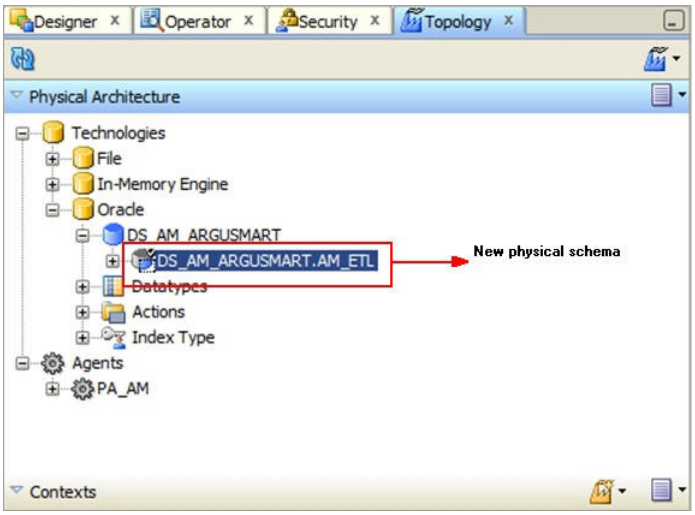
Figure 5–19 Selecting Context for the Data Server



6. From the **Context** drop-down list, select **CTX_ARGUSMART**.
7. From the **Logical Schema** drop-down list, select **LS_AM_ARGUSMART**.
8. Click **Save** on the menu bar.

   The new physical schema appears under Physical Architecture section, in Oracle folder.

Figure 5–20 Viewing the New Physical Schema

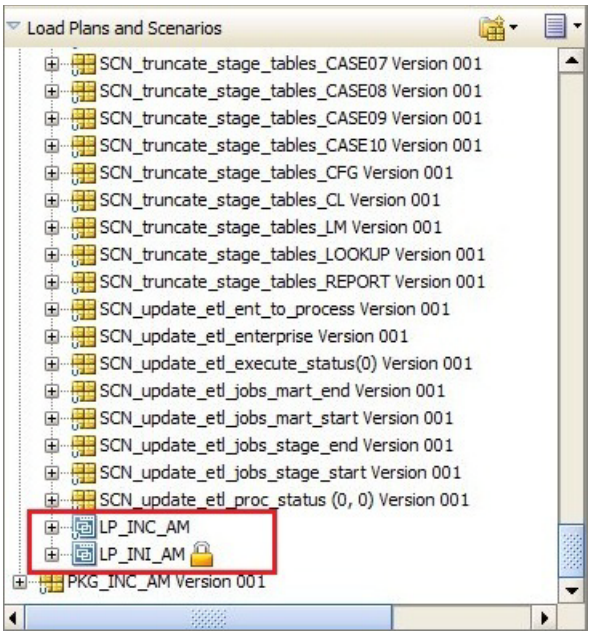


5.8 Validating Load Plan

To validate the Load Plan, execute the following steps:

1. Select Operator tab.
2. In the Load Plans and Scenarios > SCN_LP_ARGUSMART80 section, double-click the **LP_INI_AM** Load Plan.

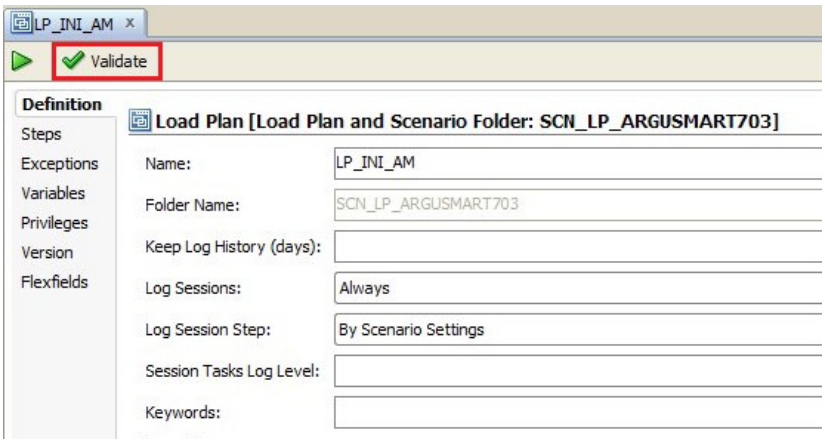
Figure 5–21 Double-clicking the LP_INI_AM Load Plan



If the Object Locking dialog box appears, click **No** and proceed with the Validation process.

The Load Plan details appears in the right pane.

Figure 5–22 Load Plan Details



3. Click **Validate**.

   A confirmation message appears, if there are no issues associated with 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

Execute the following tasks to manage the Standalone ODI Agent:

- 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

After the standalone ODI Agent is installed, you 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**. The Agent details appears in the right pane.
3. In the **Host** field, enter the Standalone Agent IP Address.

> **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.

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

Parameter	Description
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

Execute the following steps to encode the ODI Master Repository and SUPERVISOR user password:

1. Open the command prompt screen, 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.

2. Encode the ODI Master Repository User password using the **encode** command as follows:

   ```
   C:\oracle\product\<version number>\Oracle_ODI_agent\oracleid\agent\bin> encode 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

After the required modifications are made 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. On the command prompt screen, execute the **agent.bat** file using the following command:

   ```
   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. On the Designer tab, in the Load Plans and Scenarios section, double-click the **LP_INI_AM** Load Plan. (Figure 5–21)

   The Load Plan details appears in the right pane.

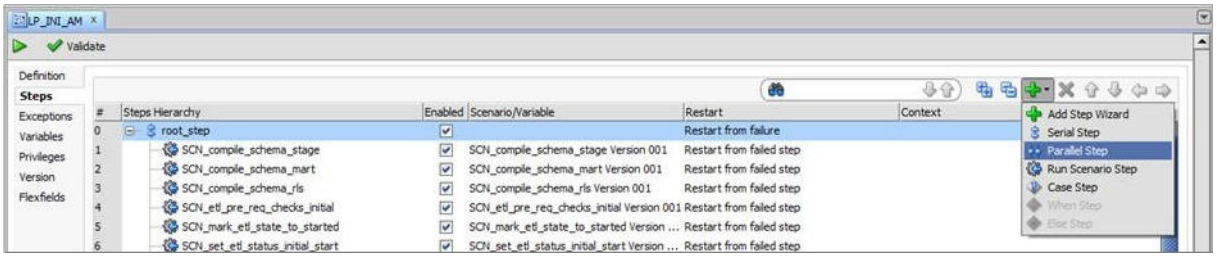
2. Select **Steps**.

   All the steps of a Load Plan appears.

3. Click the down arrow next to the + icon.

   A drop-down menu appears.

Figure 5–23 Adding Parallel Step to the List of Steps



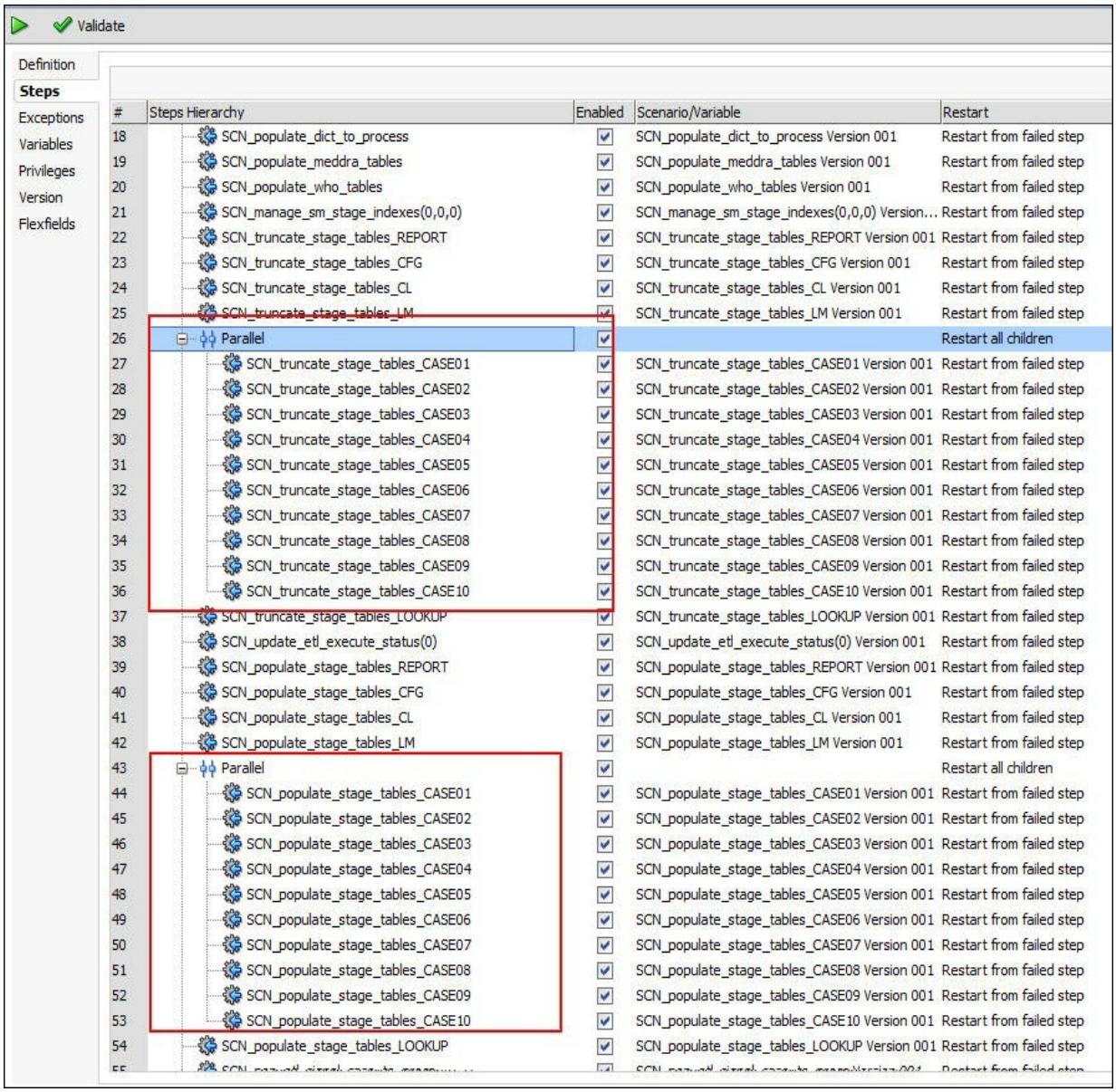
4. Select **Parallel Step**.

   A parallel step is added 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 may 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.

Figure 5–24 Executing Load Plan Steps in Parallel



The **AM.zip** file, which you is imported, as explained in Section 5.5, Importing Argus Mart Schema Object, has the provision to execute the Staging Case Table Truncation and Population in parallel, as highlighted in Figure 5–24.

The process of truncation comprises of various tables, which are divided into different categories. These categories are 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 are named as **SCN_populate_stage_tables_CASE01**, **SCN_populate_stage_tables_CASE02**, and so on.

6

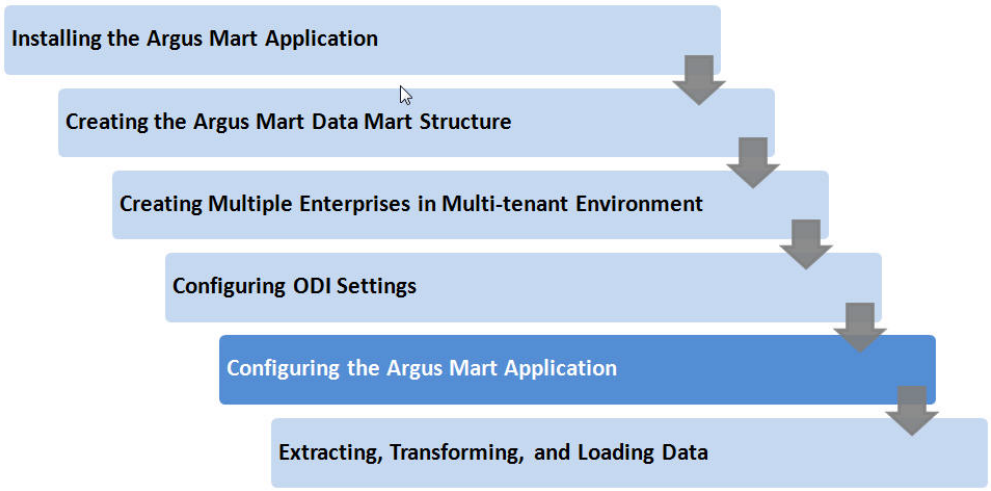
Configuring the Argus Mart Application

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:

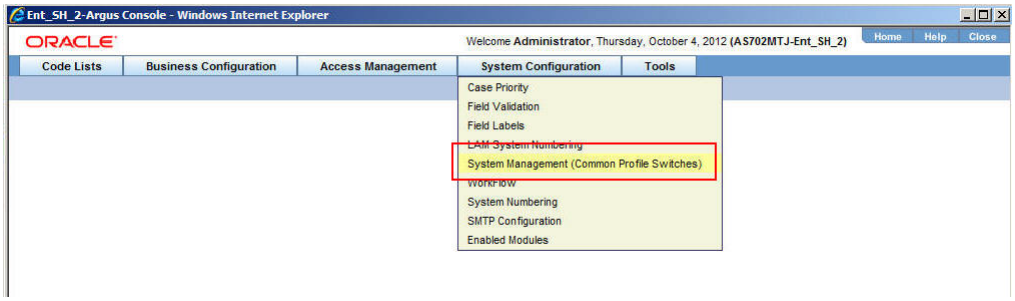
Figure 6–1 Installation Progress: Configuring the Argus Mart Application



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

1. Log on to the Argus Safety Console and navigate to **System Configuration** > **System Management (Common Profile Switches)**.

Figure 6–2 System Management Link on Argus Safety Console



The Common Profile screen appears with the list of configuration options in the left pane.

2. Click **Argus Mart**.

   The Modify Argus Mart screen appears with the list of Argus Mart Common Profile Switches that you need to configure, in the right pane.

   You can configure these Common Profile Switches 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.

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:

Table 6–1 Common Profile Switches for Argus Mart

Profile Switch	Type	Description
ENABLE SM PROCESSING	Global switch	This switch is used to enable or disable SM Processing for Argus Mart. **Yes** - Enable SM Processing for Argus Mart. **No** - Disable SM Processing for Argus Mart. The value for this switch cannot be changed once initial ETL has been executed.

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

Profile Switch	Type	Description
ENABLE_AI_PROCESSING	Global switch	This switch is used to enable or disable Argus Insight Processing for Argus Mart. **0** - Do not populate Argus Insight data in Argus Mart. 1 - Populate Argus Insight data in Argus Mart.
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.
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 **SM_EVENT_ PRODUCT.LISTEDNESS_CDS_VE** 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 **FATAL_YN_DV** 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.

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

Profile Switch	Type	Description
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.
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.

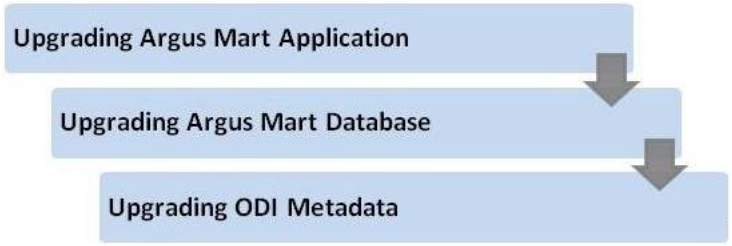
7

Upgrading the Argus Mart

This chapter explains how to upgrade Argus Mart 7.0.3 to Argus Mart 8.0, including ODI Metadata and the Schema Creation Tool.

The following figure explains the process to upgrade from Argus Mart 7.0.3 to Argus Mart 8.0:

Figure 7–1 Steps to Upgrade Argus Mart 7.0.3



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

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:
   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.**

The Summary screen appears.

3. Click **Install** to start the upgrade process.

After upgrade process is complete, the release version 7.0.3 is updated to 8.0.

7.3 Upgrading Argus Mart Database

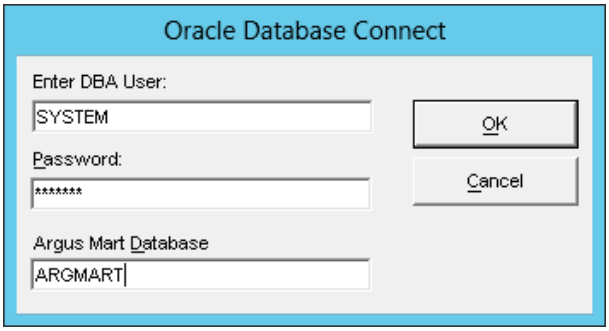
Note: Before upgrading the Argus Mart Database, you must re-create the Argus Mart user (AM_MART_USER) for the Argus Safety database. This user must be the same as the one created in Section 3.4.1, Creating User for the Argus Safety Database.

To upgrade the database from Argus Mart 7.0.3 to Argus Mart 8.0:

1. Start the Argus Mart Schema Creation Tool.
2. Click **DB Upgrade.**

The Oracle Database Connect dialog box appears.

Figure 7–2 Oracle Database Connect Screen



3. Connect to the Oracle Database:

a. In the **User** field, enter the name of Argus Mart SYSTEM or DBA user.

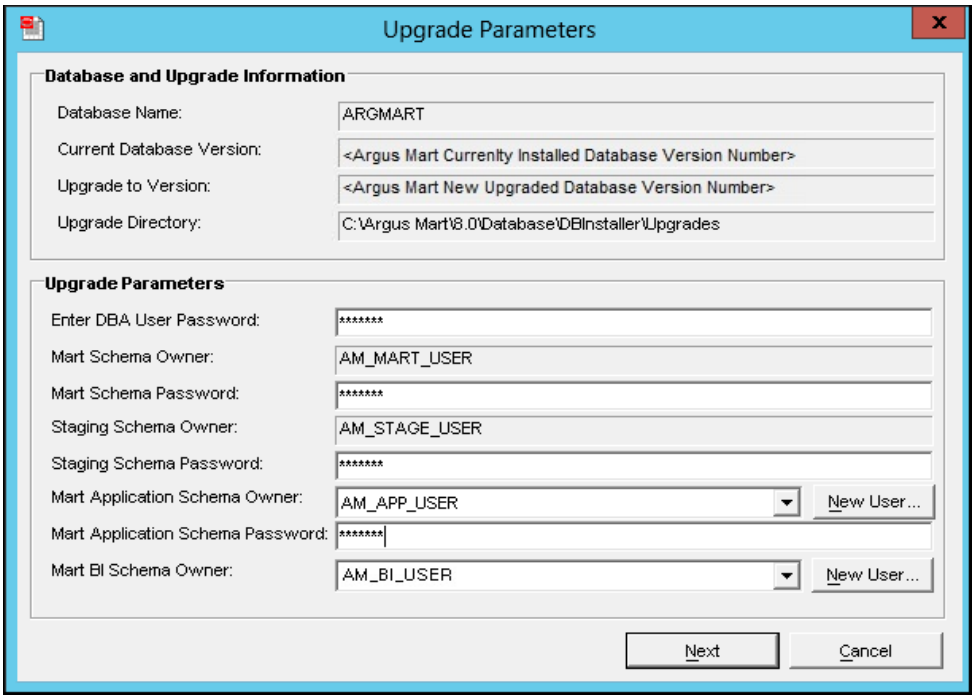
b. In the **Password** field, enter the password for Argus Mart SYSTEM or DBA user.

c. In the **Database** field, enter the name of your Argus Mart database.

d. Click **OK.**

The Upgrade Parameters dialog box appears.

Figure 7–3 Upgrade Parameters Screen



4. In the Database and Upgrade Information section, verify the following information:

   a. Database Name

   b. Current Database Version

   c. Upgrade to Version

   d. Upgrade Directory

   If the information is incorrect, click **Cancel.**

5. In the Upgrade Parameters section:

   a. In the **Enter DBA User Password** field, enter the password of Argus Mart SYSTEM or DBA user.

   b. In the **Mart Schema Password** field, enter the password of the Mart Schema Owner (AM_MART_USER).

   c. In the **Staging Schema Password** field, enter the password of the Staging Schema Owner (AM_STAGE_USER).

   d. For the **Mart Application Schema Owner** field, to create Argus Mart application owner, click **New User**.

   Note: As this is a new feature, the Argus Mart application owner does not exists in the database. You must create a new user here.

   The New User dialog box appears.

   i. In the **New User Name** field, enter a user name, such, AM_APP_USER.

   ii. In the **New User Password** field, enter a password for this user.

iii. In the **Re-enter Password** field, again enter the password (same as in previous step).

iv. From the **Default Tablespace** drop-down list, select the default tablespace, where you want to store the database objects.

v. From the **Temporary Tablespace** drop-down list, select the tablespace, where you want to store the database objects temporarily.

vi. Click **OK**.

A new Argus Mart Application user is created and you return to the Upgrade Parameters screen.

e. In the **Mart Application Schema Password** field, enter the password of the Argus Mart application owner (AM_APP_USER), created in the previous step.

f. For the **Mart BI Schema Owner** field, to create Argus Mart BI owner (AM_BI_USER), click **New User**.

Note: As this is a new feature, the Argus Mart BI owner does not exists in the database. You must create a new user here.

The New User dialog box appears.

i. In the **New User Name** field, enter a user name, such, AM_BI_USER.

ii. In the **New User Password** field, enter a password for this user.

iii. In the **Re-enter Password** field, again enter the password (same as in previous step).

iv. From the **Default Tablespace** drop-down list, select the default tablespace, where you want to store the database objects.

v. From the **Temporary Tablespace** drop-down list, select the tablespace, where you want to store the database objects temporarily.

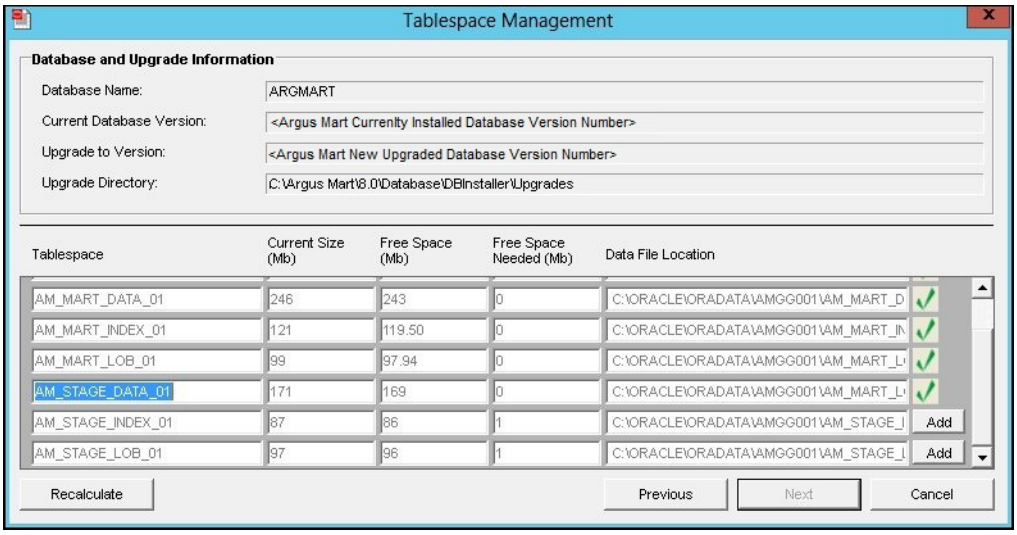
vi. Click **OK**.

A new Argus Mart BI user is created and you return to the Upgrade Parameters screen.

6. Click **Next.**

The Tablespace Management dialog box appears.

Figure 7–4 Tablespace Management Screen



7. Verify that all tablespaces have enough free space.

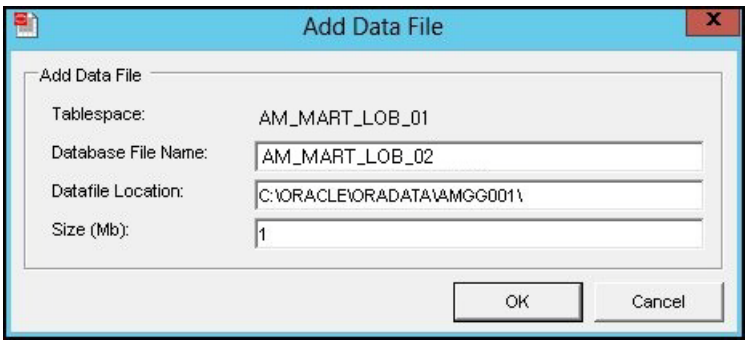
The green check mark indicates that the tablespace has enough free space.

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 appears.

Figure 7–5 Add Data File Screen



Enter a name for the new datafile (such as, **AM_MART_LOB_02**), containing the required additional space, and click **OK**.

Note: In case no datafile exists for any tablespace, click **Create**.

A dialog box appears to create a new datafile containing the tablespace information.

---

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.

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** or **Create** button no longer appears and the green check mark appears, indicating that the tablespace has enough free space.

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

8. Click **Next.**

   The Argus Mart Database Upgrade screen appears.

9. Click **Continue** to start the upgrade process.

   During the upgrade process, the system upgrades the database and loads the factory data.

   Enter Argus Mart SYSTEM or DBA user password when prompted.

   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 appears 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**.

   After successful completion of upgrade process, the status information appears.

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.

    Note: Recreate Argus Safety Read-only user using Argus Mart Schema Creation Tool after successful upgrade.

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 8.0 does not support upgrade of existing Argus Mart 7.0.3 - 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.

8

Extracting, Transforming, and Loading Data

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

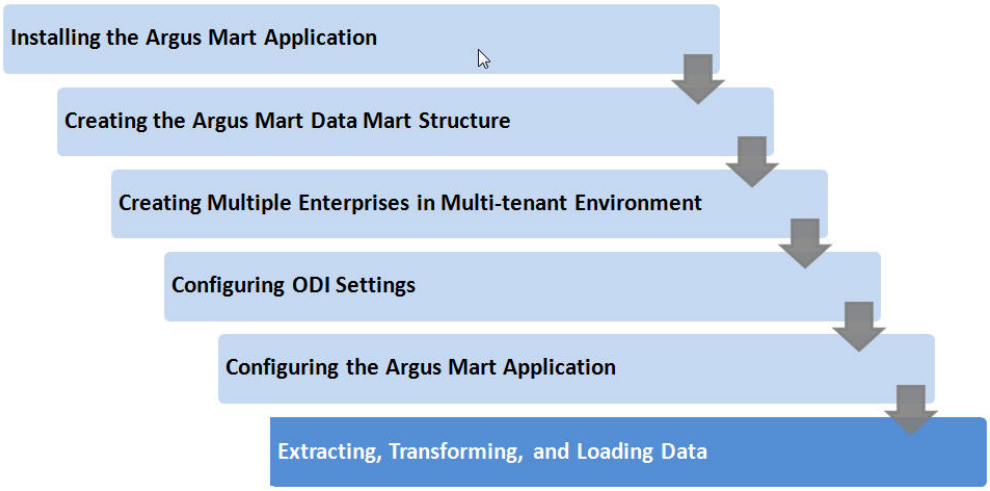
The following table illustrates some of the terms along with the name of the Load Plan that has been used to refer the different types of ETL in the later sections of this chapter:

Table 8–1 Describing ETL Types

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. If a new enterprise is added, the Incremental ETL loads complete data of the new enterprise along with delta data of other enterprises.	LP_INC_AM

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

The following are the steps required to manage the ETL process using the Database Integrator Studio:

- 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:

1. Open the ODI Studio, and click **Connect to Repository**.

   The Oracle Data Integrator Login screen appears.

Figure 8–2 Oracle Data Integrator Login Screen

2. In the **Oracle Data Integrator Login** screen:
   a. From the **Login Name** drop-down list, select the ODI Work Repository name.
   b. In the **User** field, enter the name of the ODI user.
   c. In the **Password** field, enter the password for the ODI user.

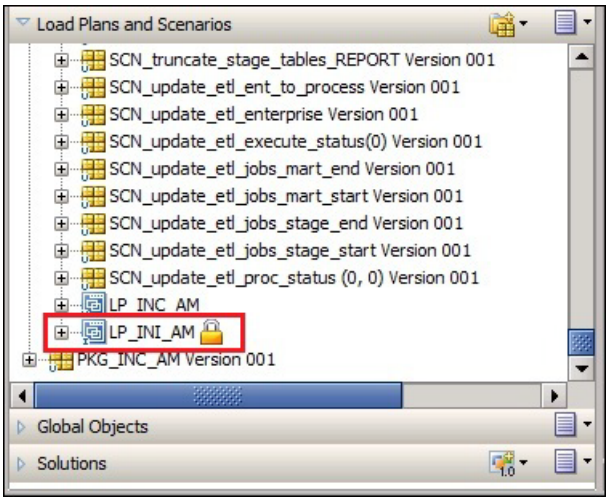
      The password for the SUPERVISOR user was specified by you in the Section 5.3, "Creating Master Repository" while configuring the ODI settings.
   d. Click **OK**. This displays the **Oracle Data Integrator** Screen.
3. Select the Operator tab in the left pane.
4. Expand the **Load Plans and Scenarios** section.

Figure 8–3 Load Plans and Scenarios

5. Expand **SCN_LP_ARGUSMART80,** and scroll-down to **LP_INI_AM**.

This option in this section represents the load plan for the initial ETL process for Argus Mart.

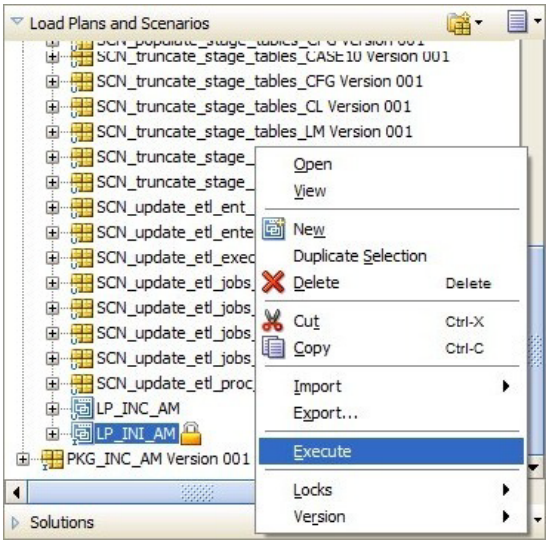
Figure 8–4 Load Plan for Initial ETL



6. Right-click the **LP_INI_AM** option.

   A drop-down menu appears.

Figure 8–5 Executing the Initial ETL



7. Click **Execute**.

   The Start Load Plan screen appears.

8. In the Start Load Plan screen:

   a. From the **Context** drop-down list, select **CTX_ARGUSMART**.

   b. From the **Logical Agent** drop-down list, select **LA_AM**.

   c. From the **Log Level** drop-down list, select the desired log level.

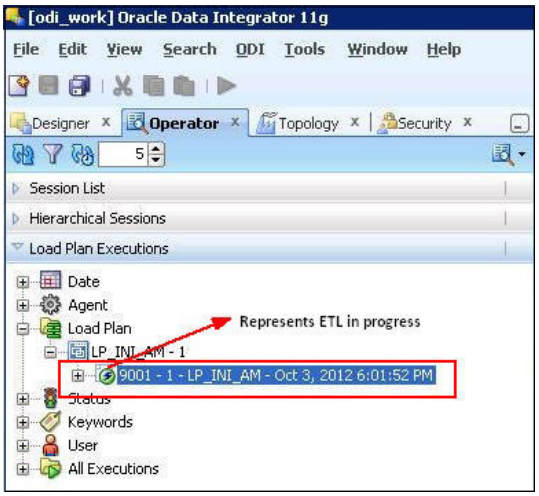
   d. Click **OK**.

The Information dialog box appears with the Load Plan Started confirmation message.

9. Click **OK**.

   To verify the status of the ETL process, navigate to the Load Plan Executions section, and expand the **Load Plan** folder. The status of the Load Plan appears in Green color with tilted **S**, which signifies that the ETL session is in progress.

Figure 8–6 Status of the Load Plan



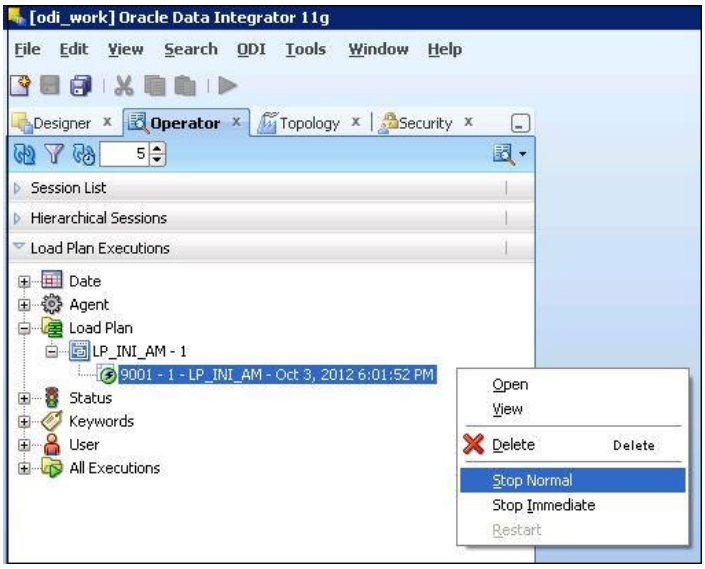
8.1.2 Stopping the ETL

To stop the initial ETL, execute the following steps:

1. In Load Plan Executions section, **Load Plan** folder, right-click the Load Plan, which you want to stop.

   A drop-down menu appears.

Figure 8–7 Stopping the Initial ETL



2. Select **Stop Normal**.

   The Stop Load Plan dialog box appears.

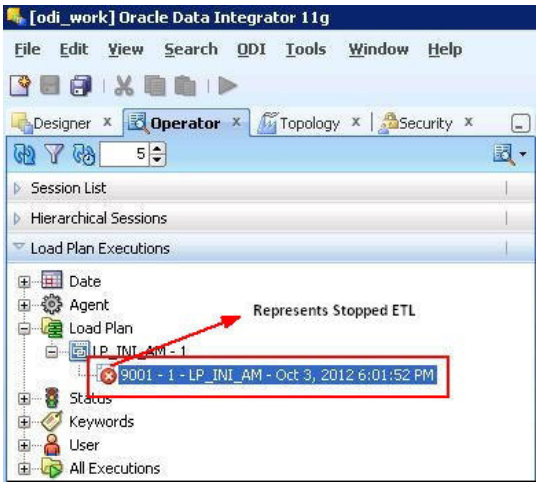
3. From the **Physical Agent** drop-down list, select **PA_AM**.

4. Click **OK**.

   The execution of the Load Plan is stopped.

   To verify the status of the ETL process, navigating to the Load Plan Executions section and expand the **Load Plan** folder. The status of the Load Plan appears in Red color with the **X** symbol, which signifies that the ETL session is not in progress.

Figure 8–8 Stopped Initial ETL Session



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

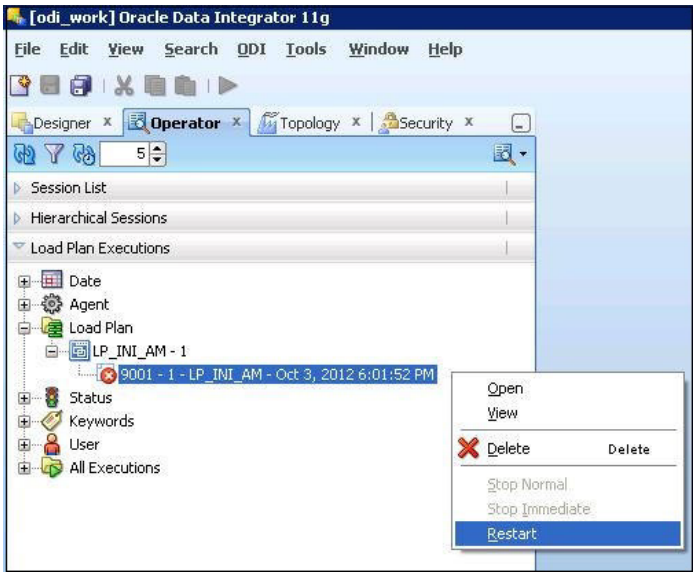
Restarting the Initial ETL process enables you to start the ETL process from the last execution step where it was stopped or failed.

To restart the Initial ETL, execute the following steps:

1. In Load Plan Executions section, **Load Plan** folder, right-click the Load Plan, which you want to restart.

   The drop-down menu appears.

Figure 8–9 Restarting the Initial ETL



2. Click **Restart**.

   The Restart Load Plan dialog box appears.

3. From the **Physical Agent** drop-down list, select **PA_AM**.

4. From the **Log Level** drop-down list, select the required log level.

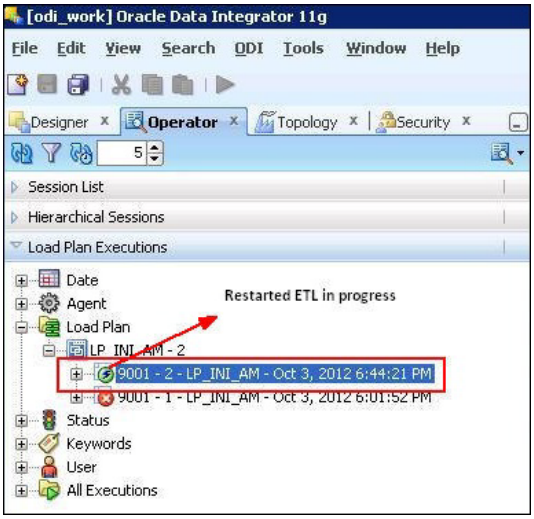
5. Click **OK**.

   The Information dialog box appears with the Load Plan restarted message.

6. Click **OK**.

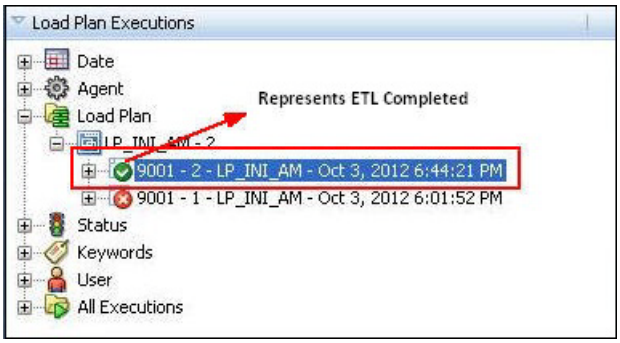
   Another Load Plan is added with the same name as that of the stopped ETL, in the Load Plan folder. However, this instance of the ETL Process appears in Green color with a tilted **S**, which signifies that the ETL is in progress.

Figure 8–10 Restarted Load Plan



Once the ETL process is complete, the Load Plan is appear in Green color with a check mark.

Figure 8–11 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 Section 8.1.3, "Restarting the ETL" 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:

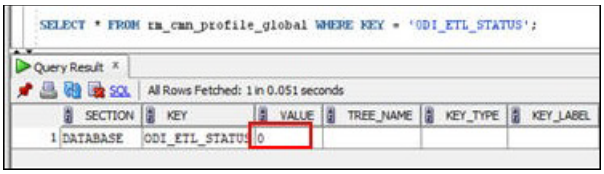
- EXEC pkg_sm_stage_util.p_set_cmn_profile_value ('DATABASE', 'ODI_ETL_STATUS', '0');
- EXEC pkg_sm_stage_util.p_set_cmn_profile_value ('DATABASE', 'ETL_SM_ITERATION_NUMBER', NULL);
- COMMIT;

To verify the successful execution of these statements, you may 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.

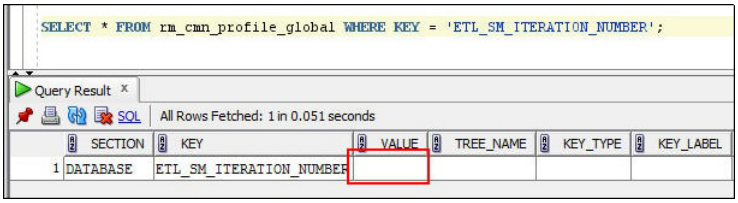
Figure 8–12 Select Statement 1 to Verify Successful Execution



- 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.

Figure 8–13 Select Statement 2 to Verify Successful Execution



See the Section 8.1.1, "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

The following are the steps to monitor the ETL process using the Database Integrator Studio:

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

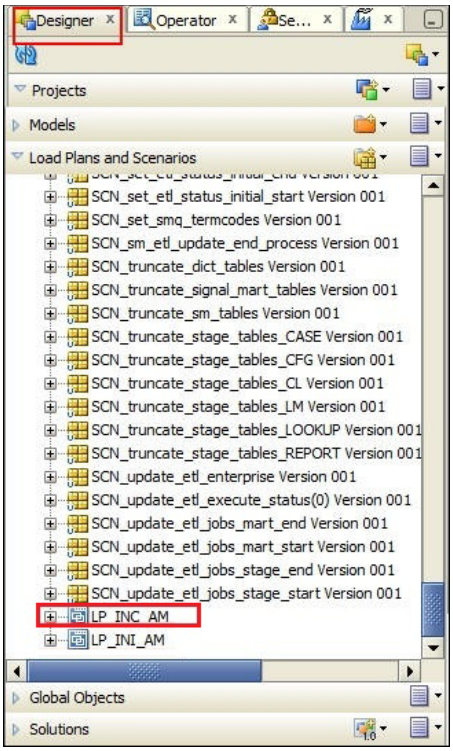
8.2.1 Viewing the Steps of Load Plan

Before executing the Initial ETL, you may 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.

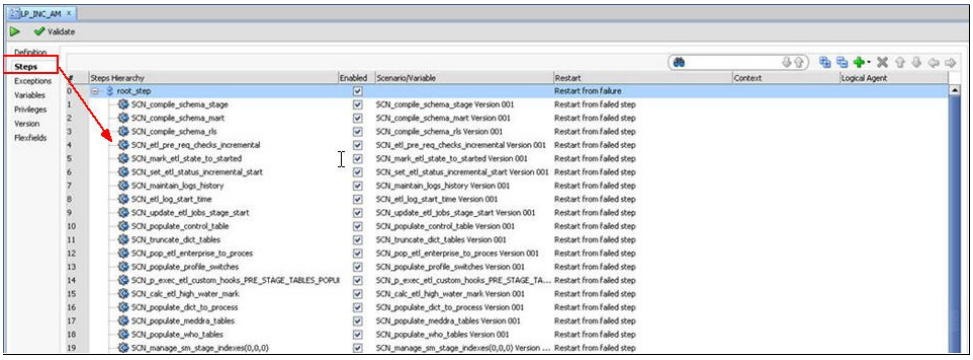
Figure 8–14 Navigating to the LP_INC_AM Load Plan



4. Double-click the **LP_INC_AM** load plan.
5. Select the **Steps** option in the right pane.

   All the steps of the Load Plan appears.

Figure 8–15 Viewing Steps of the Load Plan



Similarly, you may also view the steps for the Incremental Load Plan by navigating to **Designer** tab > Load Plans and Scenarios section, and double-click LP_INC_AM.

8.2.2 Monitoring the ETL

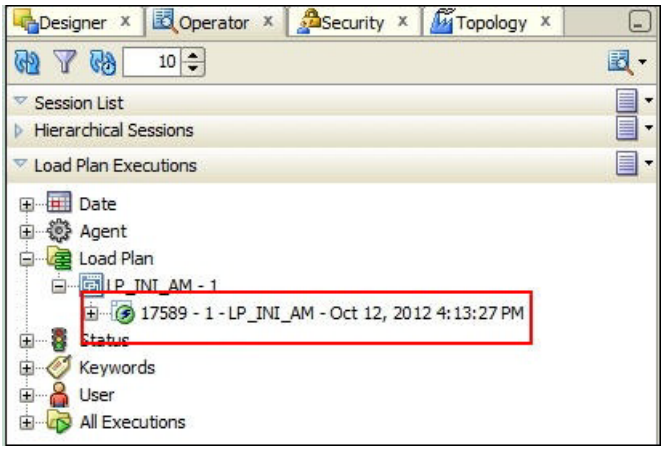
To monitor the progress of the Initial ETL after executing the **LP_INI_AM** Load Plan, execute the following steps:

1. Select the Operator tab, in the Load Plan Executions section expand the **Load Plan** folder.

2. Expand the **LP_INI_AM** load plan to view the ETL process in progress.

   The status of the Load Plan appears in Green color with a tilted **S**, which signifies that the process is running properly.

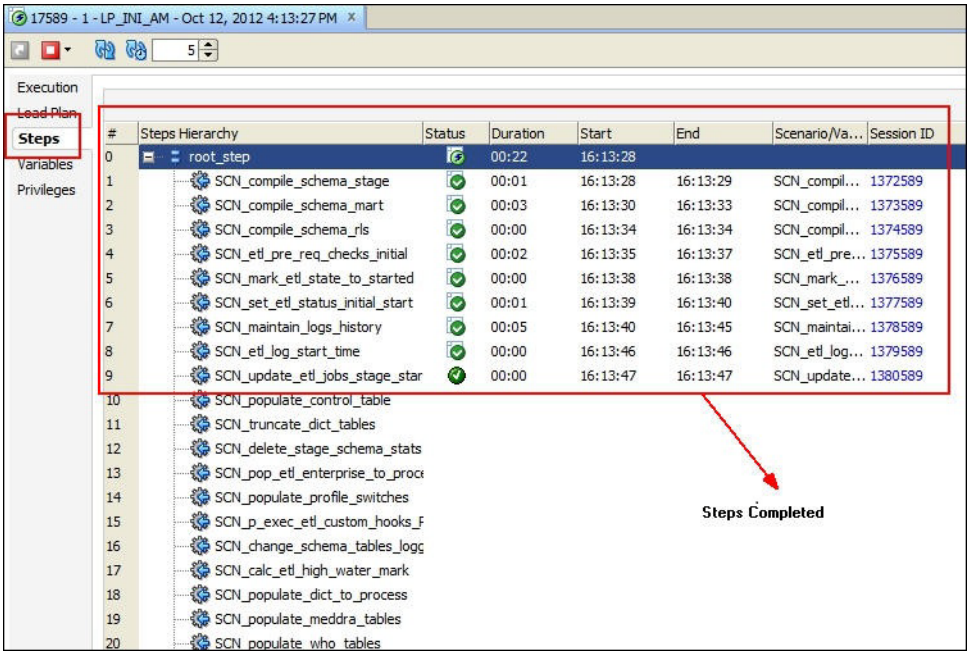
Figure 8–16 Viewing the Status of the ETL Process



3. Double-click the ETL session, highlighted in the figure above, and select **Steps** in the right pane.

   The list of steps for the Load Plan appears along with the steps that have been completed successfully.

Figure 8–17 Viewing Completed Steps in the ETL Process

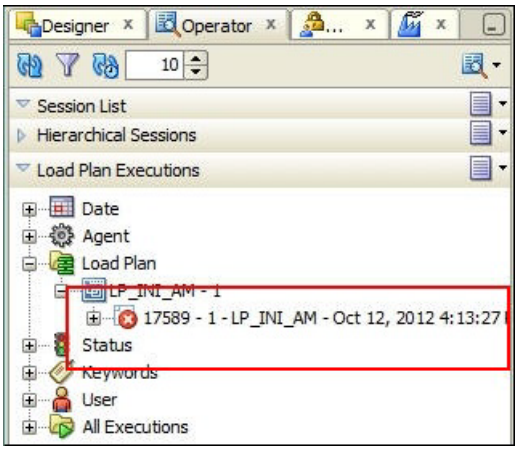


8.2.3 Debugging the Failed ETL

To view the step where the ETL process failed and also the error message related to the ETL process failure, execute the following steps:

1. In the Operator tab > Load Plan Executions section, expand the Load Plan folder to view the current status of the ETL process.

Figure 8–18 Viewing the Failed ETL Process

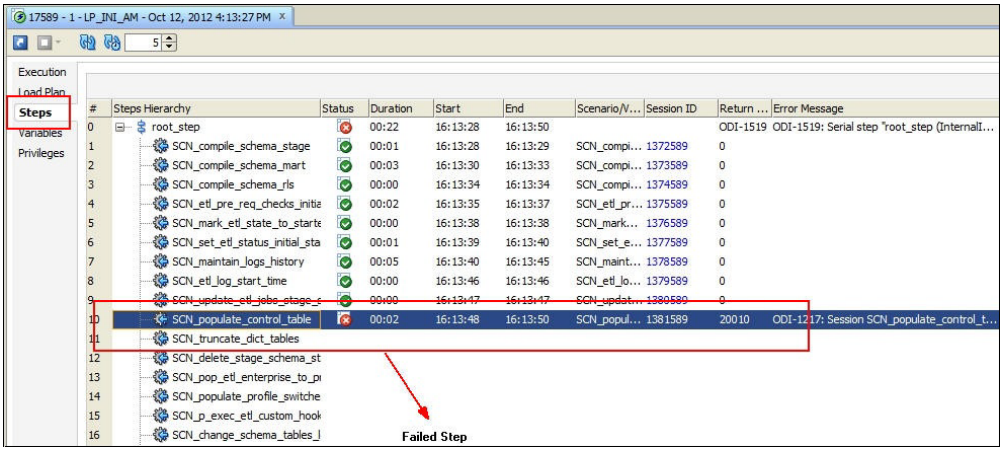


The status of the Load Plan appears in Red color with the **X** symbol, which signifies that the ETL session is not in progress.

2. Double-click the Load Plan, and select **Steps**.

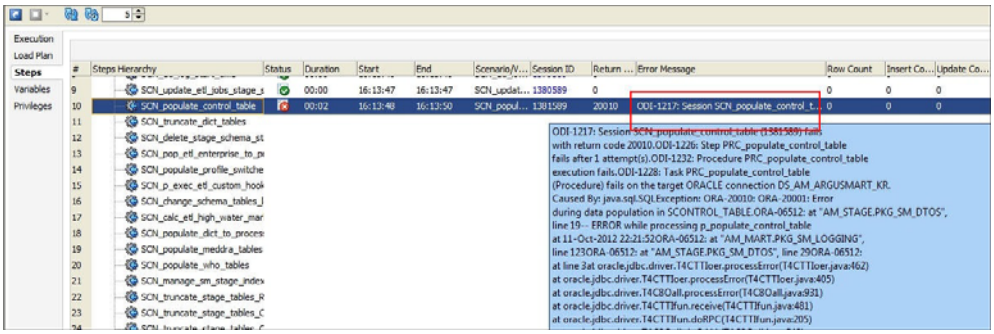
The list of steps for the Load Plan appears in the right pane. The step because of which the ETL process has failed, is highlighted in Red color with the **X** symbol.

Figure 8–19 Viewing the Failed Step for the ETL Process



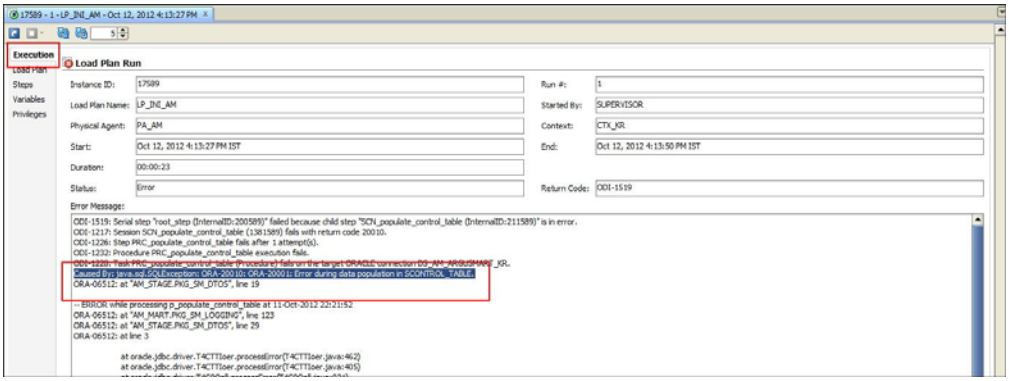
Hover the cursor over the error message to view the complete message.

Figure 8–20 Viewing the Error Message



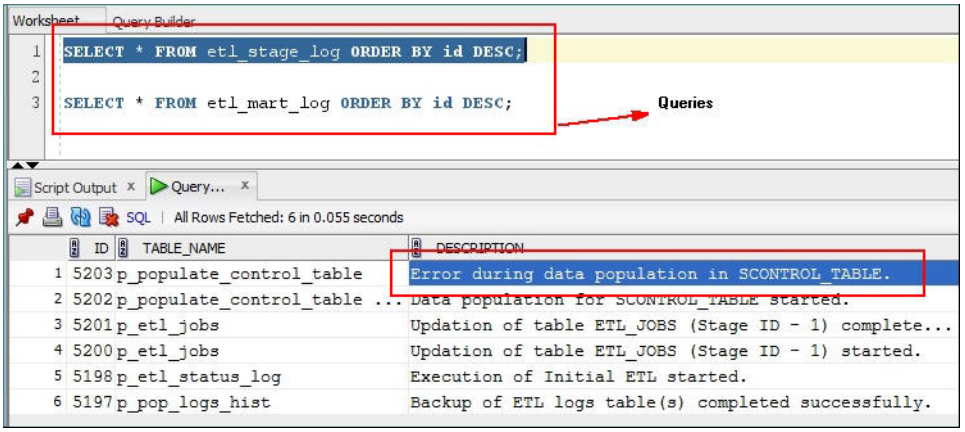
For more information about the error message, click **Execute**.

Figure 8–21 Viewing the Error Message using the Execution Section



To view the error message, log on to the Oracle SQL Developer using the Argus ETL user credentials, and execute the queries.

Figure 8–22 Viewing Error Message using SQL Developer



The following are the queries that may 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 may execute the query mentioned in point 2.

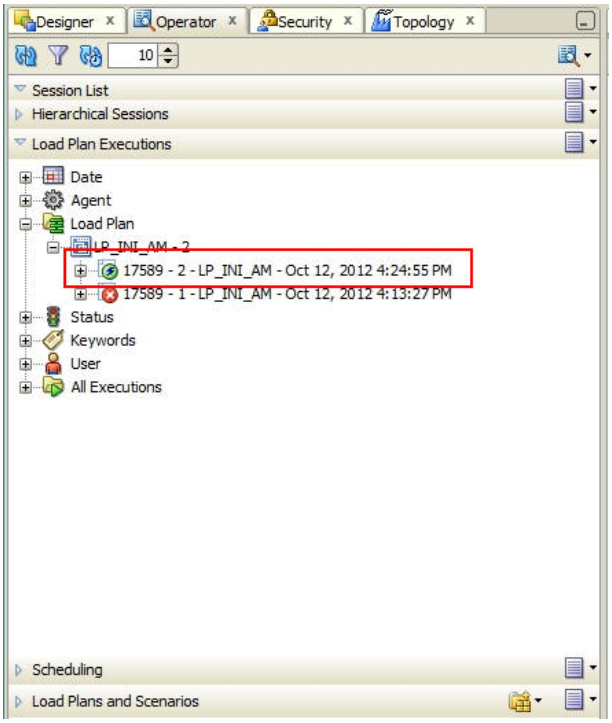
2. SELECT * FROM etl_mart_log ORDER BY id DESC;

8.2.4 Monitoring the Restarted ETL (Resume)

To view the status of the process after restarting a stopped ETL process, execute the following steps:

1. In the Operator tab > Load Plan Executions section, expand the **Load Plan** folder.

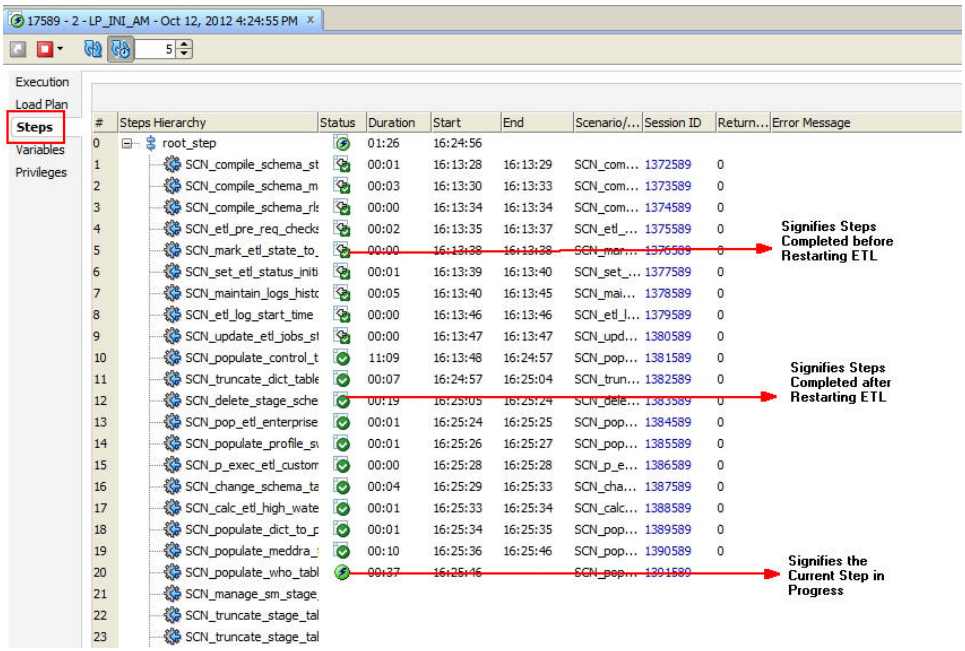
Figure 8–23 Viewing the Restarted ETL Process Status



The status of the restarted ETL process appears in Green color with a tilted **S**, which signifies that the ETL is in progress again.

To view the status of the remaining steps in the process, in the LP_INI_AM folder, double-click the Load Plan, and selecting **Steps**.

Figure 8–24 Viewing the Steps of the Restarted ETL



8.3 Managing Initial ETL Process: ODI Console

The following are the steps to manage the ETL process using the Database Integrator Console:

- 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.

   The Oracle Data Integrator Console Sign In screen appears.

2. In the Oracle Data Integrator Sign In screen:

   a. From the **Repository** drop-down list, select the ODI Work Repository name.

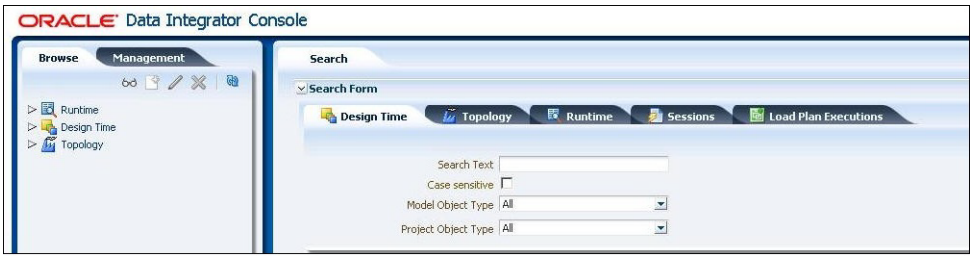
   b. In the **User Id** field, enter the name of the ODI user.

   c. In the **Password** field, enter the password for the ODI user.

   d. Click **Sign In**.

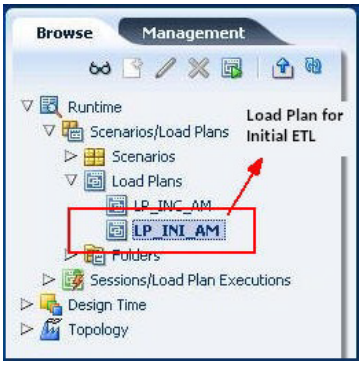
      The Oracle Data Integrator Console screen appears.

Figure 8–25 Oracle Data Integrator Console Screen



3. Select the Management tab in the left pane.
4. Expand the **Runtime** folder, and navigate to **Runtime** > **Scenarios/Load Plans** > **LP_INI_AM**.

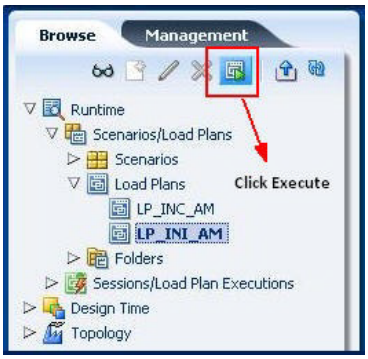
Figure 8–26 Scenarios/Load Plans



The LP_INI_AM option in this section represents the load plan for the initial ETL process for Argus Mart.

5. Click **Execute**.

Figure 8–27 Executing the Initial ETL



The Execute Load Plan screen appears.

6. In the Execute Load Plan screen:
   a. From the **Logical Agent** drop-down list, select **LA_AM**.
   b. From the **Context** drop-down list, select **CTX_ARGUSMART**.
   c. From the **Log Level** drop-down list, select the desired log level.

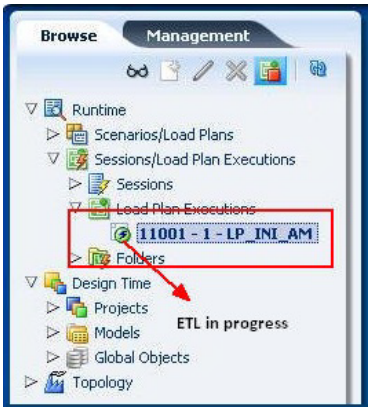
d. Click **Execute**.

The Information dialog box appears with confirmation message — Load Plan Execution submitted successfully.

7. Click **OK**.

To verify the status of the ETL process, in the Sessions/Load Plan Executions section, expand the **Load Plan Executions** folder. The status of the Load Plan appears in green color with tilted **S**, which signifies that the ETL session is in progress.

Figure 8–28 Status of the Load Plan

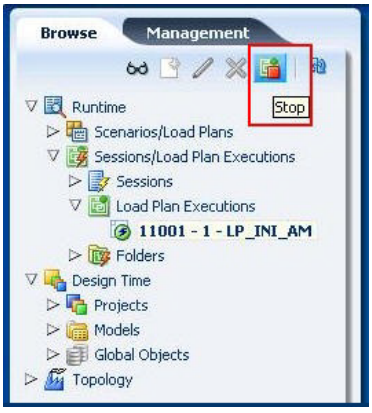


8.3.2 Stopping the ETL

To stop the initial ETL, execute the following steps:

1. In the Sessions/Load Plan Executions section > Load Plan Executions folder, select the Load Plan, which you want to stop, and click **Stop**.

Figure 8–29 Stopping the Initial ETL



The Stop Load Plan Execution dialog box appears.

2. From the **Stop Type** drop-down list, select **Normal**.

3. From the **Physical Agent** drop-down list, select **OracleDIAgent**.

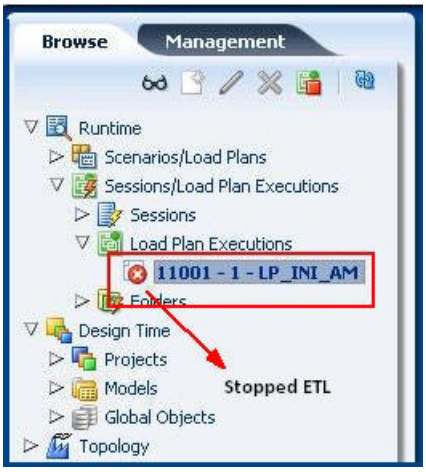
4. Click **Stop**.

The Information dialog box appears with confirmation message — Load Plan was Stopped Successfully.

5. Click **OK**.

To verify the status of the ETL process, navigate to **Sessions/**Load Plan Executions section > Load Plan Executions folder. The status of the Load Plan appears in red color with the **X** symbol, which signifies that the ETL session is not in progress.

Figure 8–30 Stopped Initial ETL Session



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

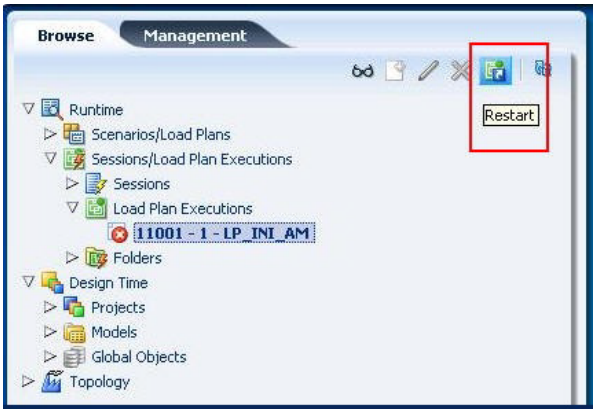
8.3.3 Restarting the ETL

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:

1. In the Sessions/Load Plan Executions section > Load Plan Executions folder, select the Load Plan, which you want to restart, and click **Restart**.

Figure 8–31 Restarting the Initial ETL



The Restart Load Plan Execution dialog box appears.

2. From the **Physical Agent** drop-down list, select **OracleDIAgent**.
3. From the **Log Level** drop-down list, select the required log level.
4. Click **Restart**.

   The Information dialog box appears with confirmation message — Load Plan restarted.
5. Click **OK**.

   Another Load Plan is added with the same name as that of the stopped ETL, in the **Sessions/**Load Plan Executions section > Load Plan Executions folder. However, this instance of the Load plan appears 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 Section 8.3.3, "Restarting the ETL" 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 Section 8.1.4.2, "Restarting the Failed Initial ETL" for the complete details.

See the Section 8.3.1, "Running the ETL" 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

The following are the steps to monitor the ETL process using the Database Integrator Console:

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

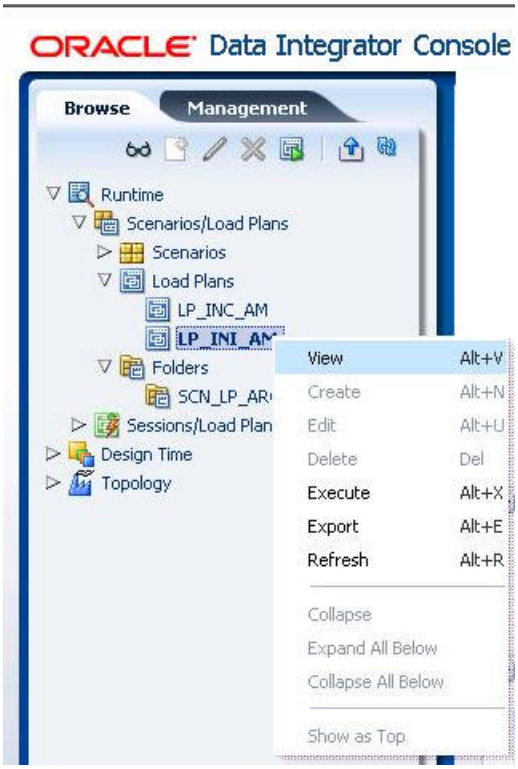
8.4.1 Viewing the Steps of Load Plan

Before executing the Initial ETL, you may 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:

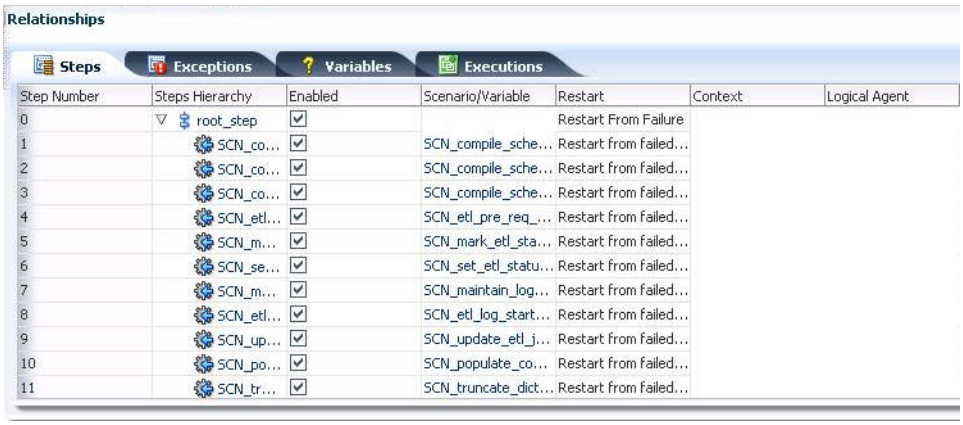
1. Log on the Oracle Data Integrator Console, and select the Management tab.
2. Navigate to **Runtime** > **Scenarios/Load Plans** > **Load Plans**.
3. Right-click **LP_INI_AM** (Load Plan for Initial ETL) or **LP_INC_AM** (Load Plan for Incremental ETL), and select **View**.

Figure 8–32 Navigating to the Load Plans



The steps for the Load Plan appears in the Relationships section in the right pane.

Figure 8–33 Viewing the Steps of the Load Plan



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:

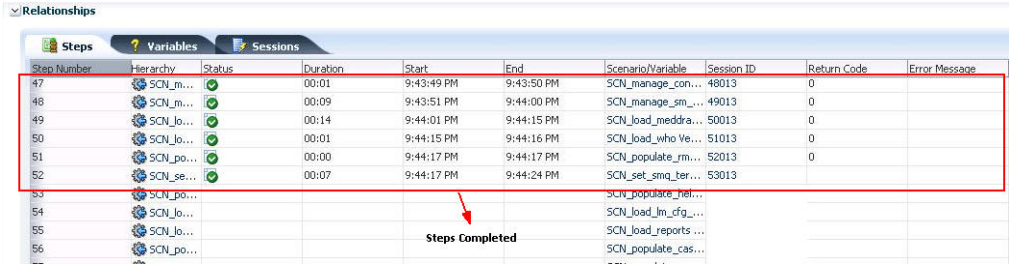
1. Select the Management tab, and navigate to **Runtime** > **Sessions/Load Plan Executions** > **Load Plan Executions**.

   A tilted **s** in green color appears, which signifies that the ETL process is running properly.

Figure 8–34 Initial ETL in Progress

2. In the Relationships section, double-click the session to view the list of all the steps along with the steps that have been completed.

Figure 8–35 Viewing Completed Steps in the ETL Process



8.4.3 Debugging the Failed ETL

To view the step where the ETL process failed and also the error message related to the ETL process failure, execute the following steps:

1. In the Management tab, navigate to **Runtime** > **Sessions/Load Plan Executions** > **Load Plan Executions**.

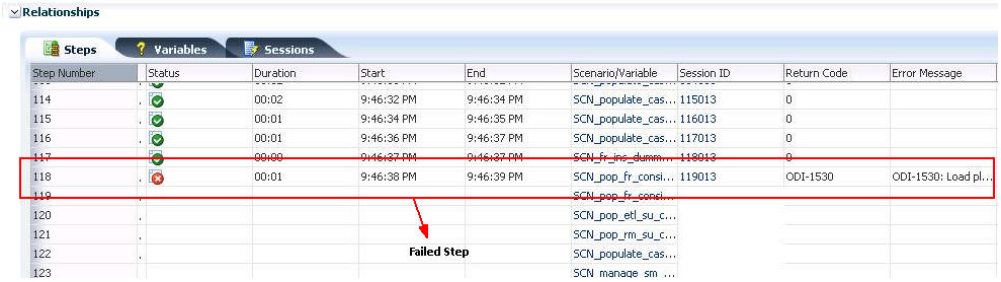
Figure 8–36 Viewing the Failed ETL Process

The status of the Load Plan appears in red color with the **X** symbol, which signifies that the ETL session is not in progress.

2. Double-click the Load Plan.

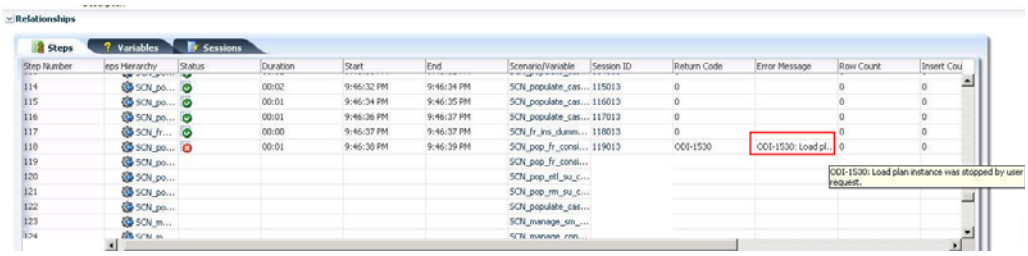
   The list of steps for the Load Plan appears in the Relationship section. The step because of which the ETL process has failed, is highlighted in red color with the **X** symbol.

Figure 8–37 Viewing the Failed Step for the ETL Process



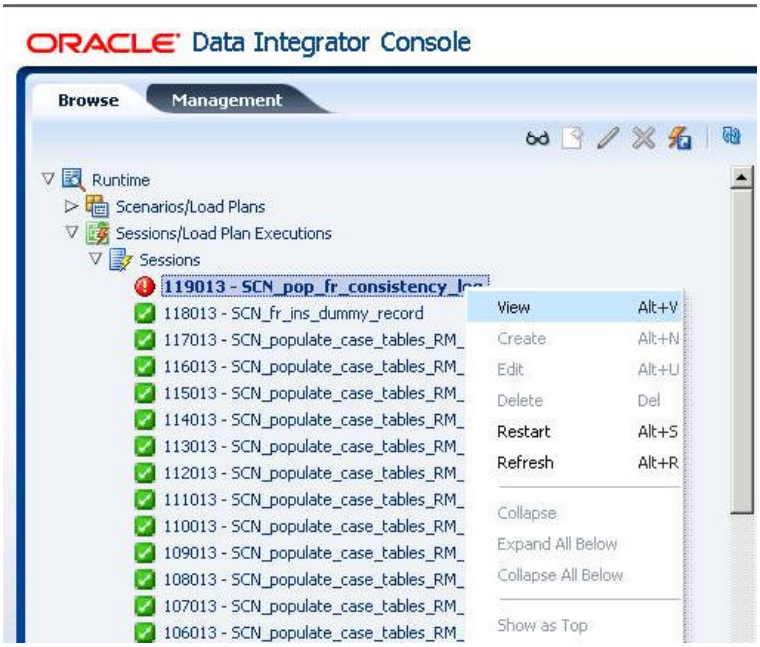
Hover the error message to view the complete message.

Figure 8–38 Viewing the Error Message



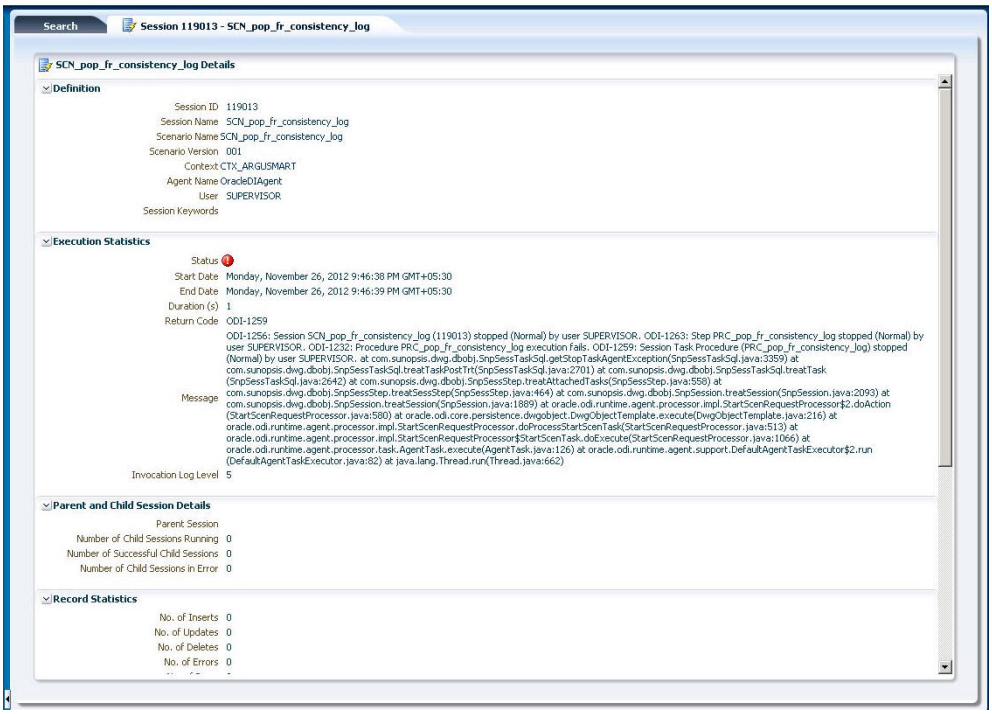
Alternatively, navigate to **Runtime** > **Sessions/Load Plan Executions** > **Sessions**, right-click the stopped session, highlighted in Red color with the ! symbol, and select **View**.

Figure 8–39 Viewing the Stopped Session



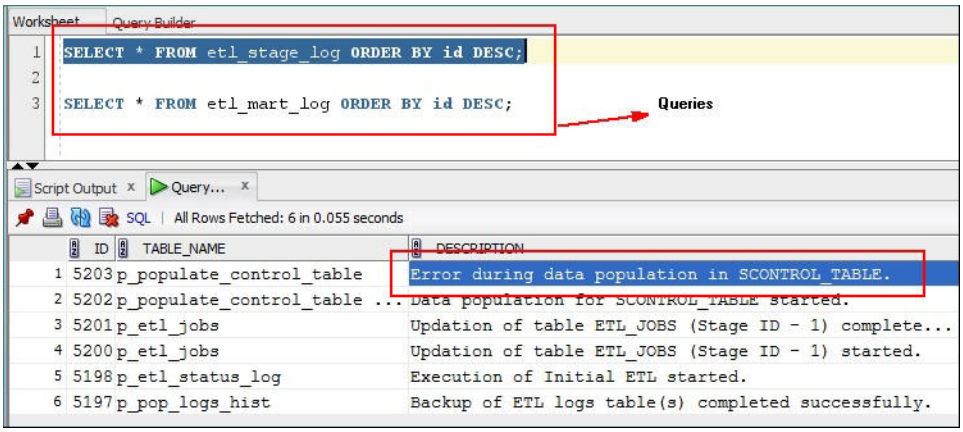
The error details appears in the right pane.

Figure 8–40 Viewing the Error Details



Or, to view the error message, log on to the Oracle SQL Developer using the Argus ETL user credentials, and execute the queries:

Figure 8–41 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.

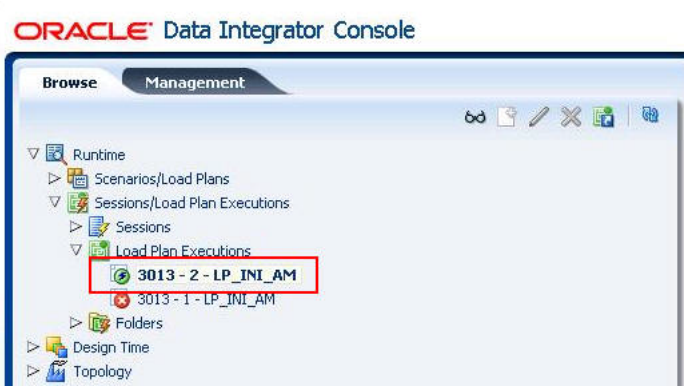
2. SELECT * FROM etl_mart_log ORDER BY id DESC;

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 steps:

1. In the Management tab, navigate to **Runtime** > **Sessions/Load Plan Executions** > **Load Plan Executions** section.

Figure 8–42 Viewing the Restarted ETL Process Status

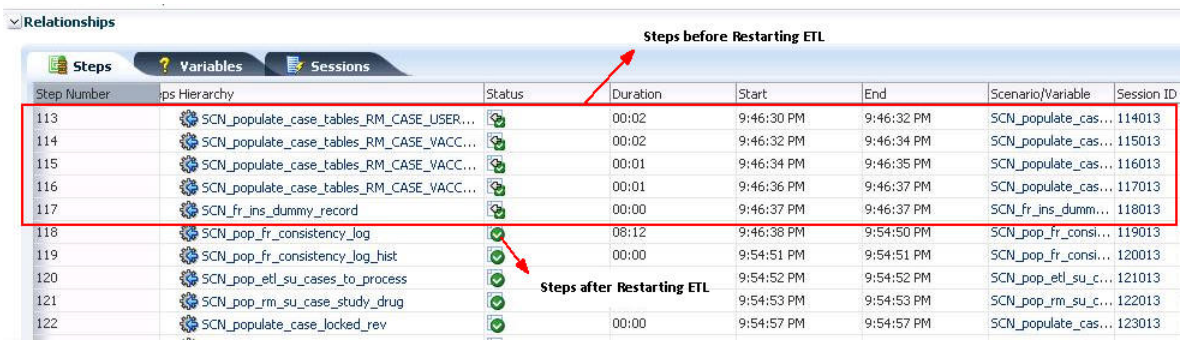


The status of the restarted ETL process appears in green color with a tilted **s**, which signifies that the ETL is in progress again.

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

The steps appears in the Relationship section in the right pane.

Figure 8–43 Viewing the Steps of the Restarted ETL



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 13.3, "Managing Incremental ETL Process"
- ODI Console, see Section 14.3, "Managing Incremental ETL Process"

9

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

   The Welcome screen appears.

2. Click **Deinstall Products**.

   The Inventory screen appears.

3. In Contents tab, expand **Independent Products**.

   The list of Independent Products appears.

4. Select **Oracle Argus Mart <version number>** check box.

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

   For example: Location C:\ArgusMart80\oracle.hsgbu.am specifies installation path as C:\ArgusMart80

5. Click **Remove**.

   A confirmation message appears.

6. Click **Yes**.

   A progress bar appears and subsequently removes Argus Mart from the list of Independent Products.

7. Click **Close** to exit from the Inventory screen.

8. Click **Cancel** in the Oracle Universal Installer screen to exit.

9. Delete the folder, where the Argus Mart was installed, from the local file system.

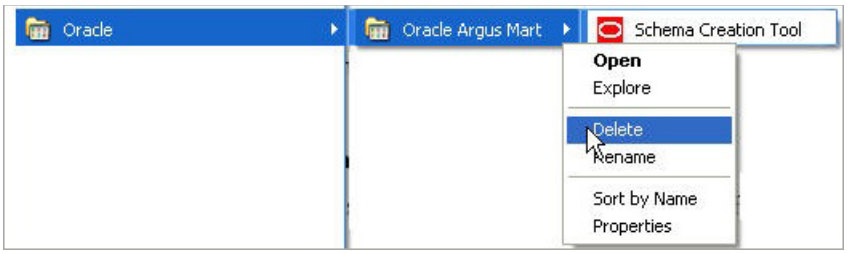
   Example: C:\AM

10. Navigate to **start** > **All Programs** > **Oracle** > **Oracle Argus Mart**.

11. Right-click **Oracle Argus Mart**.

    A drop-down menu appears.

Figure 9–1 Deleting Oracle Argus Mart through Start Menu



12. Click **Delete**.
13. Remove the TNS entry of the Argus Mart database from the given Oracle Home path (see Section 2.2 > Step 6) located at

    ..\network\admin\tnsnames.ora
14. 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:

10

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);
```

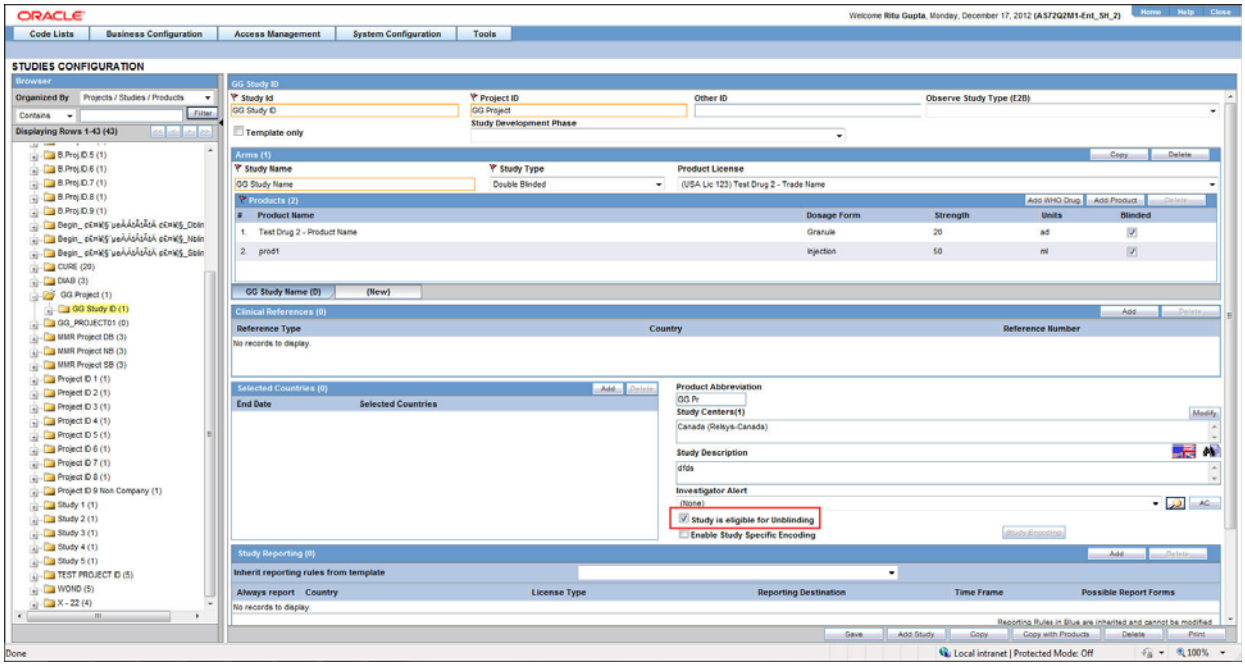
11

Secure Unblinding in Argus Mart

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

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



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.

12

Rebuilding a Case in Argus Mart

During the incremental ETL execution, you may need to re-populate certain cases from the scratch due to DLP data corruption or migration of cases in chunk.

To rebuild the entire information for the selected cases:

1. Specify ENTERPRISE_ID/CASE_ID of such cases in the table ETL_MANUAL_RBLD_CASE_LIST.
2. During the Incremental ETL, these cases will be deleted from Reporting Mart (RM) and Signal Mart (SM) tables, and rebuilt from the scratch.

   Note that the cases that are not part of this table, will be processed only for delta data as before.
3. When a case that is rebuilt has an effective start date earlier than the current value in switches START_DATE_CURRENT_DATA_SUPPORT and START_DATE_LOCKED_REVISION_SUPPORT, these switch values will be over-written with the rebuild case effective start date.

Note: When the case is rebuilt, any reference data change that is present in the case revisions will be lost.

Recommendation: Oracle recommends to use this feature cautiously and on need basis only.

13

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:

13.1 Scheduling Incremental ETL

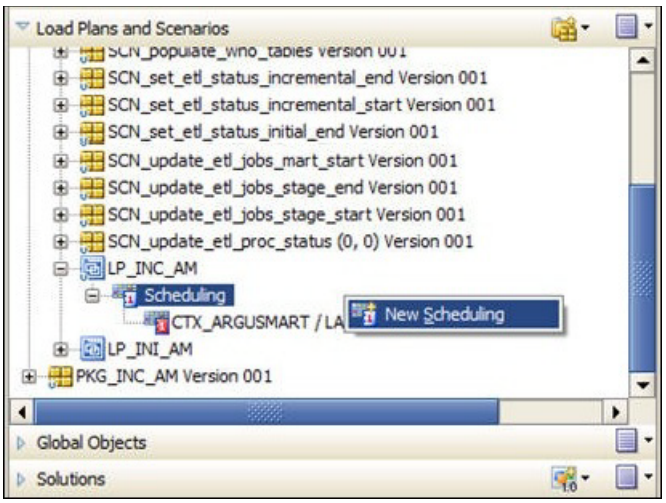
The **AM.zip** file contains pre-configured ETL scheduling in **Inactive** mode.

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:

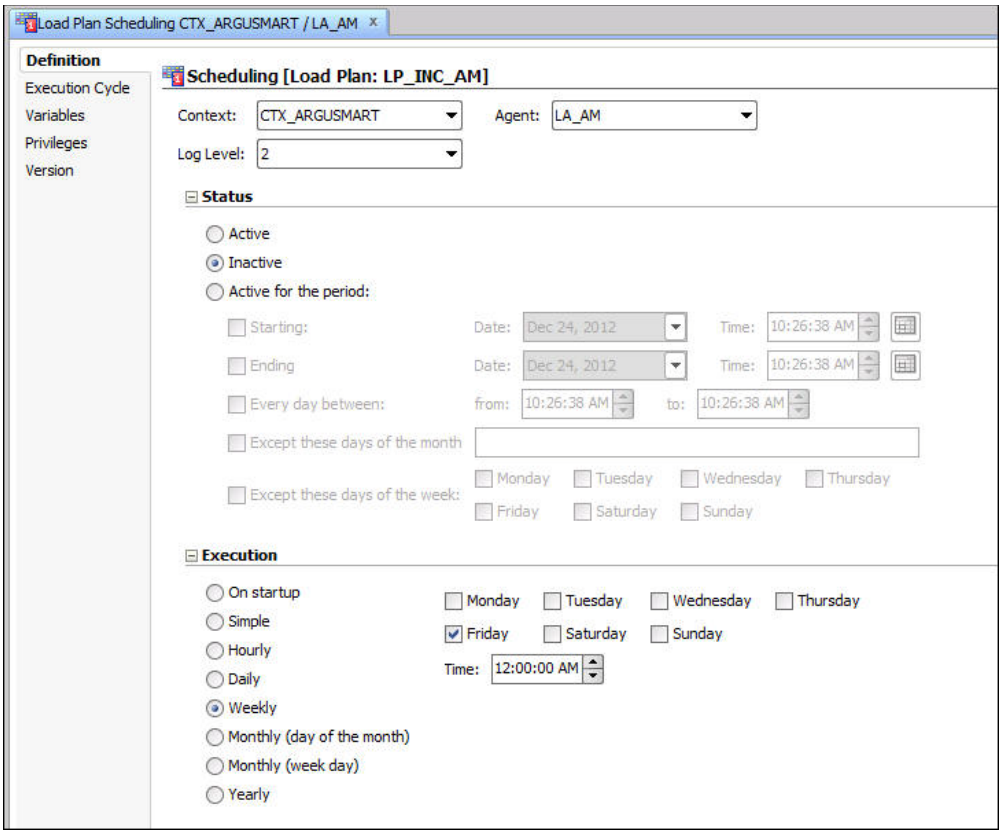
1. In the **Designer** tab, navigate to **Load Plans and Scenarios** section and expand **LP_INC_AM** (Load Plan for Incremental ETL).
2. Right-click **Scheduling** and select **New Scheduling**, as depicted in the following figure:

Figure 13–1 Scheduling ETL



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

Figure 13–2 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.

13.2 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."

13.3 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:

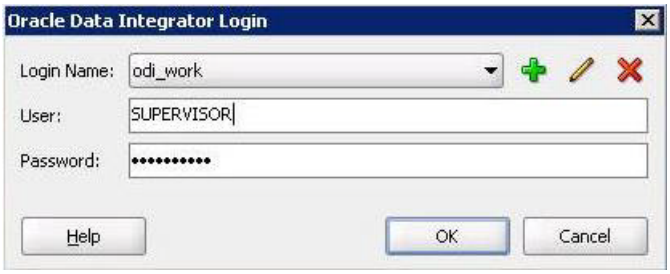
- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Stopped or a Failed ETL

13.3.1 Running the ETL

To run the Incremental ETL, execute the following steps:

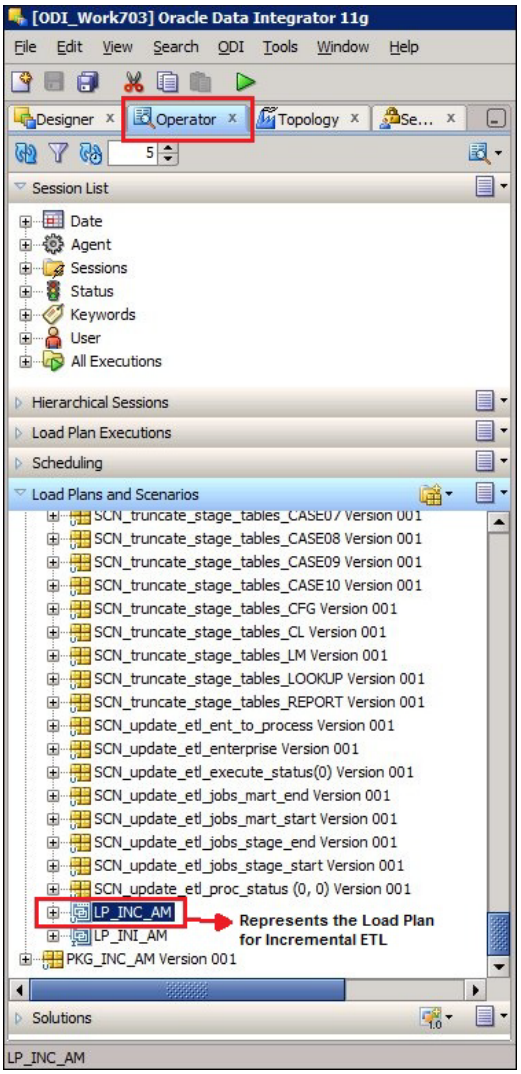
1. Open the Oracle Data Integrator Studio and click **Connect to Repository**. This displays the **Oracle Data Integrator Login** window, as depicted in the following figure:

Figure 13–3 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.
   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:

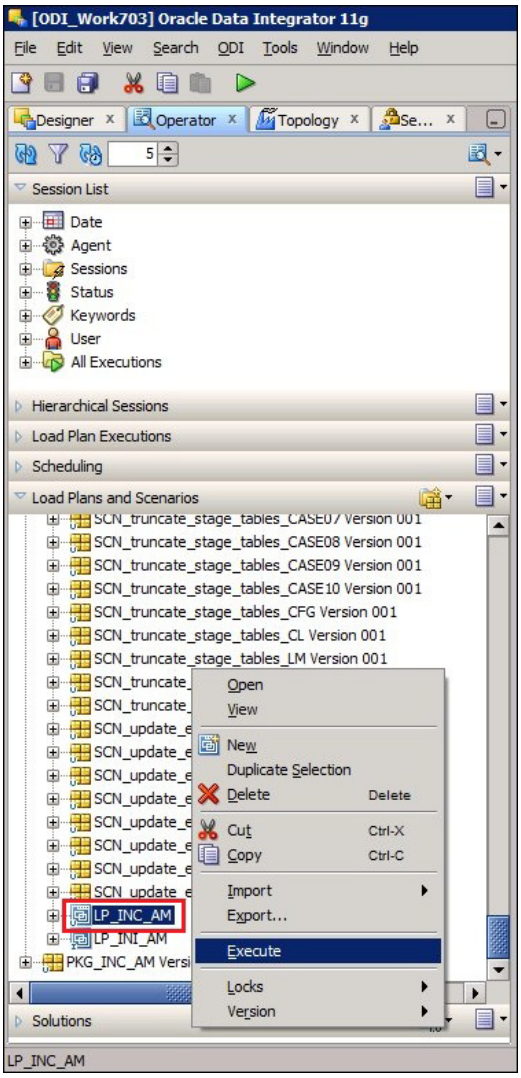
Figure 13–4 Load Plans and Scenarios



The **LP_INC_AM** option in this section represents the load plan for the Incremental ETL process for Argus Mart.

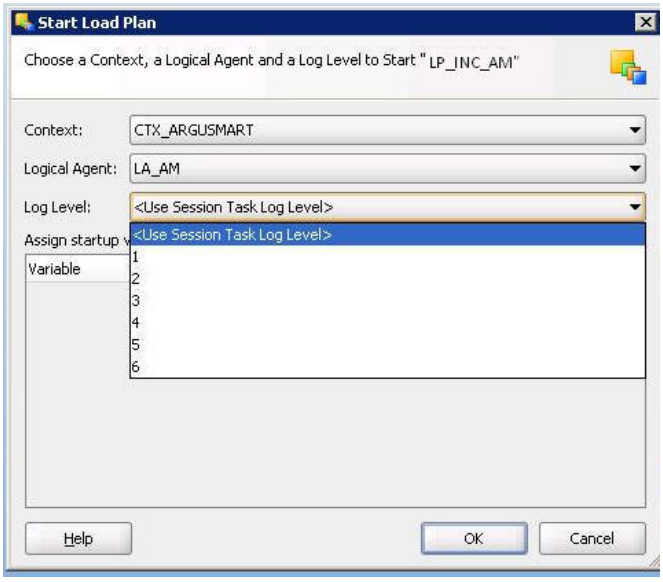
5. Right-click the **LP_INC_AM** option. This displays a menu, as shown in the following figure:

Figure 13–5 Executing the Incremental ETL



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

Figure 13–6 Start Load Plan Window



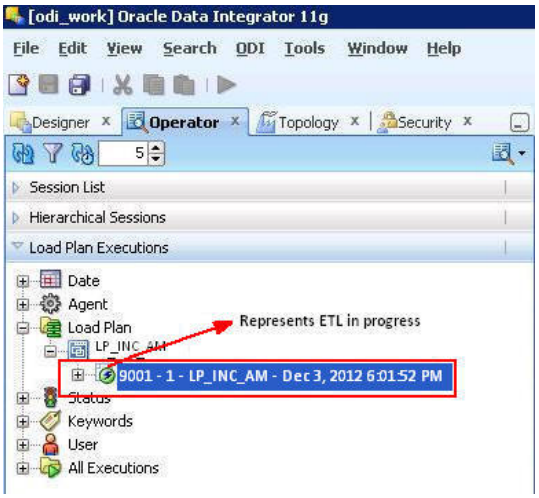
7. In the **Start Load Plan** window:
   a. Select **CTX_ARGUSMART** from the **Context** drop-down list.
   b. Select **LA_AM** from the **Logical Agent** drop-down list.
   c. Select the desired log level from the **Log Level** drop-down list.
   d. Click **OK**. This displays the **Information** dialog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

Figure 13–7 Load Plan Started Confirmation Message

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:

Figure 13–8 Status of the Load Plan

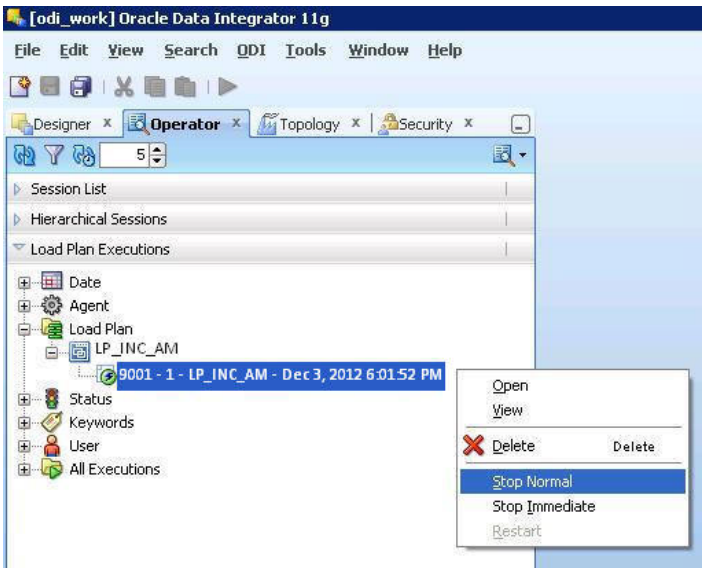


13.3.2 Stopping the ETL

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 13–9 Stopping the Incremental ETL



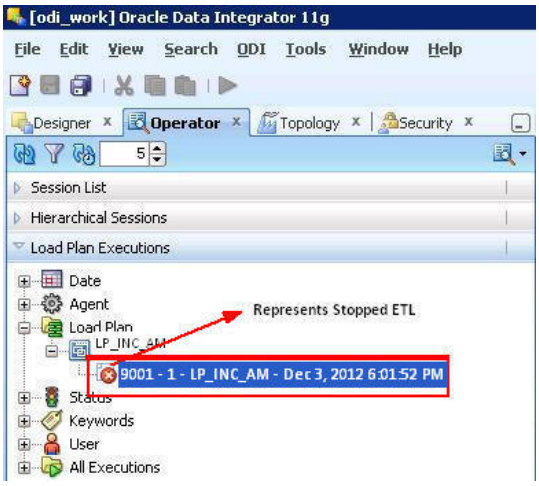
2. Select **Stop Normal**. This displays the **Stop Load Plan** dialog box, as depicted in the following figure:

Figure 13–10 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 13–11 Stopped Incremental ETL Session



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

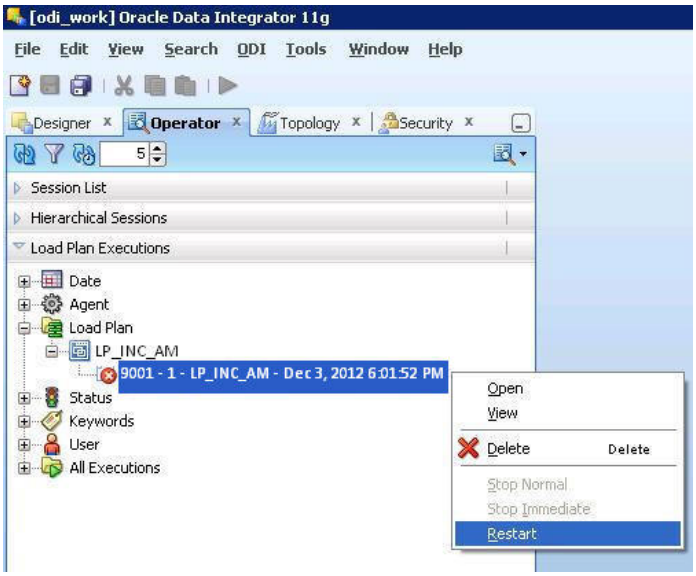
13.3.3 Restarting the ETL

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:

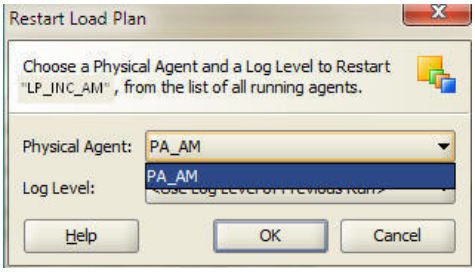
1. Right-click the Load Plan, which you want to restart, in the **Load Plan** folder of the **Load Plan Executions** section. This displays a menu, as shown in the following figure:

Figure 13–12 Restarting the Incremental ETL



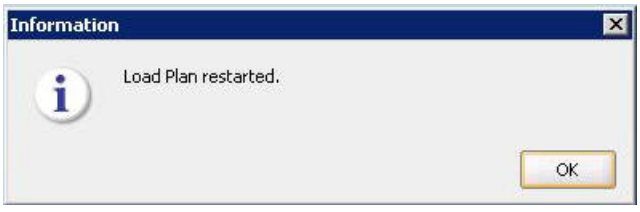
2. Click **Restart**. This displays the **Restart Load Plan** dialog box, as shown in the following figure:

Figure 13–13 Restart Load Plan Dialog Box



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:

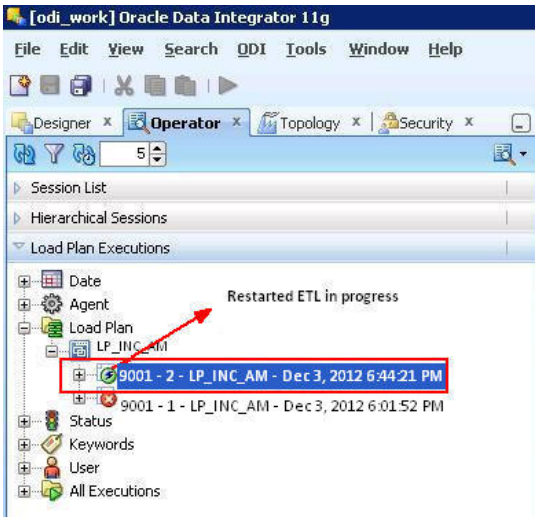
Figure 13–14 Loan Plan restarted Confirmation Message



6. Click **OK**.

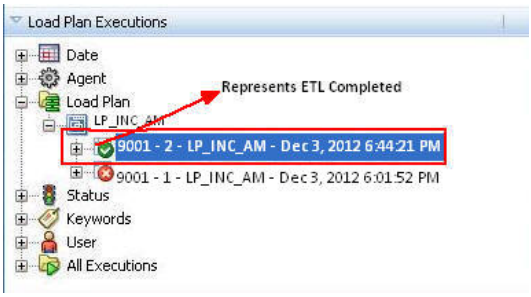
   This adds another Load Plan, with the same name as that of the stopped ETL, in the **Load Plan** folder of the **Load Plan Executions** section. However, this instance of the ETL Process is in Green color with a tilted S, which signifies that the ETL is in progress, as highlighted in the following figure:

Figure 13–15 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 13–16 Completed Load Plan



13.3.4 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.

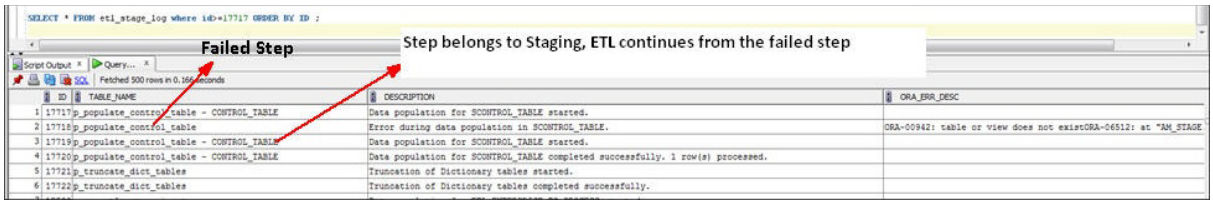
This section comprises the following sub-sections:

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

13.3.4.1 Continuing the Failed Incremental ETL

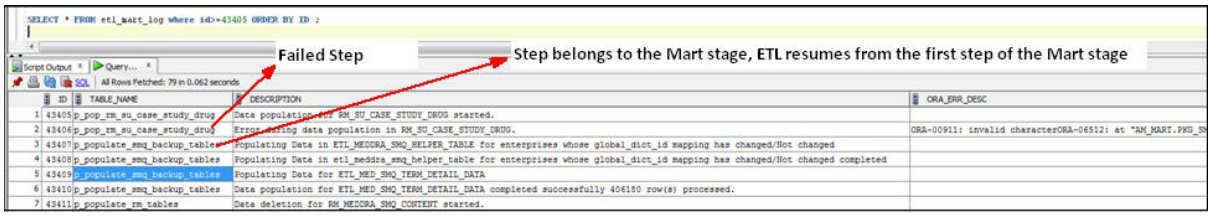
If the last execution step of the failed or stopped ETL belongs to the Staging phase, the ETL resumes from the failed or stopped point, as shown in the following figure:

Figure 13–17 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 13–18 Mart Phase: Incremental ETL Resumes from the First Step of Mart



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.

13.3.4.2 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);

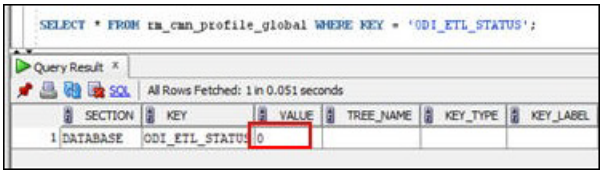
COMMIT;

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:

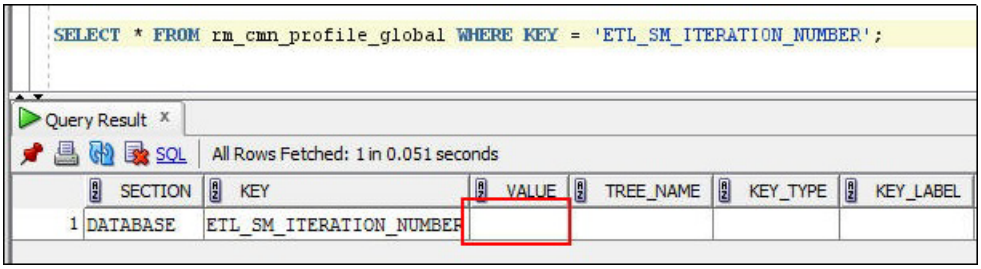
Figure 13–19 Select Statement 1 to Verify Successful Execution



- 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 13–20 Select Statement 2 to Verify Successful Execution



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

14

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

14.1 Scheduling an ETL

The ETL can be scheduled through ODI Studio only.

To schedule an ETL, see Section 13.1, "Scheduling Incremental ETL".

14.2 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."

14.3 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

14.3.1 Running the ETL

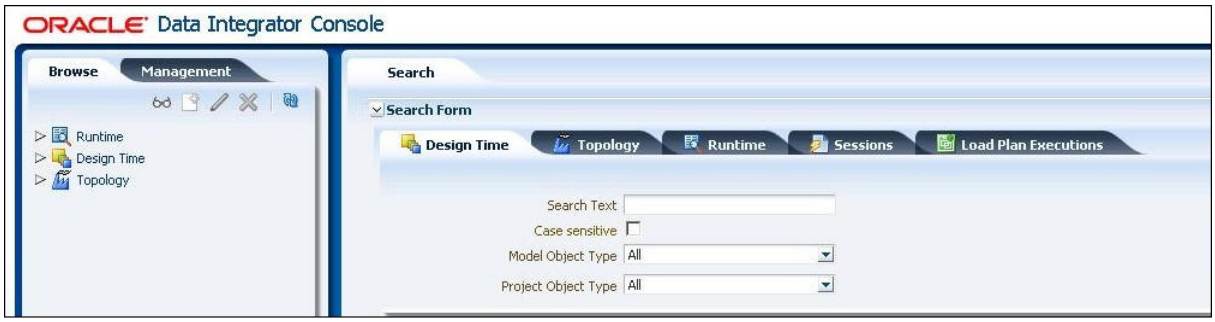
To run the Incremental ETL, execute the following steps:

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

Figure 14–1 Oracle Data Integrator Sign In Window

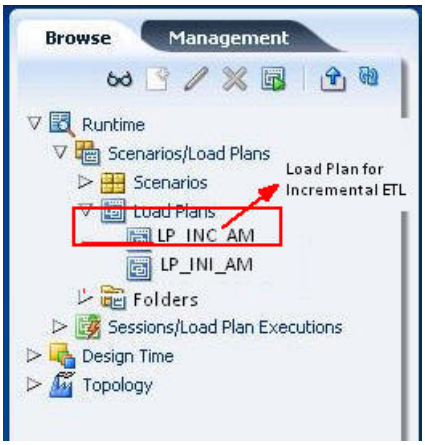
2. In the **Oracle Data Integrator Sign In** window:
   a. Select the ODI Work Repository name from the **Repository** drop-down list.
   b. Enter the name of the ODI user in the **User Id** field.
   c. Enter the password for the ODI user in the **Password** field.
   d. Click **Sign In**. This displays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

Figure 14–2 Oracle Data Integrator Console Screen



3. Select the **Management** tab in the left pane.
4. Expand the **Runtime** folder and navigate to **Runtime** > **Scenarios/Load Plans** > **LP_INC_AM**, as highlighted in the following figure:

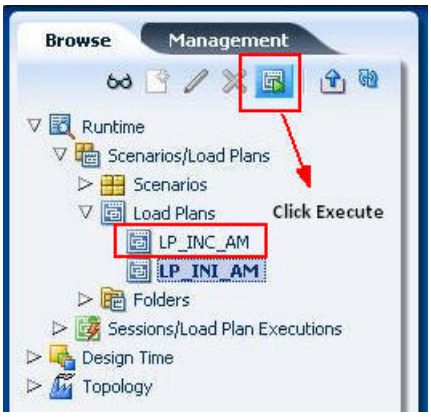
Figure 14–3 Scenarios/Load Plans



The **LP_INC_AM** option in this section represents the load plan for the Incremental ETL process for Argus Mart.

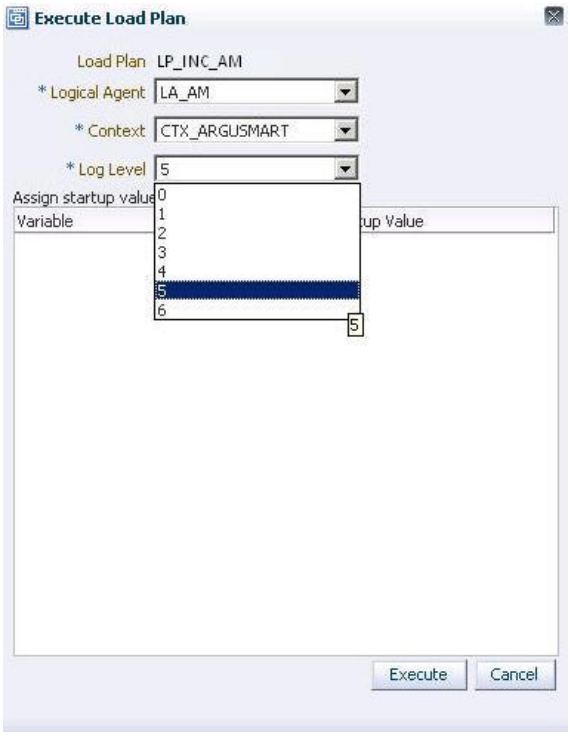
5. Click **Execute**, as highlighted in the following figure:

Figure 14–4 Executing the Incremental ETL



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

Figure 14–5 Execute Load Plan Window



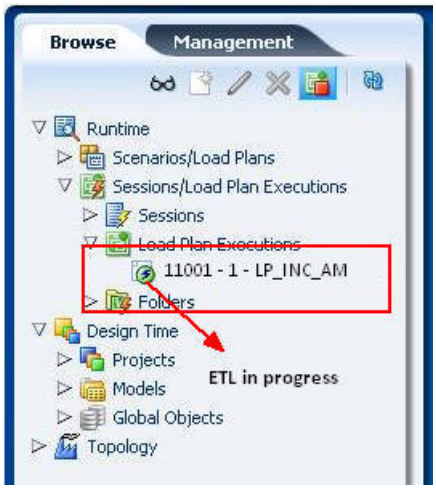
6. In the **Execute Load Plan** window:
   a. Select **LA_AM** from the **Logical Agent** drop-down list.
   b. Select **CTX_ARGUSMART** from the **Context** drop-down list.
   c. Select the desired log level from the **Log Level** drop-down list.
   d. Click **Execute**. This displays the **Information**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

Figure 14–6 Load Plan Started Confirmation Message

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 14–7 Status of the Load Plan

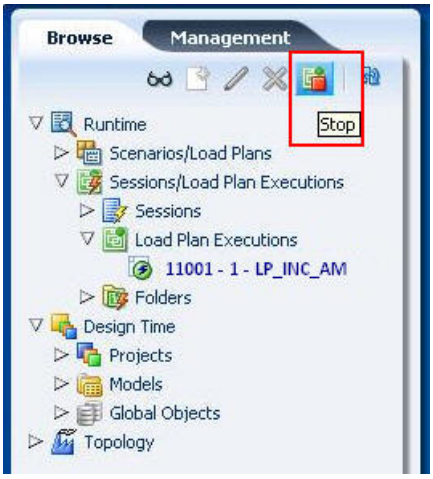


14.3.2 Stopping the ETL

To stop the Incremental ETL, execute the following steps:

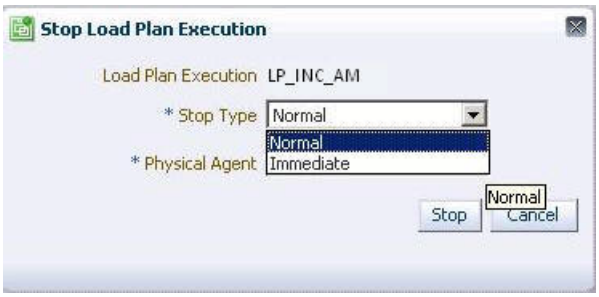
1. Select the Load Plan, which you want to stop, by expanding the **Load Plan Executions** folder of the **Sessions/Load Plan Executions** section and click **Stop**, as shown in the following figure:

Figure 14–8 Stopping the Incremental ETL



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

Figure 14–9 Stop Load Plan Execution Dialog Box



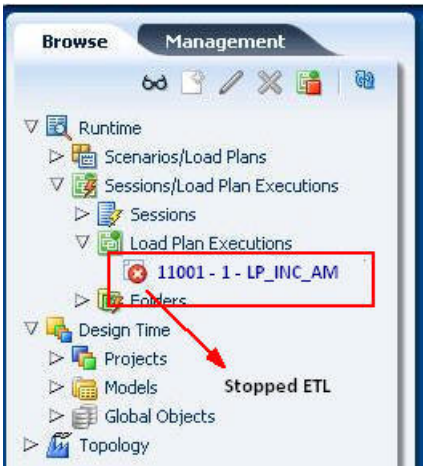
2. Select **Normal** from the **Stop Type** drop-down list.
3. Select **OracleDIAgent** from the **Physical Agent** drop-down list.
4. Click **Stop**. This displays the **Information** dialog box with the **Load Plan was Stopped Successfully** confirmation message, as depicted in the following figure:

Figure 14–10 Load Plan Stopped Confirmation Message

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 14–11 Stopped Incremental ETL Session



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

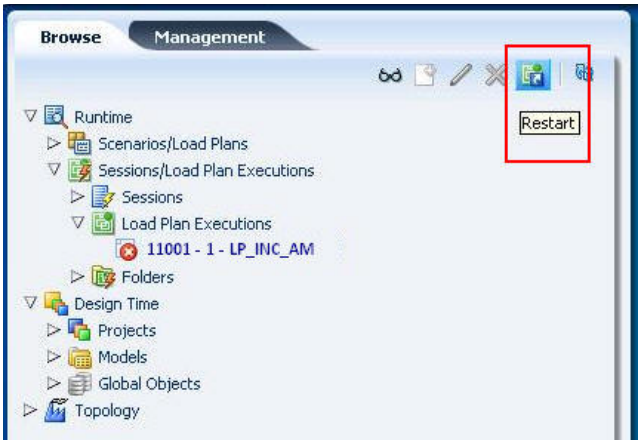
14.3.3 Restarting the ETL

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:

1. 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 14–12 Restarting the Incremental ETL

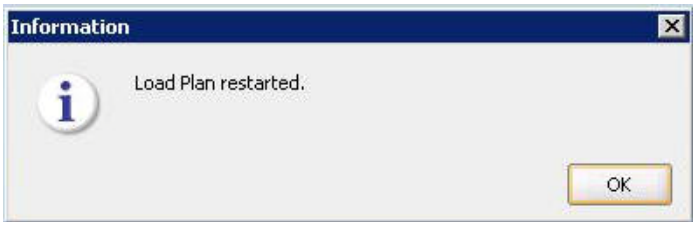


This displays the **Restart Load Plan Execution** dialog box, as depicted in the following figure:

Figure 14–13 Restart Load Plan Execution Dialog Box

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 14–14 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.

14.3.4 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 13.3.4, "Processing a Stopped or a Failed ETL".

15

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 15–1 Confirmation of Resetting the Mart Environment

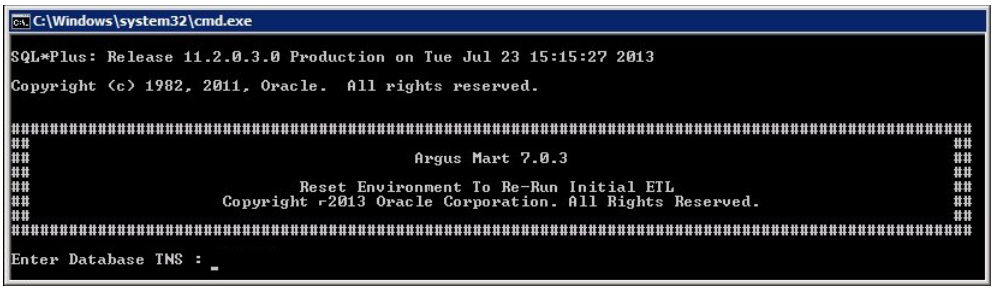
2. Enter **Y**, which represents **Yes**, in the **Do You Want to Continue (Y/N)?** field, if you want to continue with resetting the Mart environment to be able to run the Initial ETL on the database again.

   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 15–2 Entering TNS Name to Connect to Database



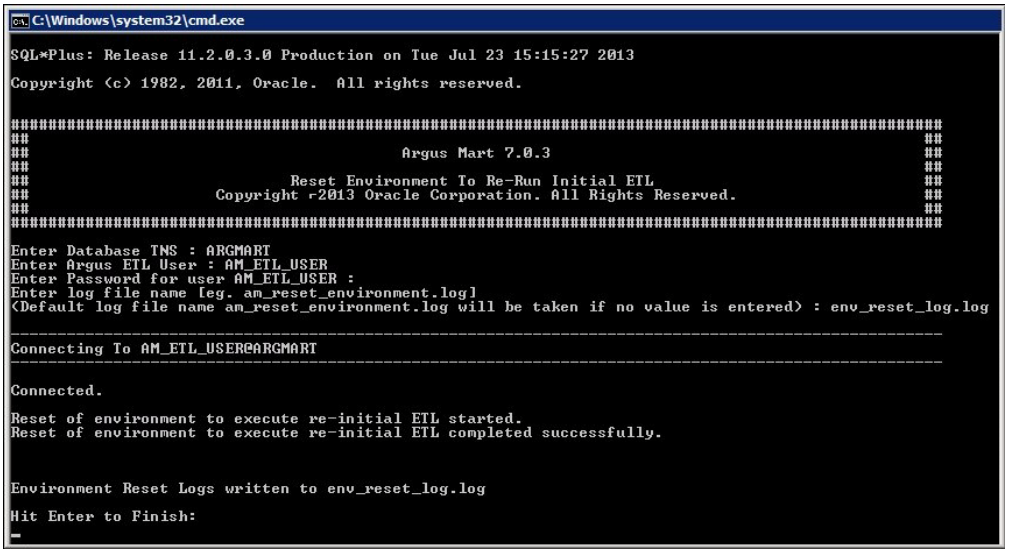
3. Enter the TNS Name to connect to the Argus Mart database in the **Enter Database TNS** field and press **Enter**.
4. Enter the following parameters for the user who have administrator rights to access the ETL process.

> **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**.

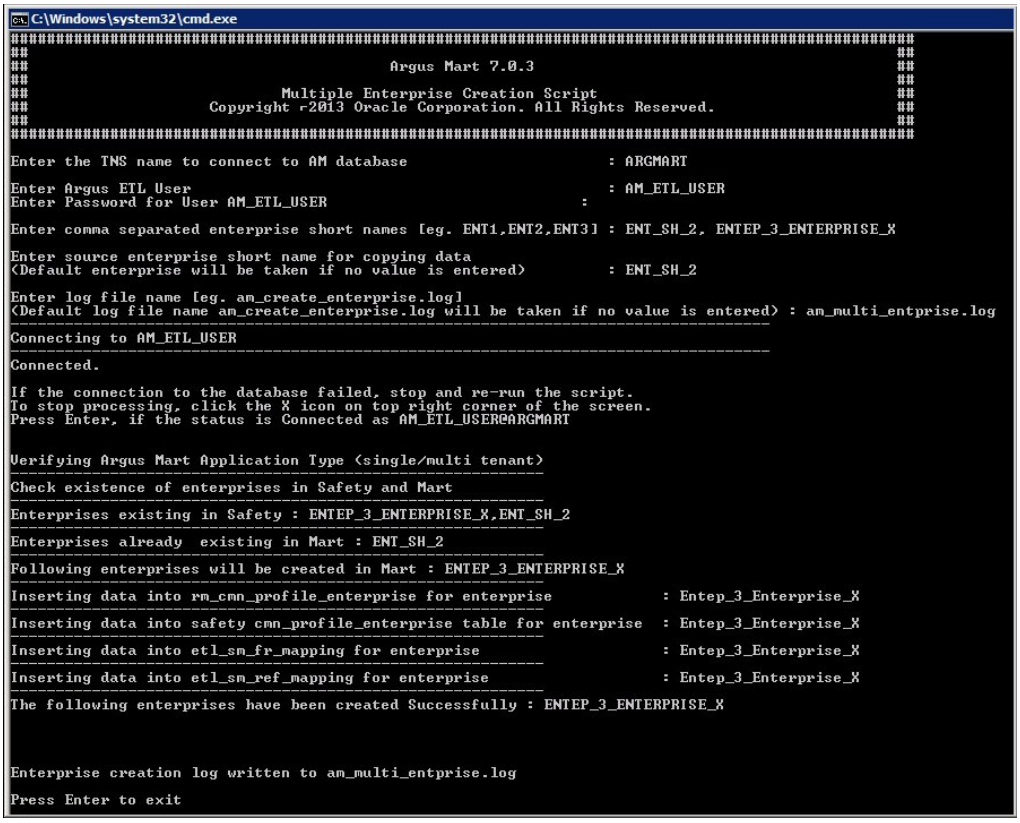
      The system displays a **Connecting** status message and once connected displays **Connected**, as shown in the following figure:

Figure 15–3 Connecting to the Database



5. Press **Enter** to complete writing the logs.

Figure 15–4 Writing Enterprise Creation Logs



6. Press **Enter** to exit from the window.

16

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.

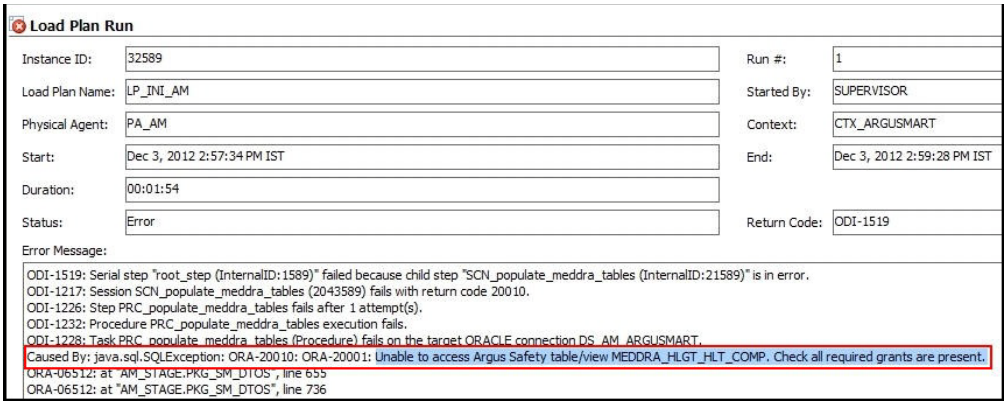
The following is the list of error messages:

16.1 Dictionary Reload Error

Error Message

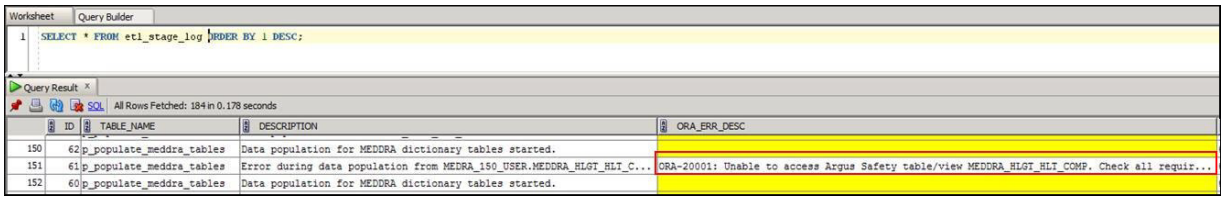
The following error message is displayed during the ETL process, whenever the dictionary is reloaded in Argus Safety:

Figure 16–1 Dictionary Reload Error Message



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 16–2 Dictionary Reload Error Message: SQL Developer



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.

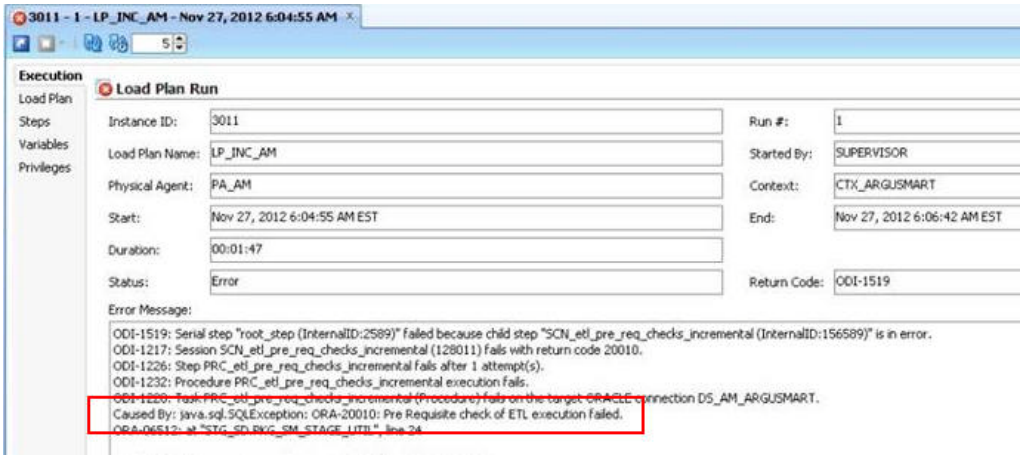
You can refer to Section 3.5.1, Creating User for the Argus Safety Database, for more information.

16.2 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 16–3 Pre-Requisite Check Failed Error



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 15, "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."

16.3 FR Consistency Log Error

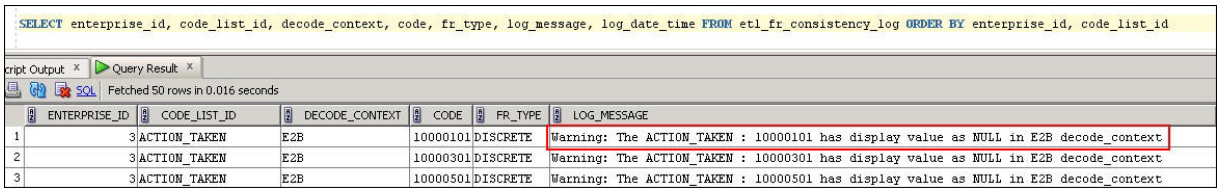
Error Message

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:

Figure 16–4 FR Consistency Error



```
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 Output | Query Result

SQL | Fetched 50 rows in 0.016 seconds

	ENTERPRISE_ID	CODE_LIST_ID	DECODE_CONTEXT	CODE	FR_TYPE	LOG_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

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.

16.4 MedDRA Mismatch Error

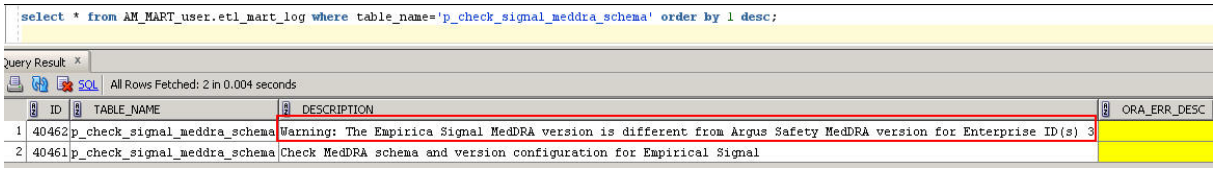
Error Message

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 16–5 MedDRA Mismatch Error



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.

16.5 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

16.5.1 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.

16.5.2 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.

16.5.3 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.

16.6 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.