Oracle® Argus Mart

Installation and Administration Guide

Release 7.0.3

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Preface

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

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

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

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Finding Information and Patches on My Oracle Support

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

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

Getting the Oracle Argus Mart Standard Configuration Media Pack

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

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

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

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1. Open a Web browser to http://support.oracle.com.
2. Click the **Register here** link to create a My Oracle Support account. The registration page opens.
3. Follow the instructions on the registration page.

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1. Open a Web browser to http://support.oracle.com.
2. Click **Sign In**.
3. Enter your user name and password.
4. Click **Go** to open the My Oracle Support home page.

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To search by the article ID number:

1. Sign in to My Oracle Support at http://support.oracle.com.
2. Locate the Search box in the upper right corner of the My Oracle Support page.
3. Click the Sources icon to the left of the search box, and then select Article ID from the list.
4. Enter the Article ID number in the text box.
5. Click the magnifying glass icon to the right of the Search box (or press the Enter key) to execute your search.

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

In addition to searching by article ID, you can use the following My Oracle Support tools to browse and search the knowledge base:

- Product Focus — On the Knowledge page, you can drill into a product area through the Browse Knowledge menu on the left side of the page. In the Browse any Product, By Name field, type in part of the product name, and then select the product from the list. Alternatively, you can click the arrow icon to view the

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.

- Refine Search — Once you have results from a search, use the Refine Search options on the right side of the Knowledge page to narrow your search and make the results more relevant.
- Advanced Search — You can specify one or more search criteria, such as source, exact phrase, and related product, to find knowledge articles and documentation.

Finding Patches on My Oracle Support

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

To locate and download a patch:

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

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

   - In the **Patch ID** or **Number is** field, enter the primary bug number of the patch you want. This option is useful if you already know the patch number.
   - To find a patch by product name, release, and platform, click the Product or Family link to enter one or more search criteria.
3. Click **Search** to execute your query. The Patch Search Results page opens.
4. Click the patch ID number. The system displays details about the patch. In addition, you can view the Read Me file before downloading the patch.
5. Click **Download**. Follow the instructions on the screen to download, save, and install the patch files.

Finding Certification Information

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

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

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

Known Installation and Configuration Issues

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

Conventions

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:

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

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

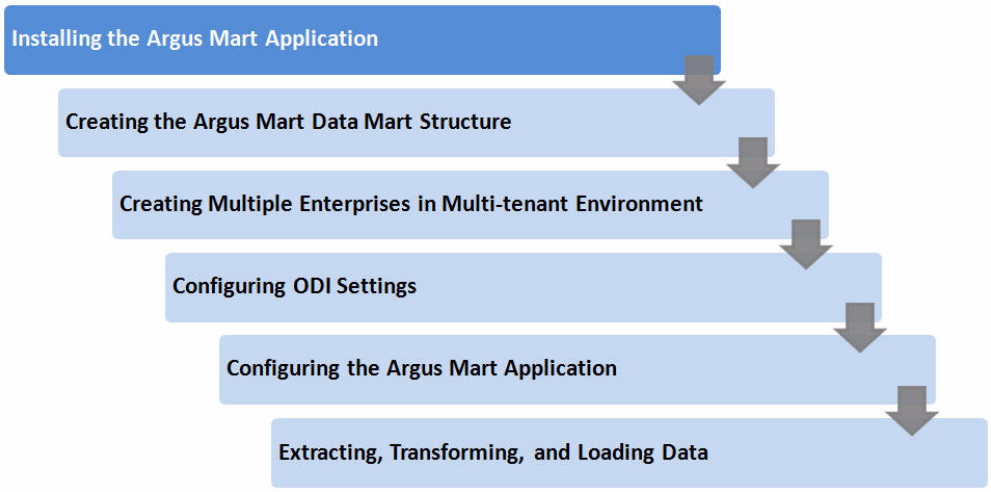
2

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:

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

2.1 Before You Install the Argus Mart Application

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

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

Table 2–1 Argus Mart Software Requirements

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

- Ensure that you have installed the Oracle 32 bit client (Administrator installation type) on the machine where Argus Mart is being installed.
- If you are using Windows 64 bit machine and Oracle 11.2.0.3 32 bit client, you must execute the following procedure to register the DLL file:

  1. Open the MS-DOS command prompt and change directory to <ORACLE_HOME>\bin

     Example: cd C:\app\<username>\product\11.2.0\client_1\bin

  2. Execute the following command to register DLL using the command prompt:

     regsvr32 oip11.dll

     The following confirmation message is displayed on DLL registration:

     DLLRegisterServer in oip11.dll succeeded

2.2 Installing Argus Mart Components

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

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

Figure 2–2 Welcome Screen

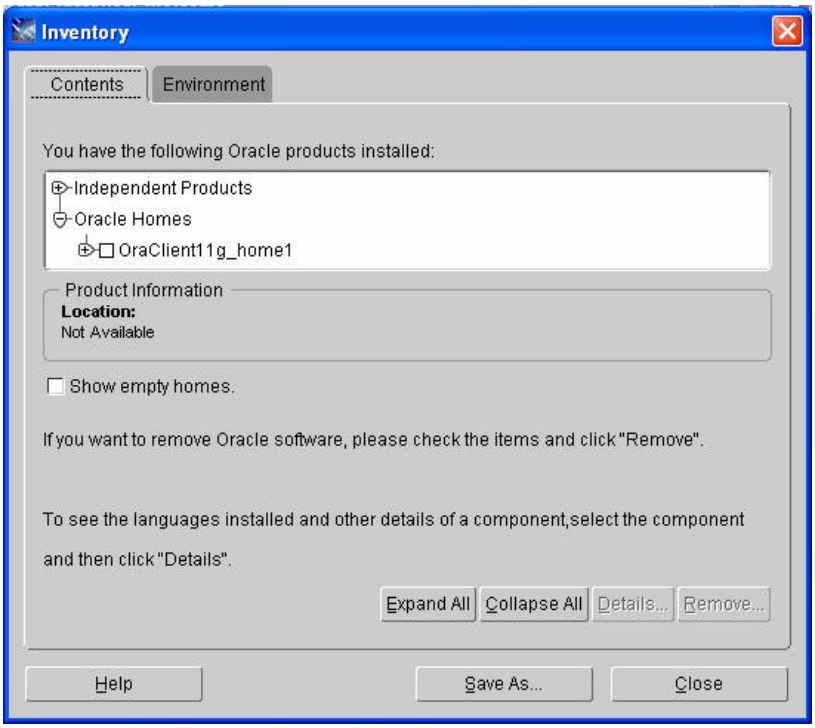
The **Welcome** screen comprises the following buttons:

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

Figure 2–3 About Oracle Universal Installer

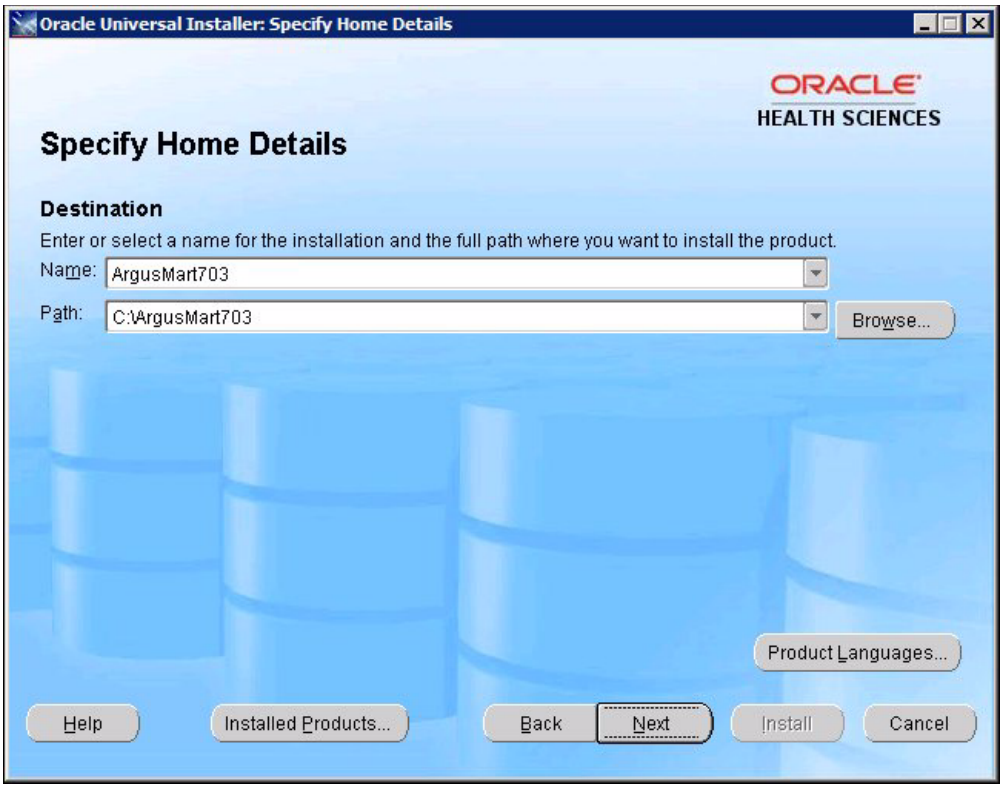
b. **Installed Products** to view the list of installed products, as depicted in the following figure:

Figure 2–4 List of Installed Products



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

Figure 2–5 Specify Home Details Screen



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

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

Figure 2–6 Oracle Home Location Screen

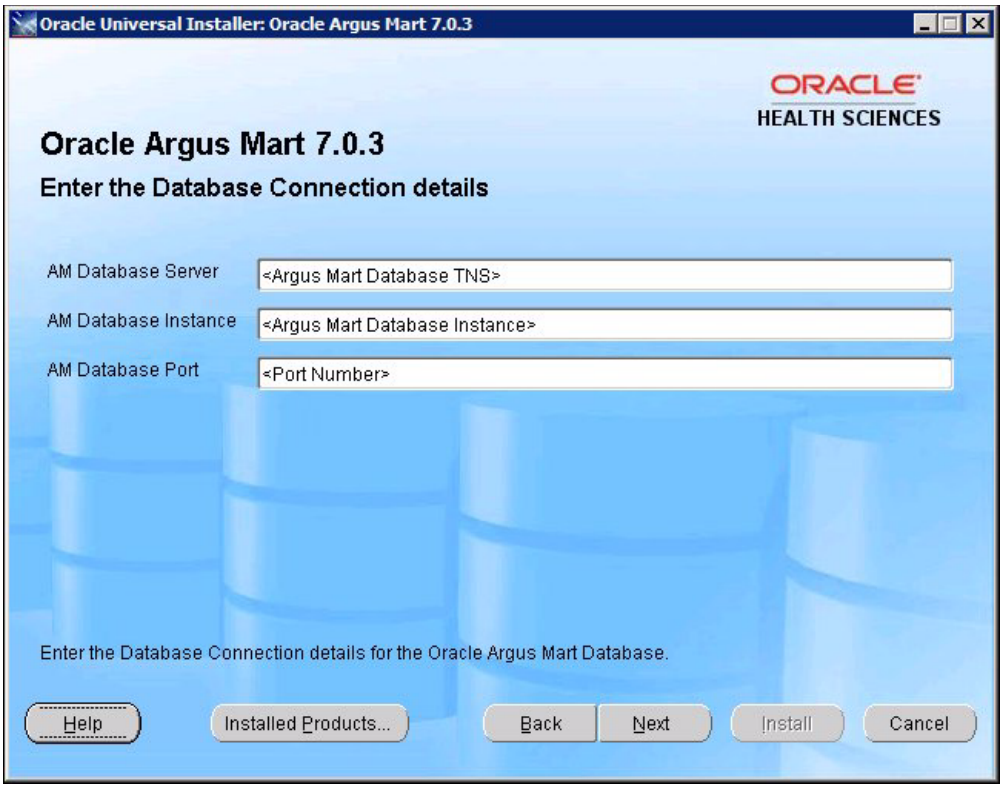
7. Click **Browse** and navigate to the location of Oracle Home that identifies the TNSNAMES.ORA file.

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

8. Click **Next**.

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

Figure 2–7 Database Details Screen



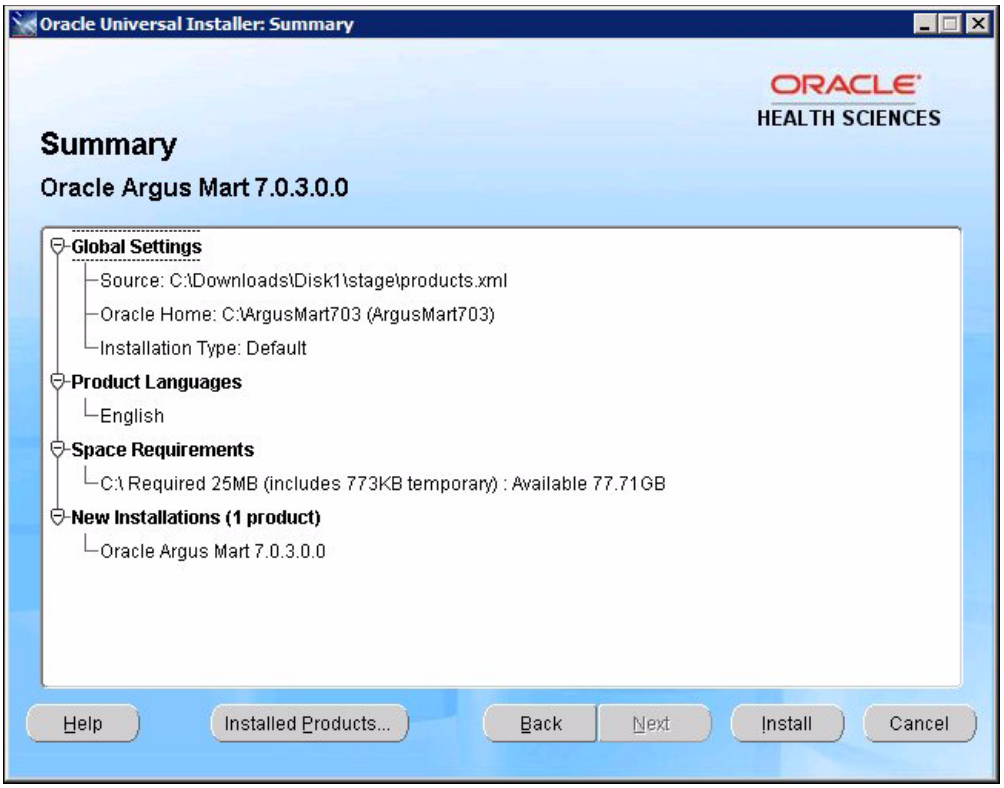
9. Enter the following parameters:
   - Name or IP Address in the **AM Database Server** field.
   - Instance Name in the **AM Database Instance** field.
   - Database Port Number in the **AM Database Instance** field.

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

   <ORACLE_HOME>\NETWORK\ADMIN

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

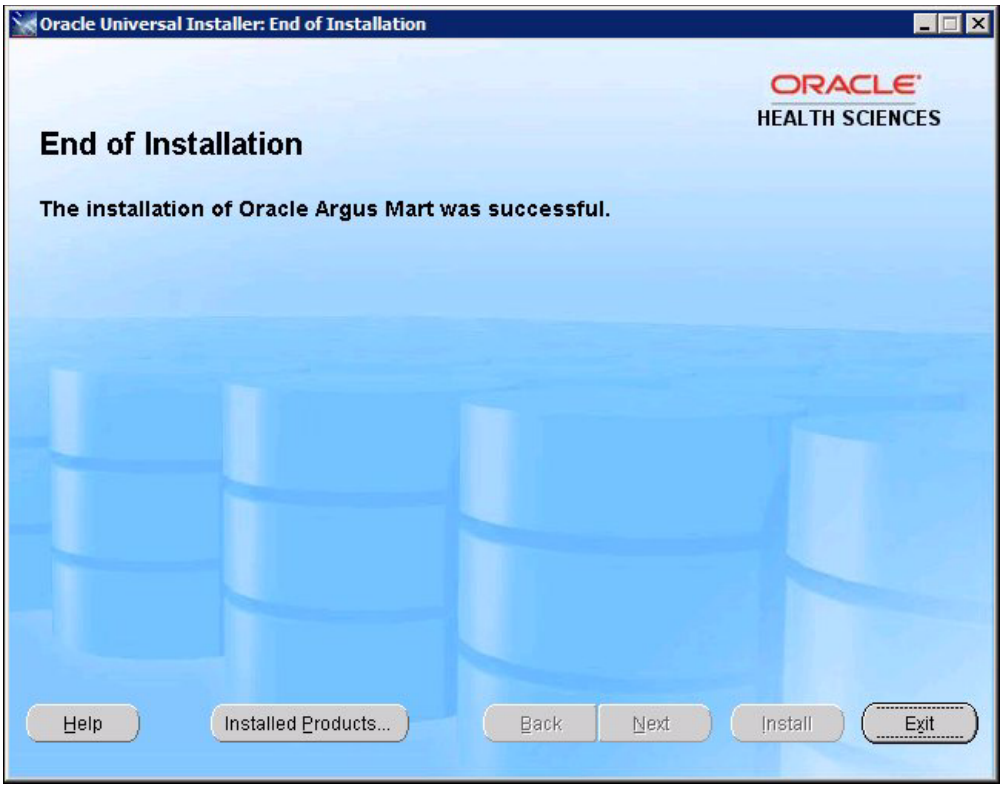
Figure 2–8 Summary Screen



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

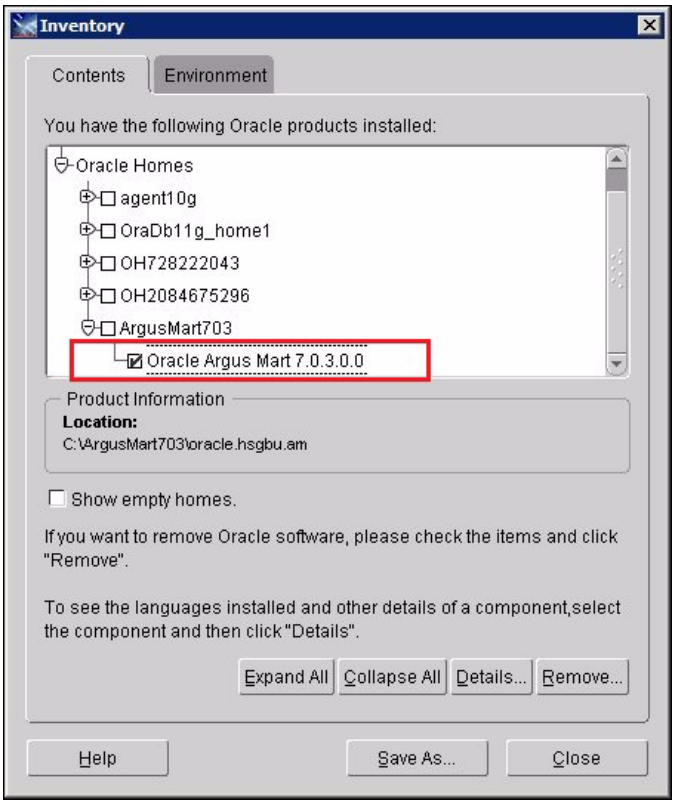
    Once completed, the **End Of Installation** screen is displayed, as depicted in the following figure:

Figure 2–9 End Of Installation Screen



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

Figure 2–10 Verifying Successful Argus Mart Installation



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

Figure 2–11 Exit Confirmation Window

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

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

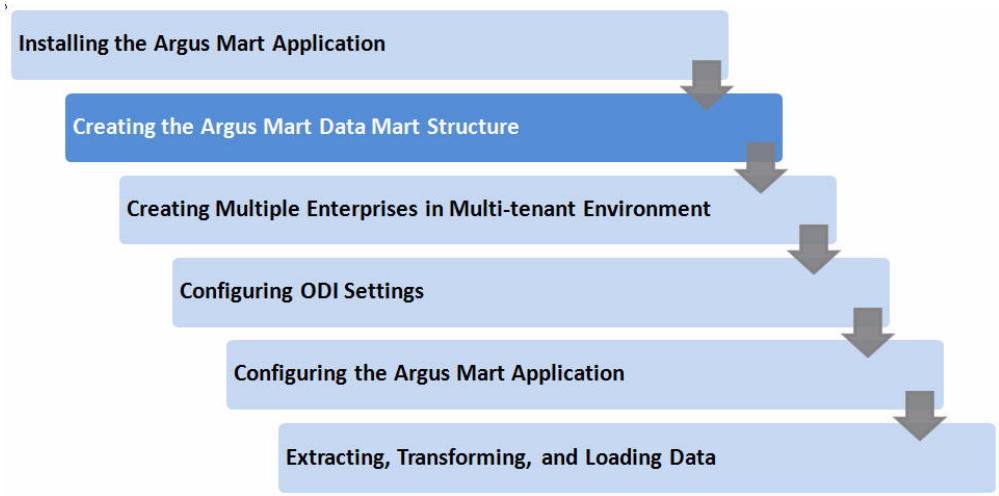
3

Creating the Argus Mart Database Structure

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

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

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



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

This chapter comprises the following sub-sections:

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

3.1 Before Running the Argus Mart Schema Creation Tool

The **GLOBAL_NAME** and **NLS_LENGTH_SEMANTICS** database parameters must be configured properly in order, for the Argus Mart Schema Creation Tool to run. If the parameters are not set properly, the Schema Creation Tool fails.

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

- **GLOBAL_NAME** is set to **FALSE**. This enables the Argus Mart application to create the database links.
- **NLS_LENGTH_SEMANTICS** is set to **CHAR** for the Argus Mart Schema Creation Tool to run.

3.2 Argus Mart Tablespaces

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

Table 3–1 Tablespaces Created for the Argus Mart Database

AM_MART_DATA_01	AM_MART_INDEX_01	AM_MART_LOB_01
AM_STAGE_DATA_01	AM_STAGE_INDEX_01	AM_STAGE_LOB_01

3.3 Starting the Argus Mart Schema Creation Tool

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

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

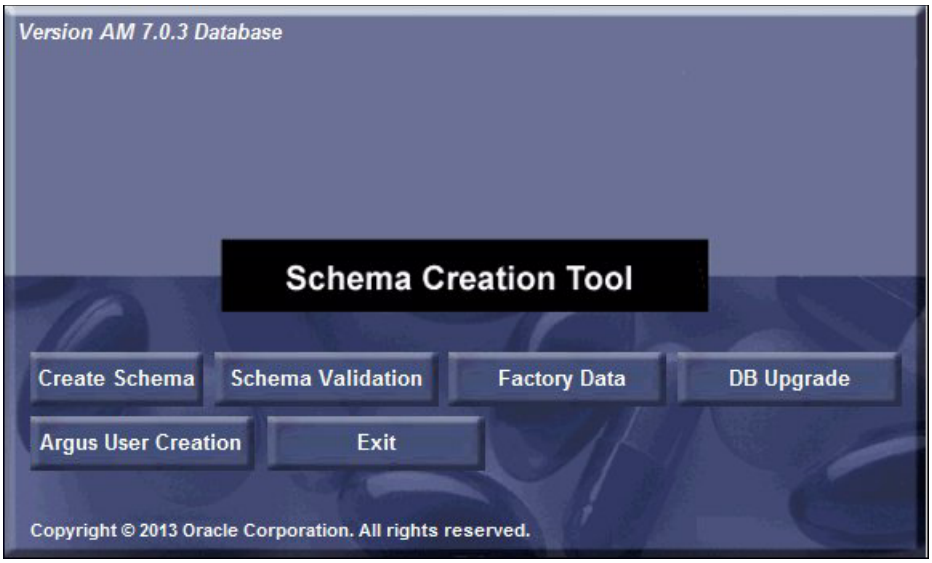
1. Log in to the Argus Mart Server as a user with administrator privileges.
2. Click **DBInstall.exe** saved at the following location:

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

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

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

Figure 3–2 Schema Creation Tool



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

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

3.4 Creating the Database Schema

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

This section comprises the following sub-sections:

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

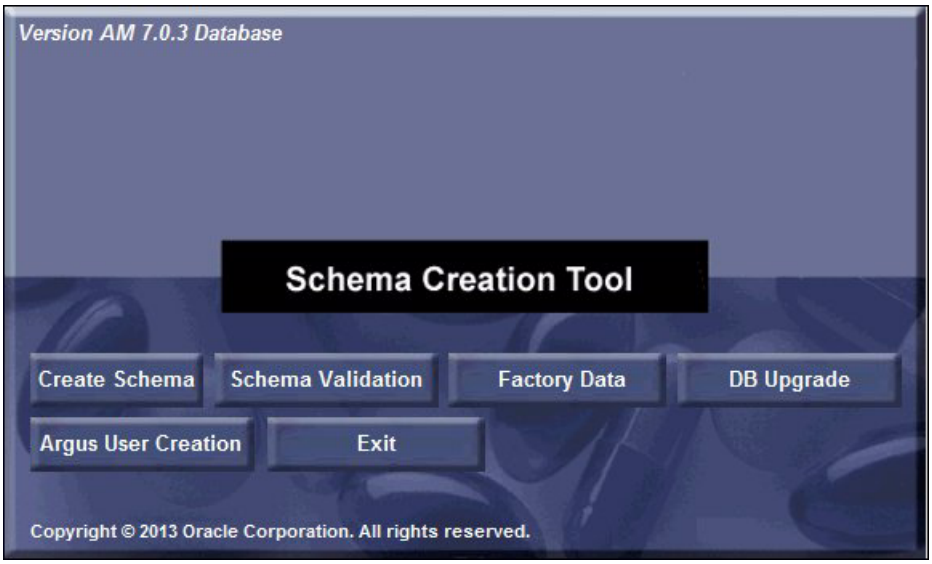
3.4.1 Creating User for the Argus Safety Database

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

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

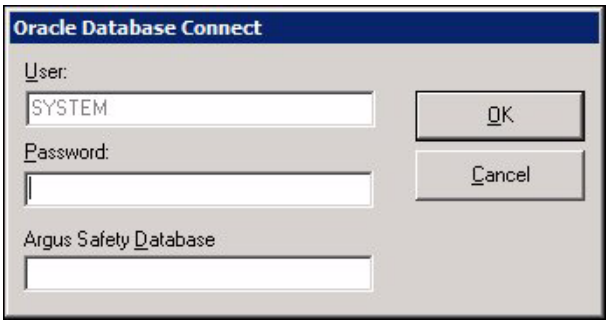
1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart **Schema Creation Tool**, as shown in the following figure:

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



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

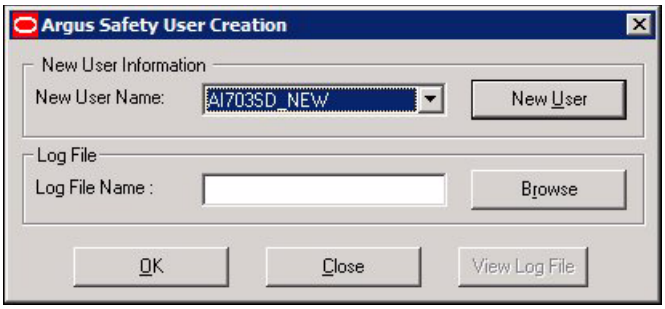
Figure 3–4 Oracle Database Connect Dialog Box



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

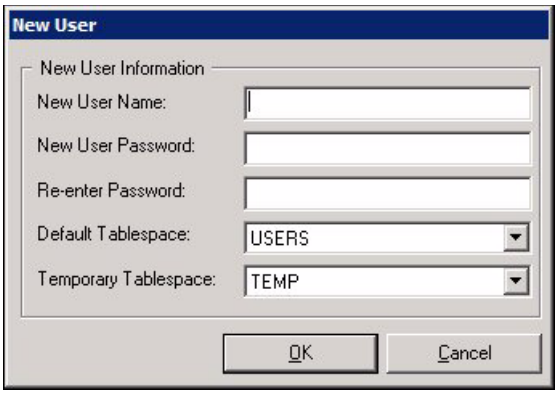
      This displays the **Argus Safety User Creation** dialog box as depicted in the following figure:

Figure 3–5 Argus Safety User Creation Dialog Box



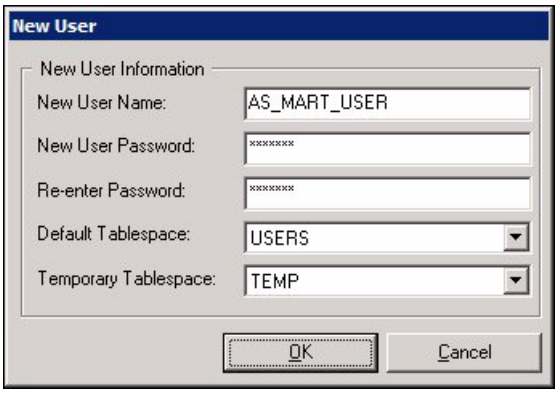
4. Click **New User**. This displays the **New User** dialog box, as displayed in the following figure:

Figure 3–6 New User Dialog Box



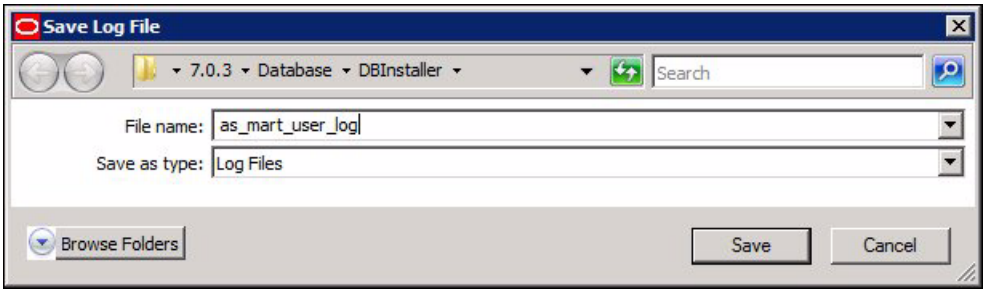
5. In the **New User** dialog box:
   a. Enter the name for the new user in the **New User Name** field.
   b. Enter the password for the new user in the **New User Password** field.
   c. Re-enter the password for the new user in the **Re-enter Password** field.
   d. Select the default tablespace,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

Figure 3–7 Argus Safety User Creation



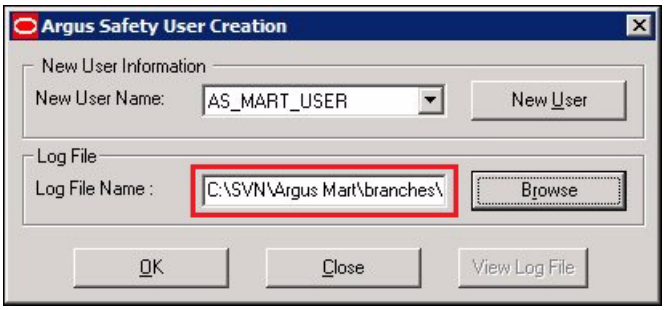
6. Click **OK**.
7. Select the name of the newly created user from the list of existing users in the **New User Name** drop-down list of the **Argus Safety User Creation** dialog box.
8. Click **Browse** to navigate to the location where you want to save the log file. This displays the **Save Log File**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

Figure 3–8 Save Log File Dialog Box



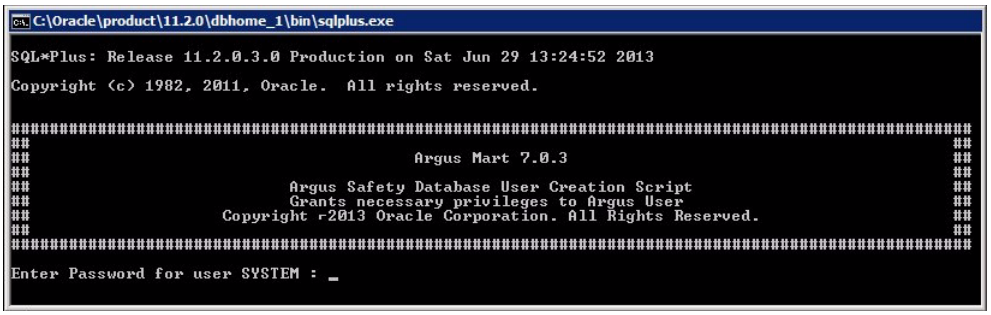
9. Enter the name of the log file in the **File name** field. You can enter the name of the file as **AS_SAFETY_USER**, which is easier to remember, for reference later in the installation process.
10. Click **Save**. This displays the complete path of the log file in the **Log File Name** field of the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

Figure 3–9 Saving Log File



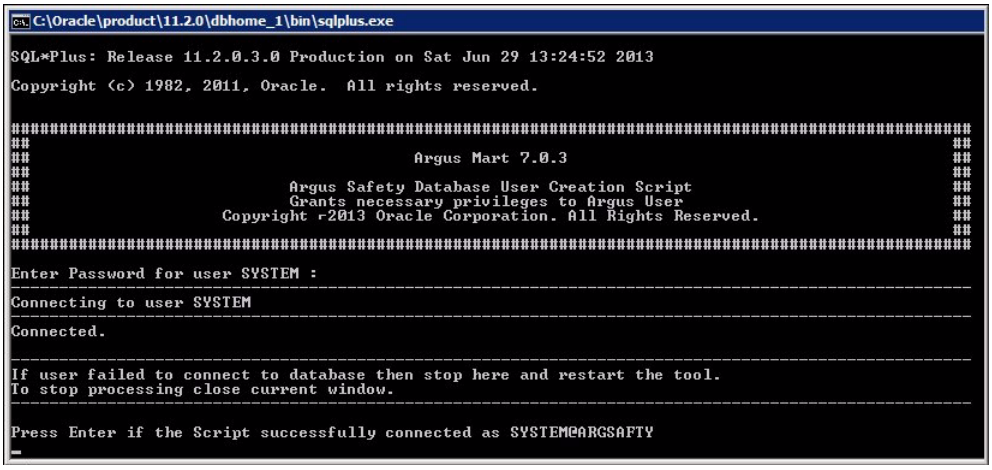
11. Click **OK** when you are ready to create the specified user. This displays a command prompt as shown in the following figure:

Figure 3–10 Entering Password for the SYSTEM User



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

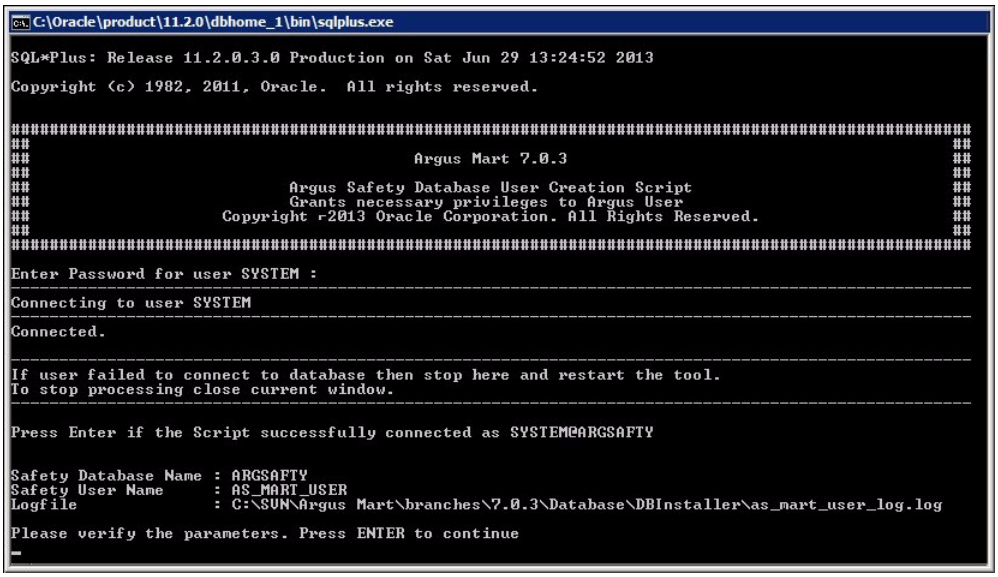
Figure 3–11 Verifying User and Database Details



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

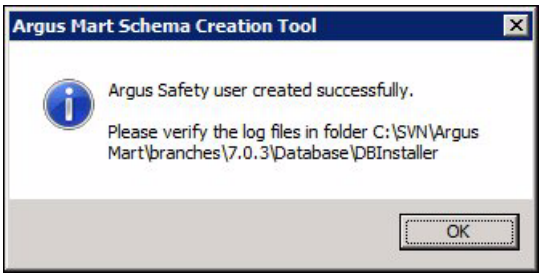
    The system displays information about the Argus Safety database name, the name of the user to create, and the name of the log file, as depicted in the following figure:

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



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

Figure 3–13 User Creation Confirmation



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

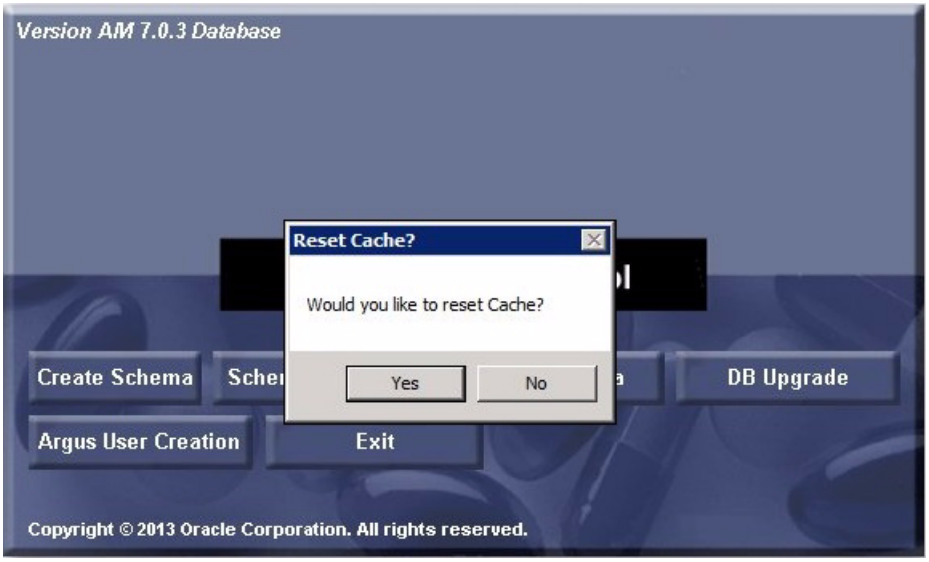
3.4.2 Clearing the Cache

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

To clear the Cache:

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

Figure 3–14 Clearing Cache



2. Click **Yes.**

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

3.4.3 Creating a New Database Schema for Argus Mart

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

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

- **&rls_user.** with VPD Admin User, such as AM_VPD_USER
- **&sm_mart.** with Argus Mart User, such as AM_MART_USER

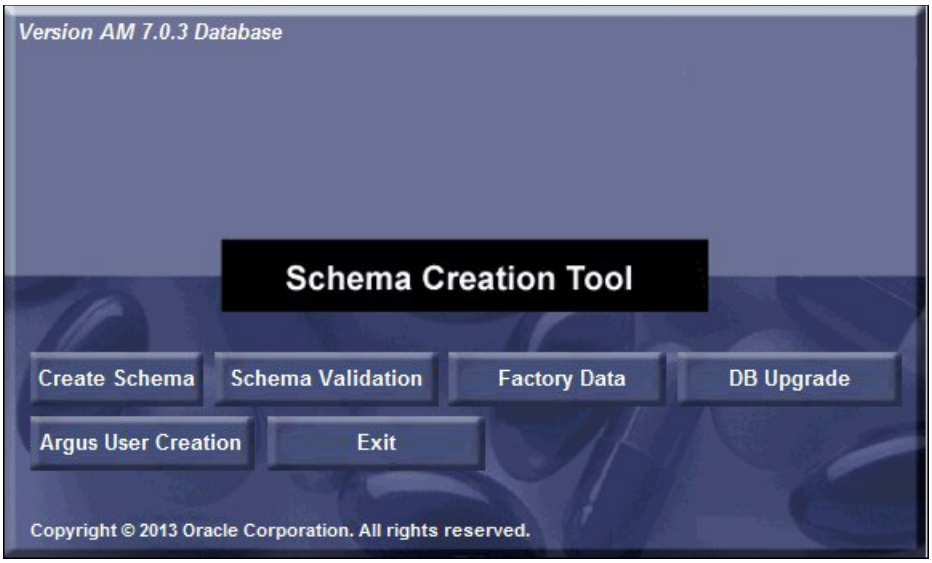
This SQL script is located in the following folder:

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

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

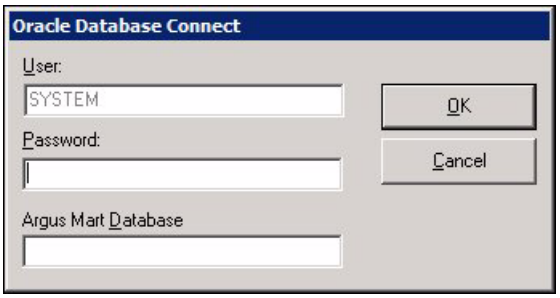
1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart **Schema Creation Tool**, as shown in the following figure:

Figure 3–15 Schema Creation Tool: Create Schema



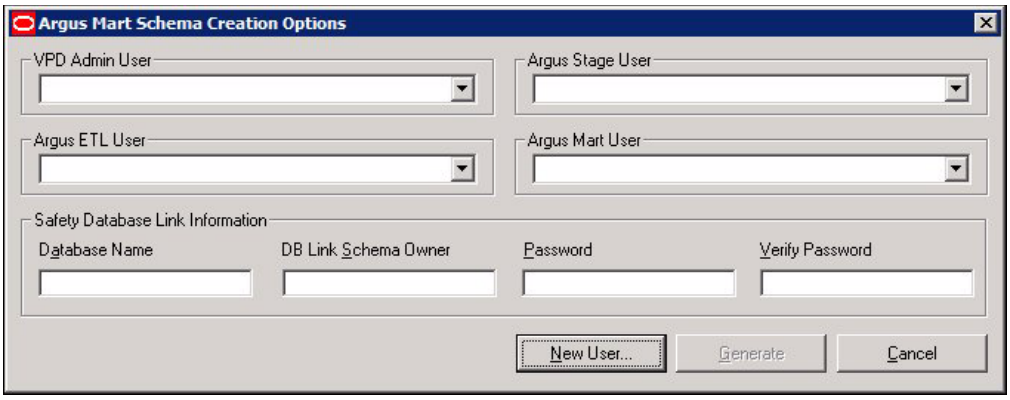
2. Click **Create Schema**. This displays the **Oracle Database Connect** dialog box, as shown in the following figure:

Figure 3–16 Connecting to Argus Mart Database



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

Figure 3–17 Argus Mart Schema Creation Options Dialog Box



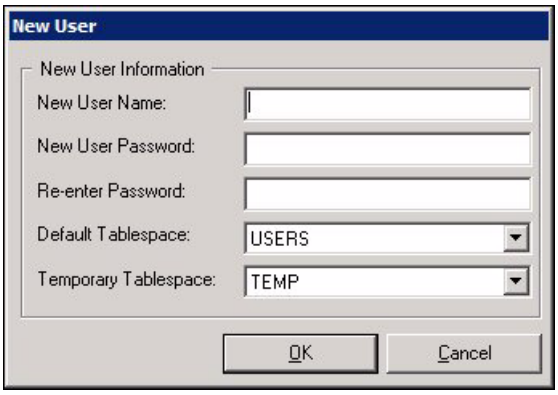
Now we need to create the following four users using this screen:

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

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

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

Figure 3–18 New User Dialog Box



5. In the **New User** dialog box:

   a. Enter the name for the new user in the **New User Name** field.

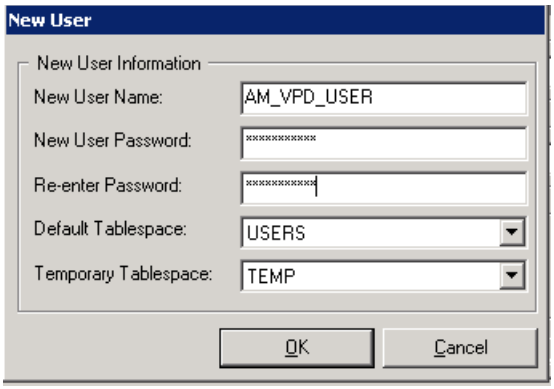
      Enter the password for the new user in the **New User Password** field.

   b. Re-enter the password for the new user in the **Re-enter Password** field.

   c. Select the default tablespace, where you want to store the database objects, from the **Default Tablespace** drop-down list.

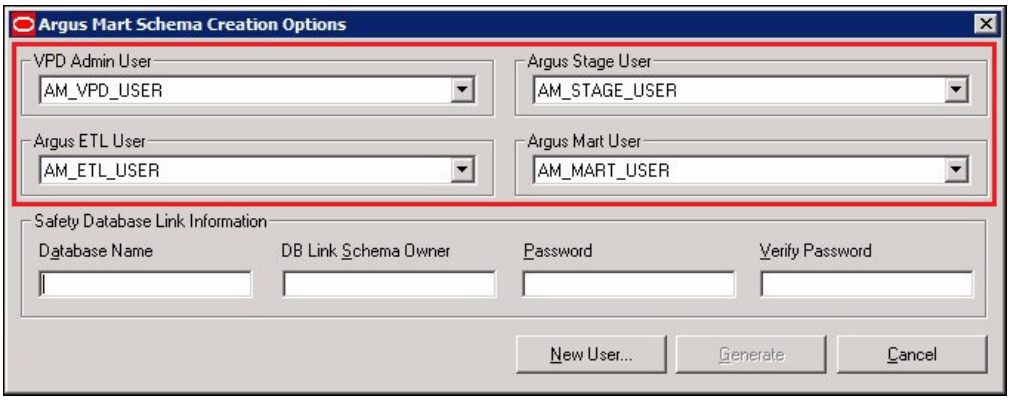
   d. Select the tablespace, where you want to store the database objects temporarily, from the **Temporary Tablespace** drop-down list.

Figure 3–19 Creating VPD Admin User



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

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

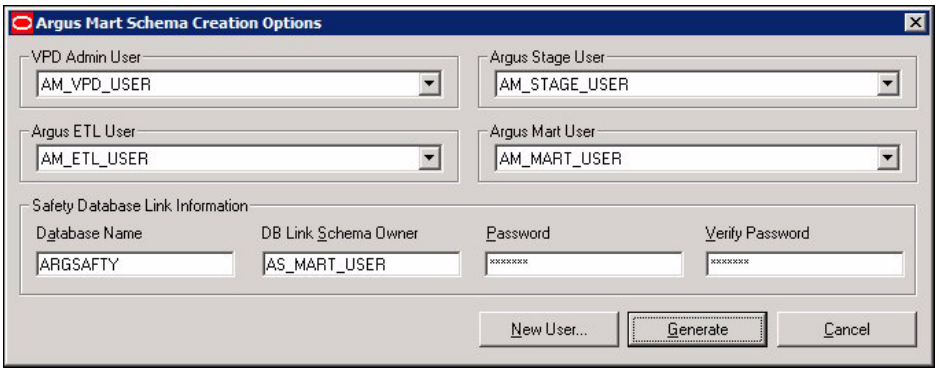


9. In the **Safety Database Link Information** section:
   a. Enter the Argus Safety Database name, which you have used while creating the user for the Argus Safety database in the **Database Name** field. See step 3(b) of the section 3.4.1 , Creating User for the Argus Safety Database for detailed steps.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

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

d. Re-enter the password in the **Verify Password** field.

Figure 3–21 Safety Database Link Information Details



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

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

11. Enter the password for the **Argus Stage User** in the **Password** field.

12. Click **OK**.

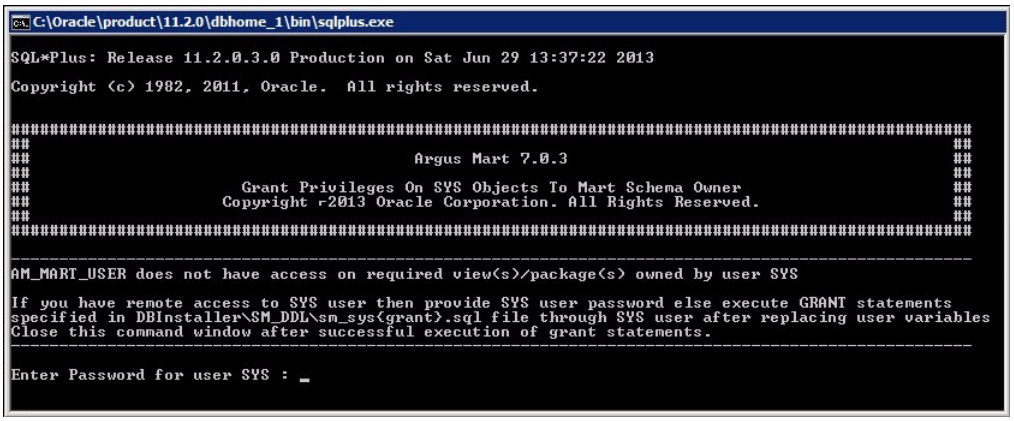
    This displays the **Oracle Database Connect** dialog box again, as shown in the following figure:

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

13. Enter the password for the Argus Mart User in the **Password** field.

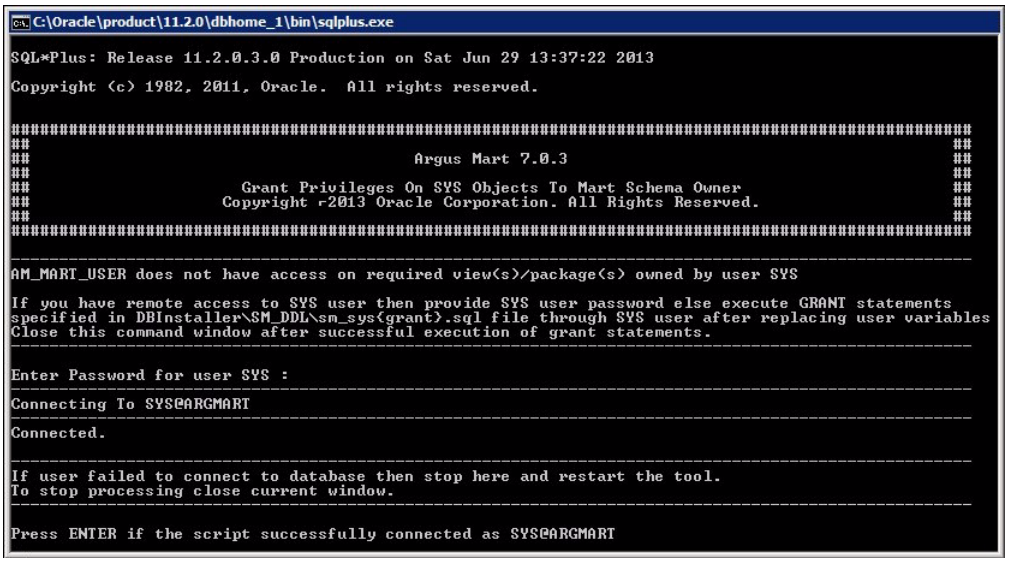
14. Click **OK**. This displays a command prompt, as shown in the following figure:

Figure 3–24 SYS User Details



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

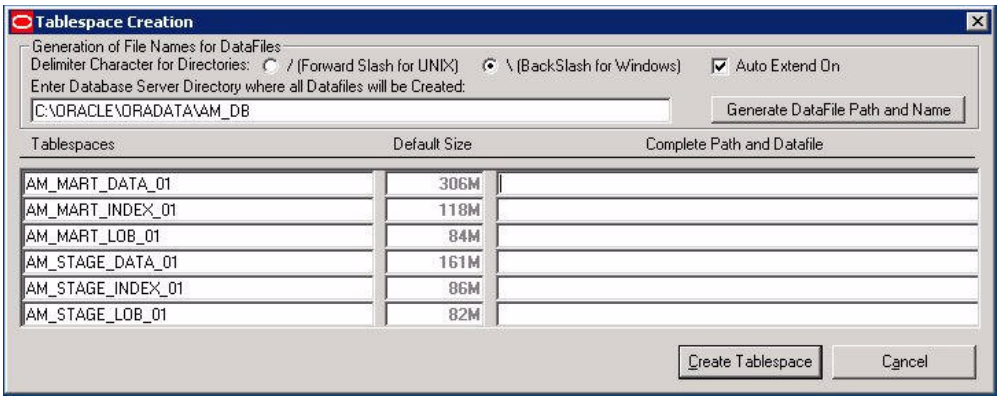
Figure 3–25 Verifying User and Argus Mart Database Details



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

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

Figure 3–26 Tablespace Creation Dialog Box

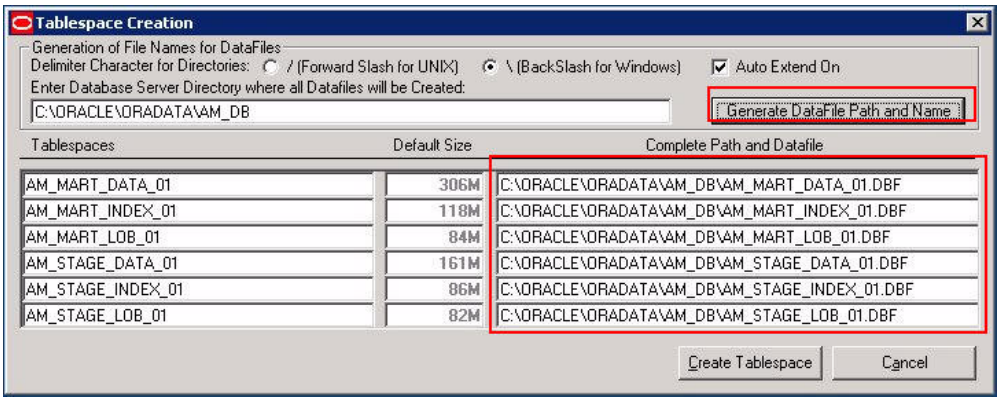


18. In the **Tablespace Creation** dialog box:

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

b. Click **Generate DataFile Path and Name**. The system automatically fills in the Complete Path and Datafile column for all tablespaces, as shown in the following figure:

Figure 3–27 Generating DataFile Path and Name

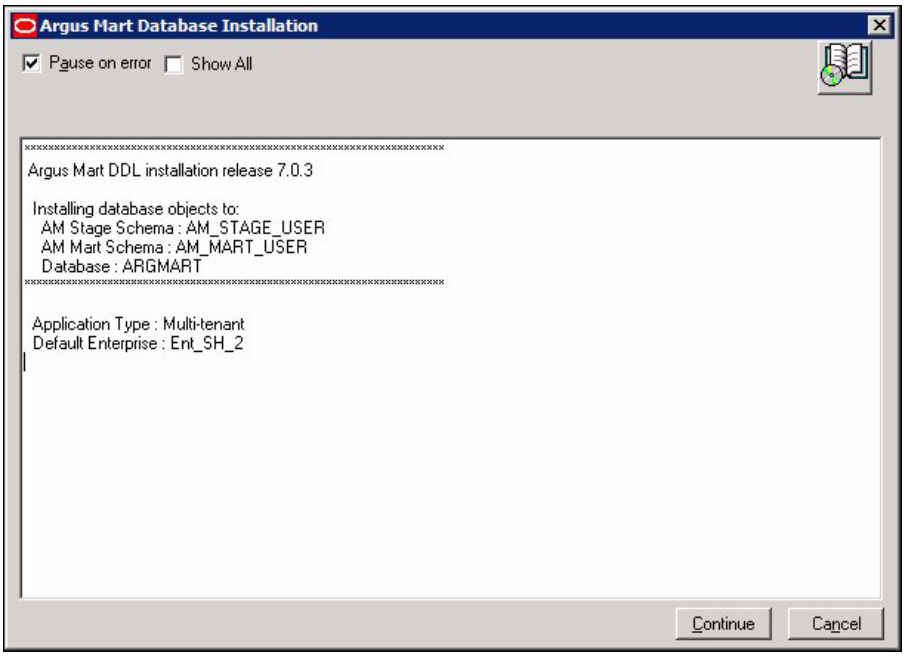


c. Click **Create Tablespace** to create all Tablespaces. If a Tablespace already exists, the system displays a warning message to use the existing Tablespace.

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

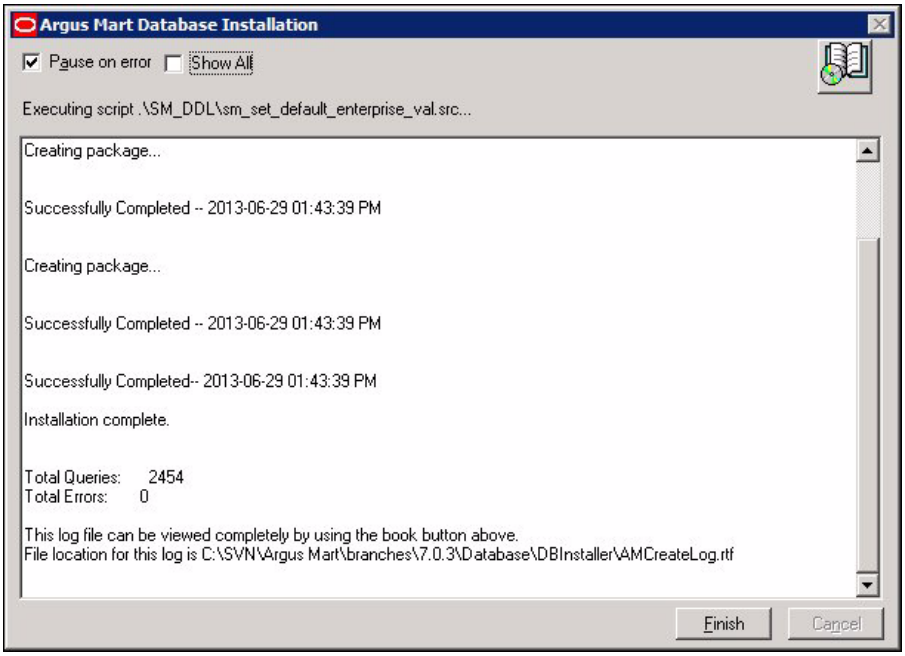
19. Wait until the system creates the tablespaces and opens the **Argus Mart Database Installation** dialog box, as shown in the following figure:

Figure 3–28 Argus Mart Database Installation Dialog Box



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

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



21. Click the Book icon to view the log file and check for errors.
Alternatively, you can view the log file at any time at the following location:
...\ArgusMart\Database\DBInstaller\AMCreateLog.rtf

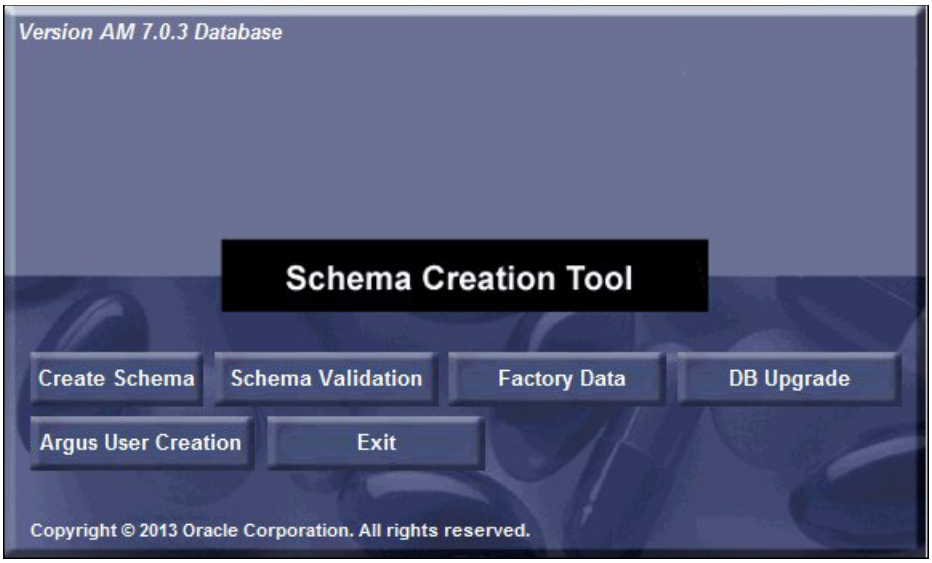
22. Click **Finish** to close the **Argus Mart Database Installation** dialog box. This completes the procedure to create a new database schema for Argus Mart.

3.4.4 Loading Factory Data

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

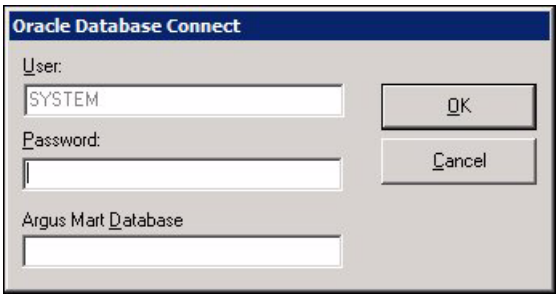
1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart **Schema Creation Tool**, as shown in the following figure:

Figure 3–30 Schema Creation Tool



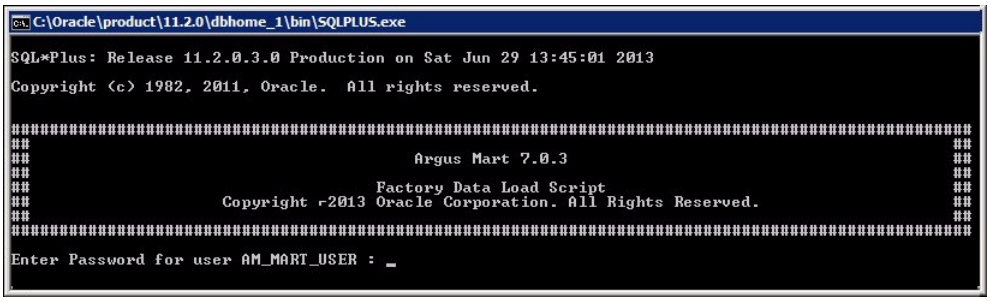
2. Click **Factory Data**. The Connect to Database dialog box opens.

Figure 3–31 The Connect to Argus Mart Database Screen



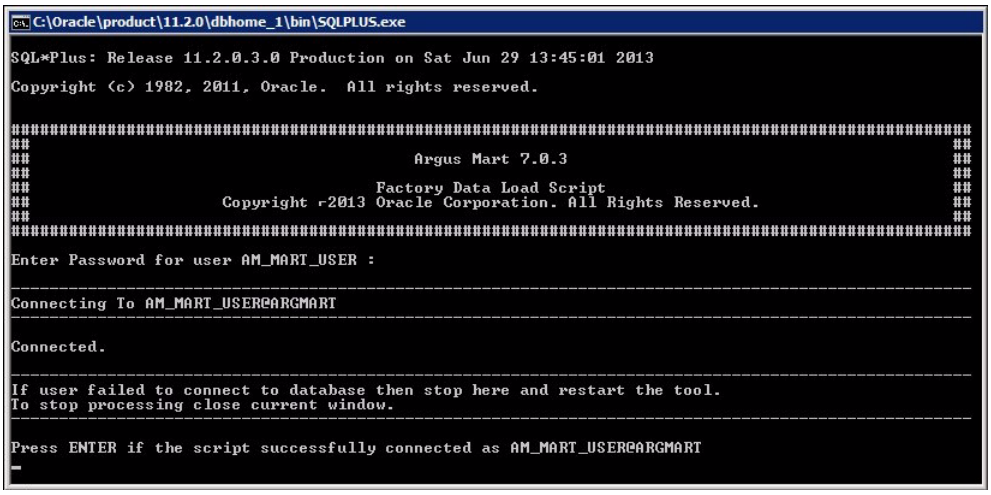
3. Enter the following parameters:
   - Argus Mart Schema Owner
   - Password
   - Database
4. Click **OK**. This displays a command prompt, as shown in the following figure:

Figure 3–32 Entering Argus Mart User Password



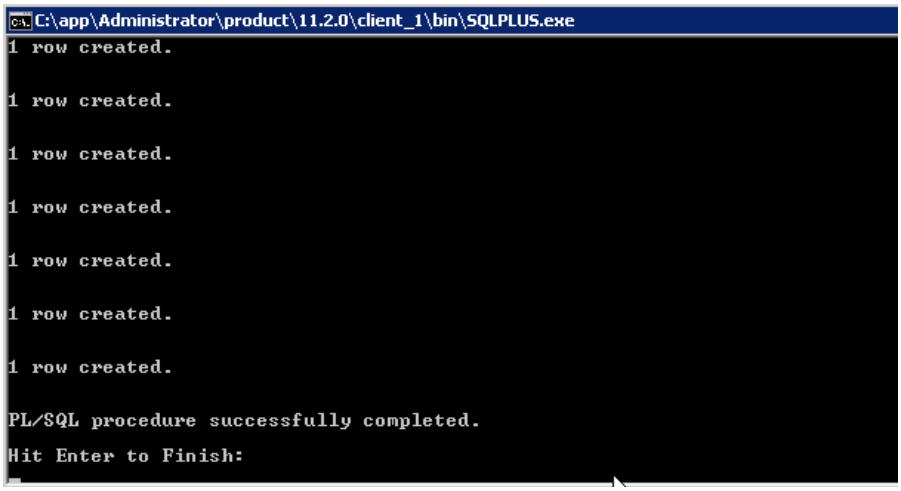
5. Enter the password for the Argus Mart user and Press **Enter**. This displays the following screen:

Figure 3–33 Verifying the Argus Mart User and Database Details



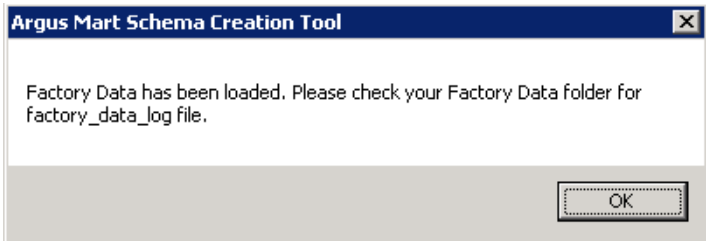
6. Verify that the script is successfully connected as <Argus Mart User Name>@<Argus Mart Database Name> and press **Enter**. The system displays messages about the creation of rows and subsequently displays the following message:

Figure 3–34 Loading Factory Data



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

Figure 3–35 Loading Factory Data Successful: Confirmation Screen



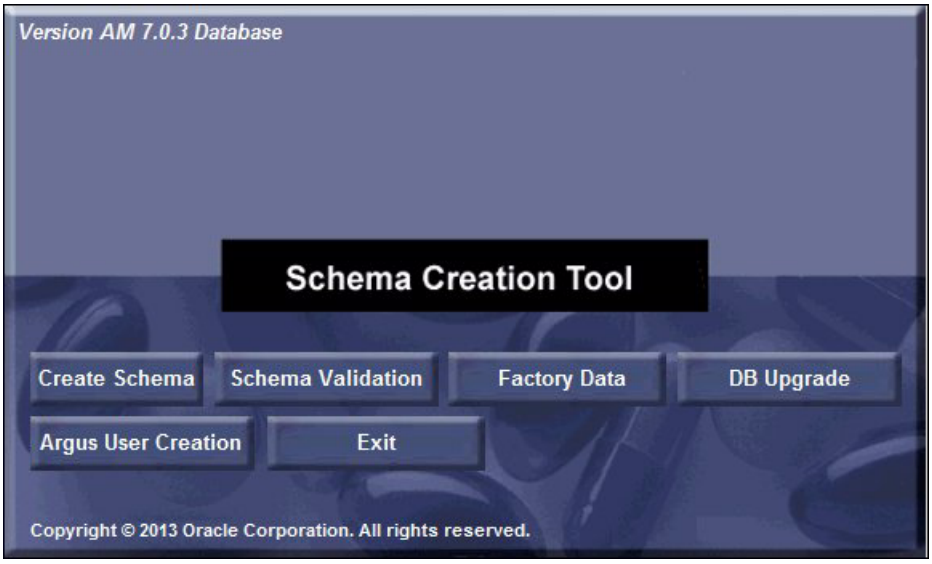
8. Click **OK** to complete the procedure to load the factory data into the newly created Argus Mart database.

3.5 Validating the Schema

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

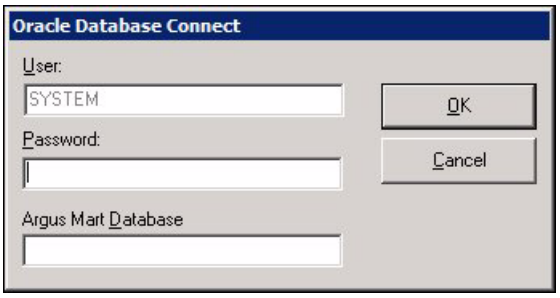
1. Start the Argus Mart Schema Creation tool. See Section 3.3, Starting the Argus Mart Schema Creation Tool. This displays the Argus Mart **Schema Creation Tool**, as shown in the following figure:

Figure 3–36 Schema Creation Tool: Validating the Schema



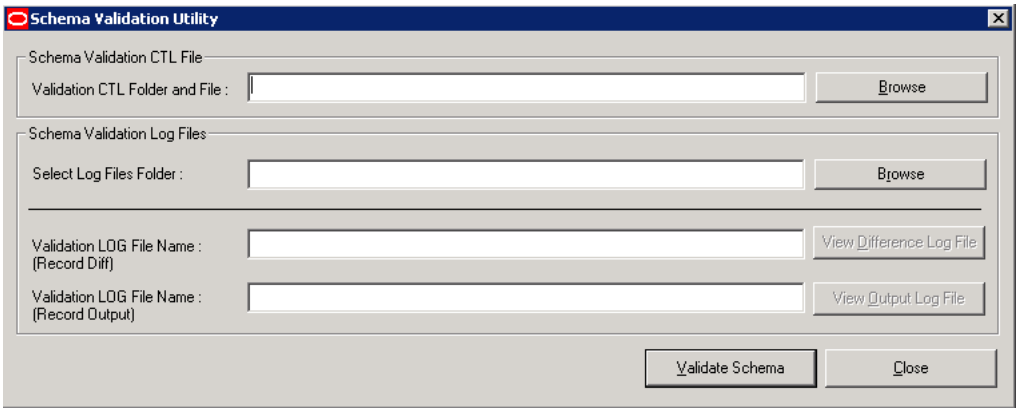
2. Click **Schema Validation**. This displays the **Oracle Database Connect** dialog box, as shown in the following figure:

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



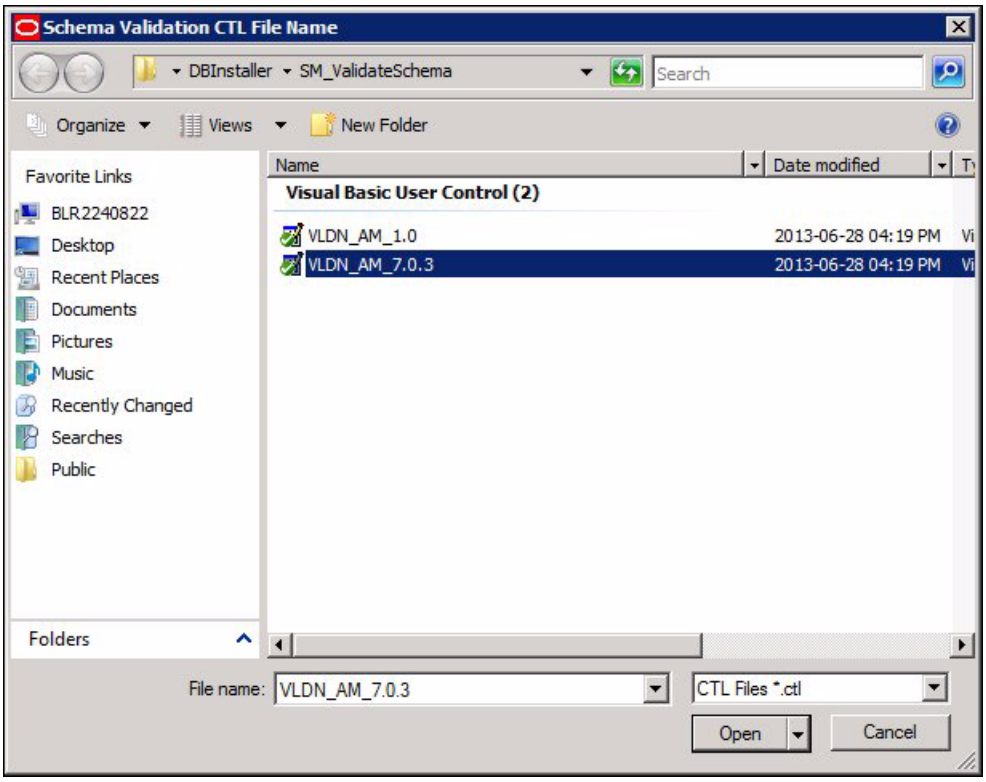
3. In the **Oracle Database Connect** dialog box:
   a. Enter the password for the SYSTEM user in the **Password** field.
   b. Enter the name of the Argus Mart database that you want to connect to, in the **Argus Mart Database** field.
   c. Click **OK**. This displays the **Schema Validation Utility**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

Figure 3–38 Schema Validation Utility Dialog Box



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

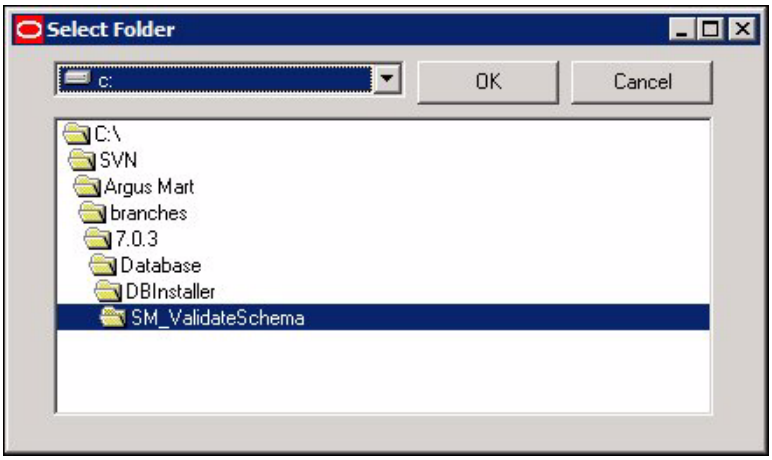
Figure 3–39 Schema Validation: Selecting CTL File



b. Select the CTL file (VLDN_AM_7.0.3) to validate the Argus Mart 703 instance, and click **Open**. This displays the complete path of the CTL file in the **Schema Validation CTL File** section. Once you select the location of the CTL file, the **Validation LOG File Name (Record Diff)** and **Validation LOG File Name (Record Output)** fields are also auto-populated with the **<name of the CTL file>_Diff.log** and **<name of the CTL file>_Out.log** names respectively.

c. In the **Schema Validation Log Files** section, click **Browse** next to the **Select Log Files Folder** field. This displays the **Select Folder** dialog box, as depicted in the following figure:

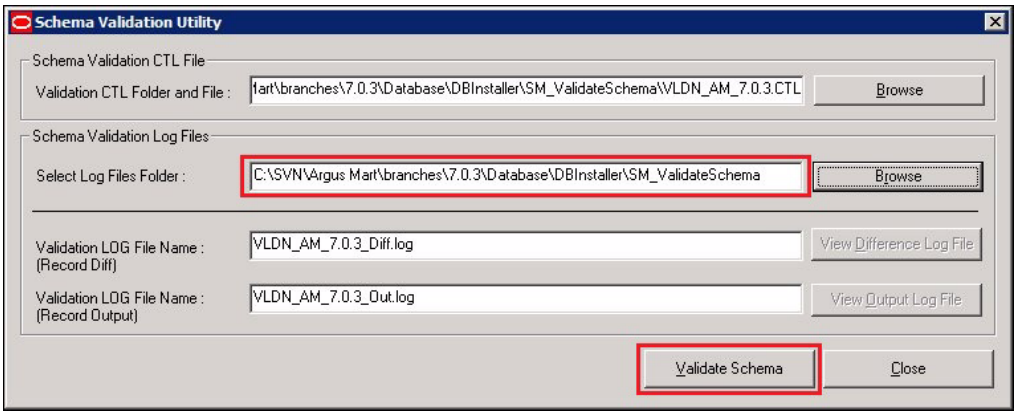
Figure 3–40 Schema Validation: Selecting Folder for the Log Files



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

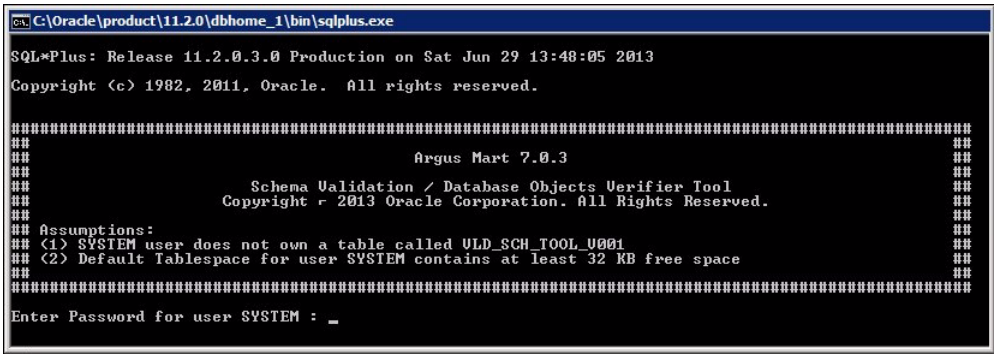
e. Click **OK**. This displays the name of the folder in the **Select Log Files Folder** field, as shown in the following figure:

Figure 3–41 Schema Validation: Log Files Location



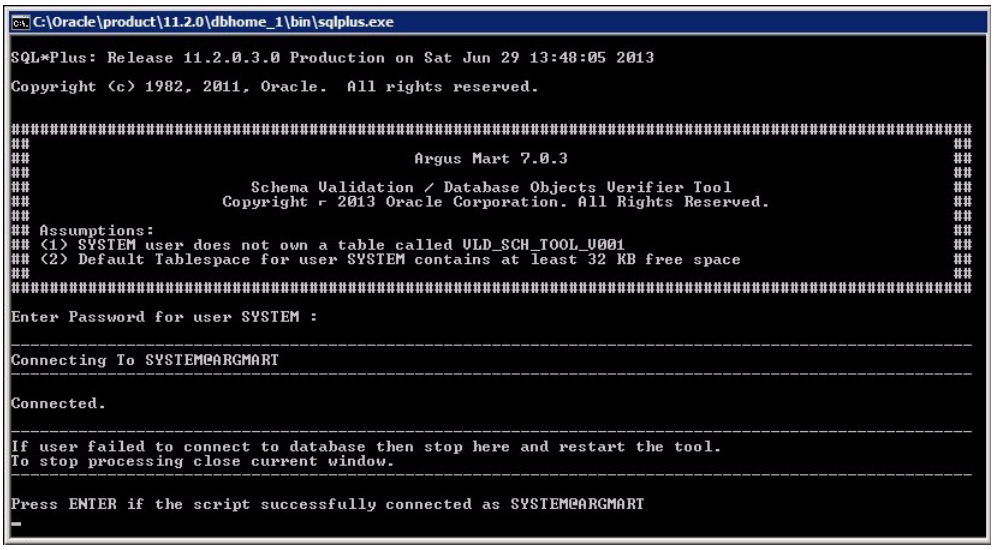
f. Click **Validate Schema**. The system displays the following command screen:

Figure 3–42 Entering SYSTEM User Password



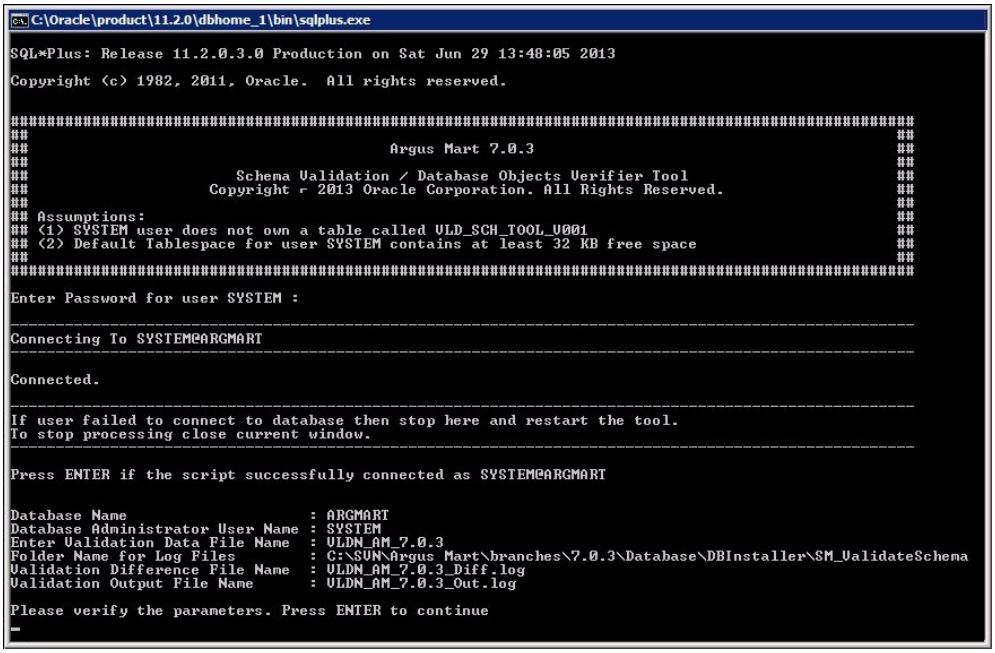
5. Enter the password for the SYSTEM user and press **Enter**. This displays the following command screen:

Figure 3–43 Verifying User and Database Details



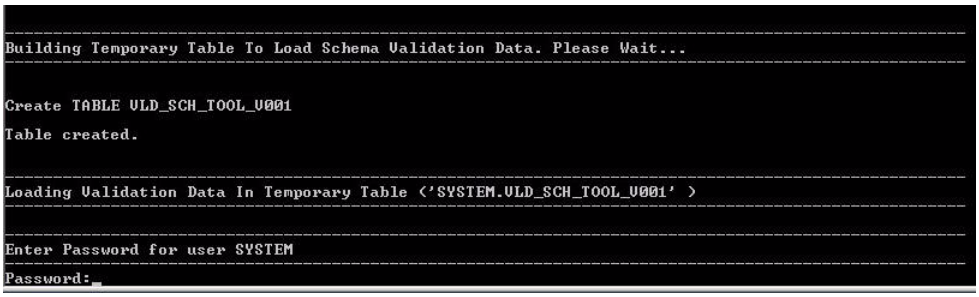
6. Verify that the script is successfully connected as <SYSTEM User Name>@<Argus Mart Database Name> and press **Enter**. This displays the following command screen:

Figure 3–44 Verifying other Details



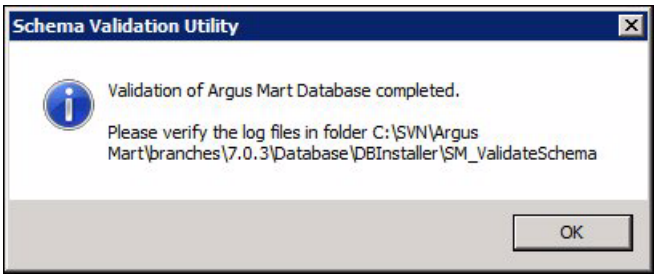
7. Review the information on the command screen and press **Enter**. This displays the following command screen:

Figure 3–45 Entering Database Administrator Password



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

Figure 3–46 Schema Validation: Successful Confirmation Screen



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

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:

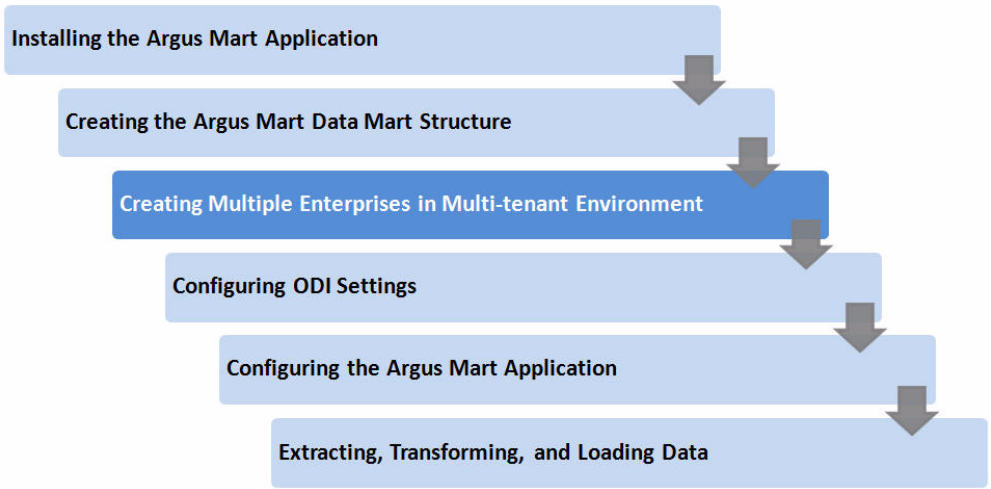
- The configuration of default enterprise.
- The configuration of any other existing enterprise in Argus Safety Database.

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



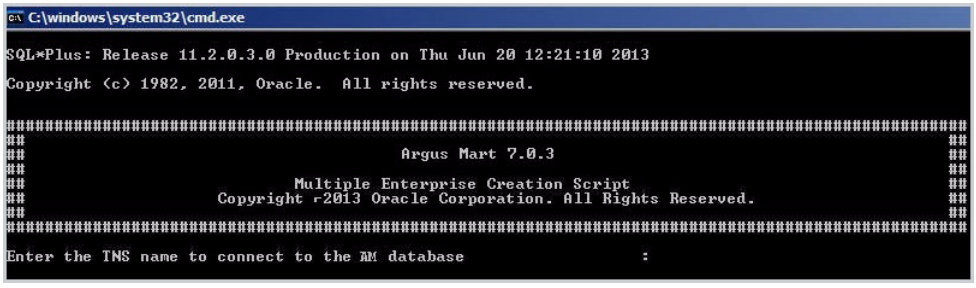
To create multiple enterprises in Argus Mart, execute the following steps:

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

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

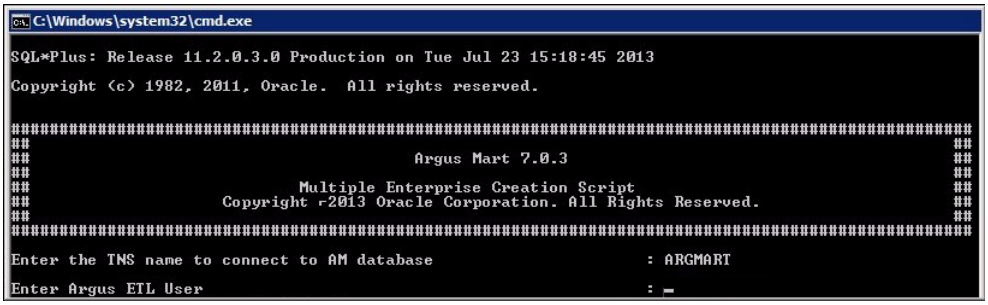
This displays the **Argus Mart Enterprise Creation** Screen as shown in the following figure:

Figure 4–2 Entering TNS Name to Connect to Database



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

Figure 4–3 Entering Argus ETL User



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

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

   a. Enter the Argus Mart Database Owner in the **Enter Argus ETL User** field, and press **Enter**.

   b. Enter the password in the **Enter Password for User** field, and press **Enter**.

   c. Enter the name of the enterprises, which you want to create in Argus Mart, in the **Enter comma separated enterprise short names** field, and press **Enter**.

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

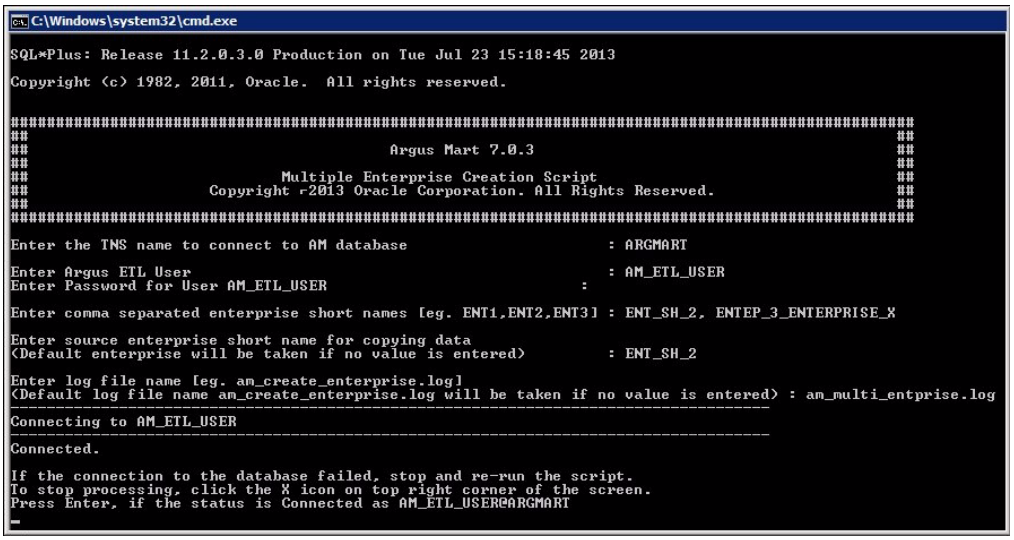
   d. Enter the Source Enterprise name using which you want to create new enterprises in the **Enter source enterprise short name for copying data** field, and press **Enter**.

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

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

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

Figure 4–4 Connecting to the Database

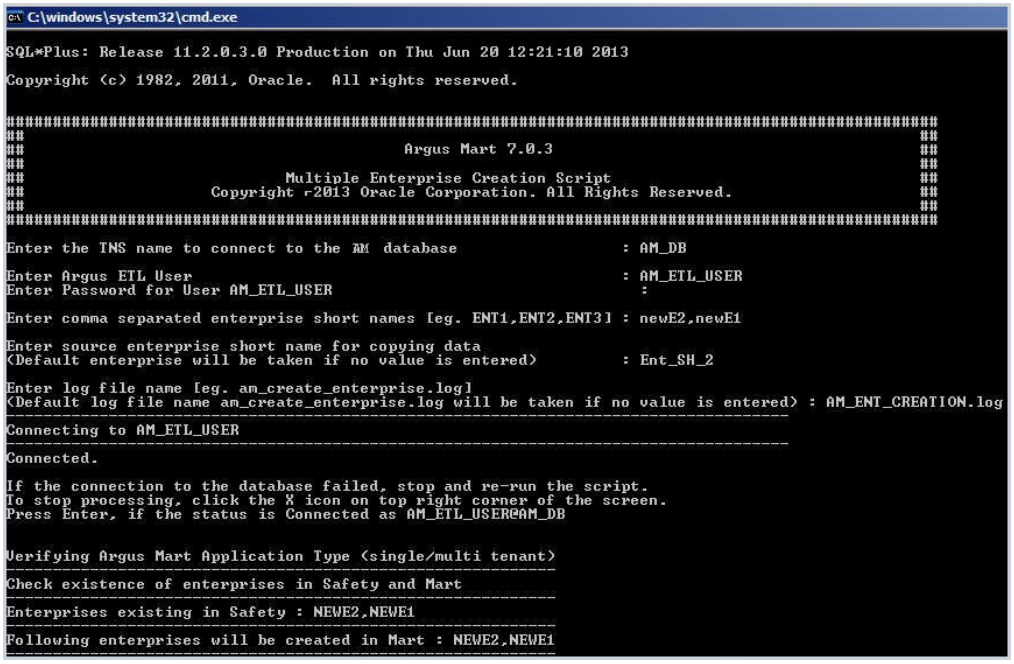


The system also validates that the Argus Mart database is a multi-tenant database, which supports creation of multiple enterprises and the factory data has already been loaded to the database. If any of these requirements are not met, the system displays an error message.

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

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

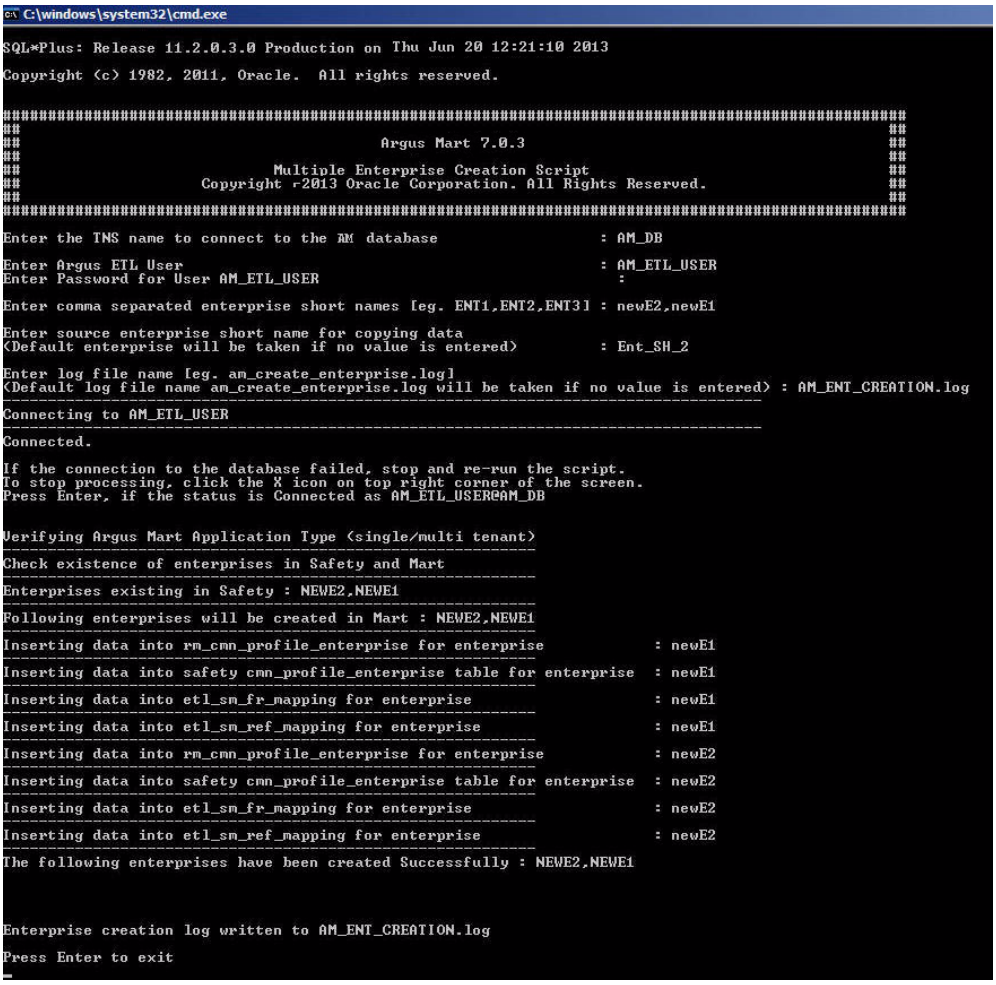
Figure 4–5 Displaying List of Enterprises to be Created in Argus Mart



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

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

Figure 4–6 Displaying Enterprise Creation Confirmation



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

5

Configuring ODI Settings

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

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

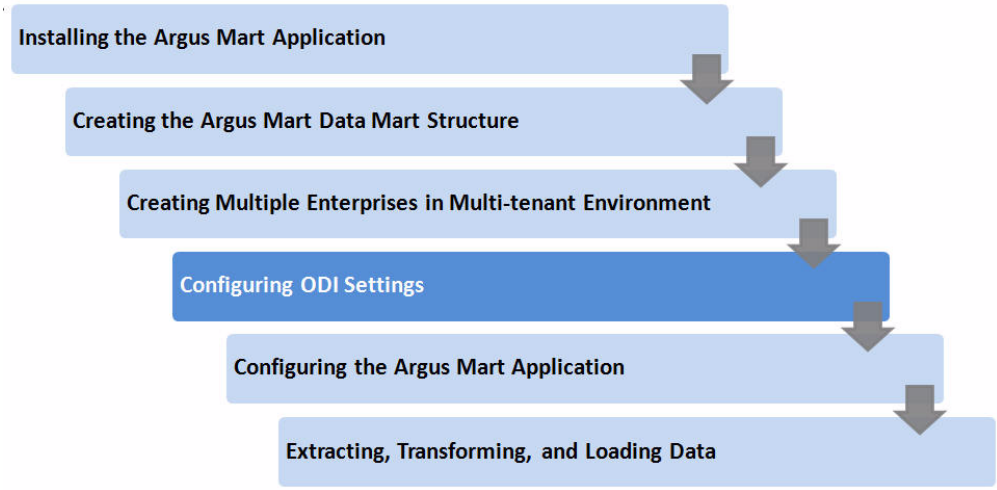
...\ArgusMart\ODI\AM.zip

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

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

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

Figure 5–1 Installation Progress: Configuring ODI Settings



This chapter comprises the following sub-sections:

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

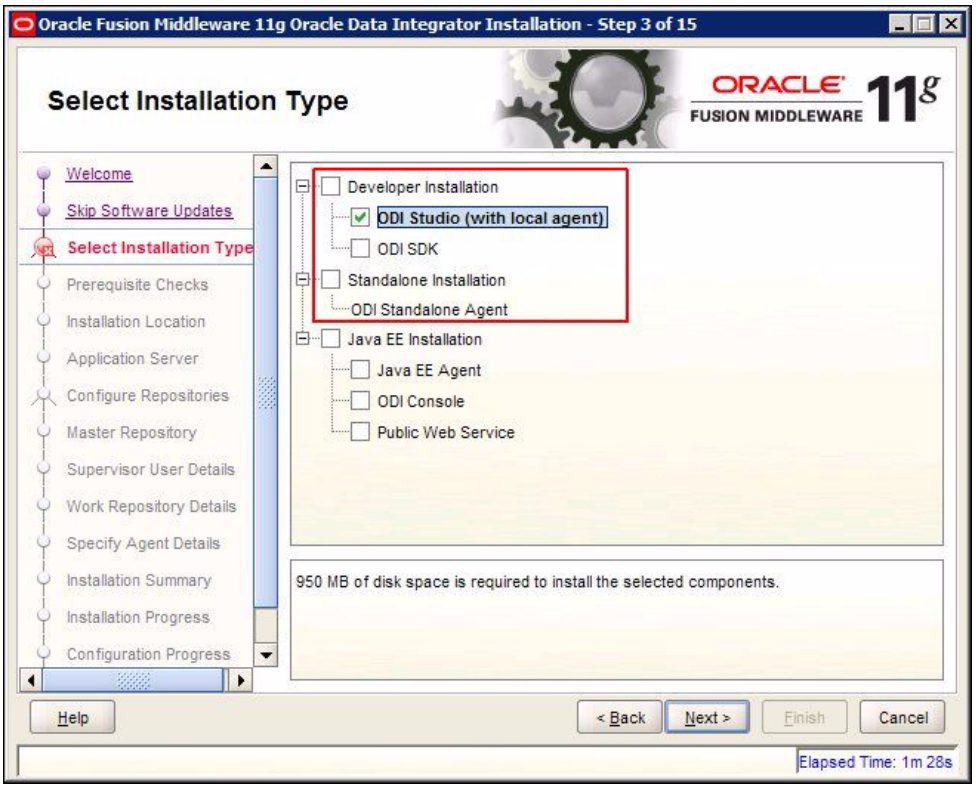
- Creating and Testing Data Server Connection
- Creating New Physical Schema
- Validating Load Plan
- Managing the ODI Agent
- Executing Steps of a Load Plan in Parallel

5.1 Minimum Components Required

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

- ODI Studio
- ODI Agent

Figure 5–2 Minimum Components Required for Setting-up ODI



5.2 Before Configuring ODI Settings

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

This section comprises the following sub-sections:

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

5.2.1 Creating the Database Users for Master and Work Repositories

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

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

CREATE USER <odi_master> IDENTIFIED BY <password>;

CREATE USER <odi_work> IDENTIFIED BY <password>;

Where **<odi_master>** refers to the Master Repository User Name and **<odi_work>** refers to the Work Repository User Name.

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

5.2.2 Granting Privileges to the Database Users

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

GRANT RESOURCE, CREATE SESSION, CONNECT TO odi_master;

GRANT RESOURCE, CREATE SESSION, CONNECT TO odi_work;

GRANT EXECUTE ON DBMS_LOCK TO odi_work;

Where **odi_master** refers to the Master Repository User Name and **odi_work** refers to the Work Repository User Name.

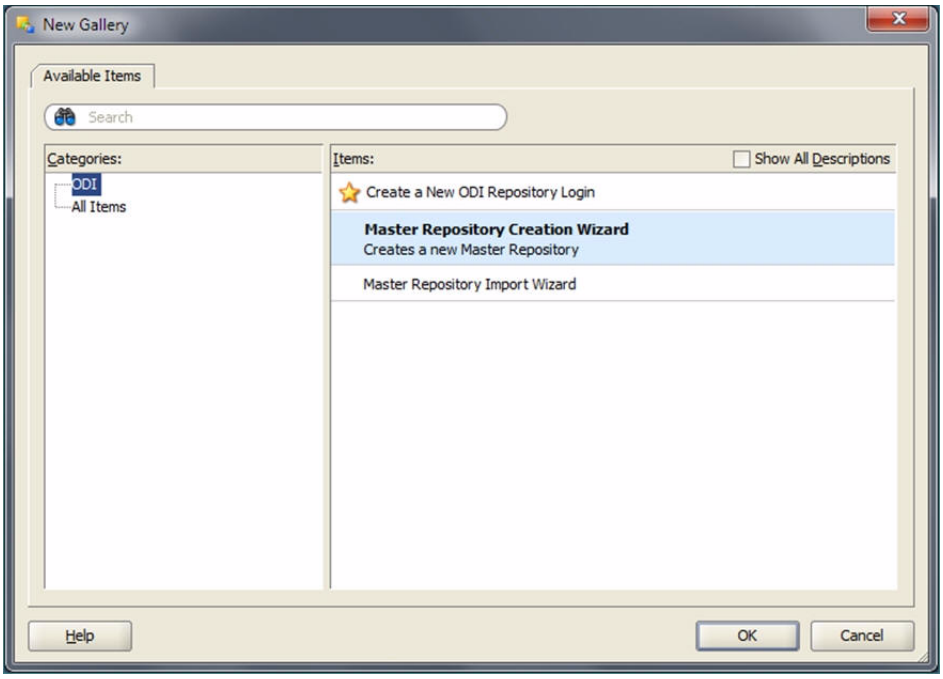
5.3 Creating Master Repository

To create the Master Repository, execute the following steps:

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

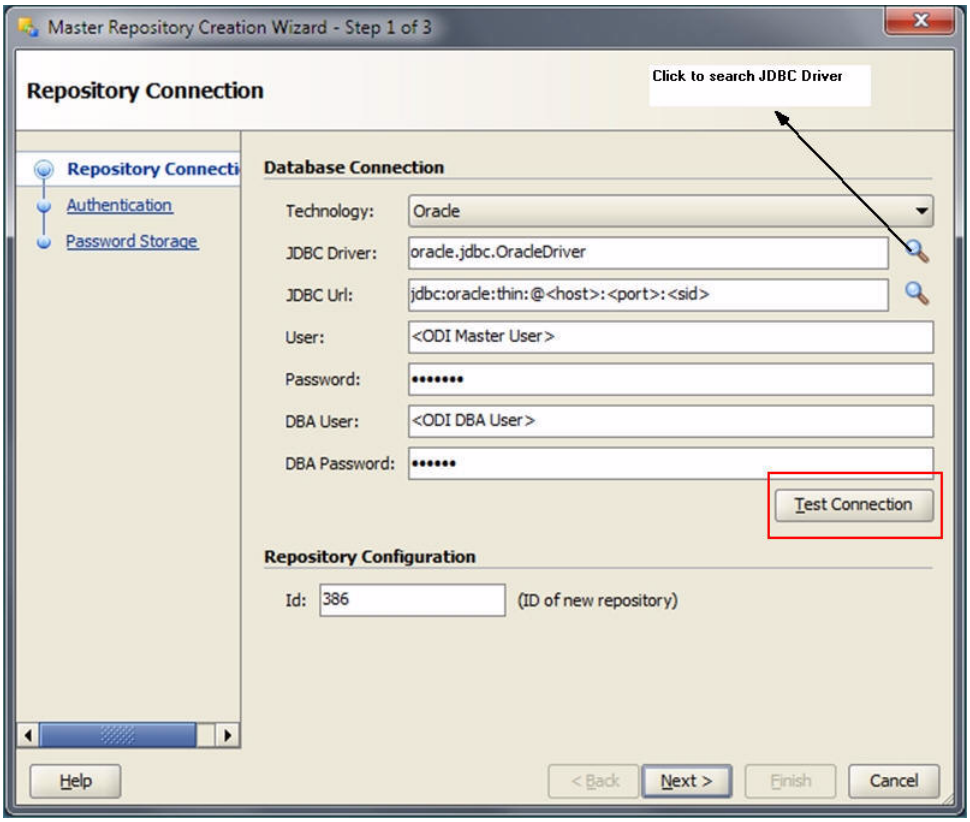
   This displays the **New Gallery** dialog box, as depicted in the following figure:

Figure 5–3 Creating Master Repository



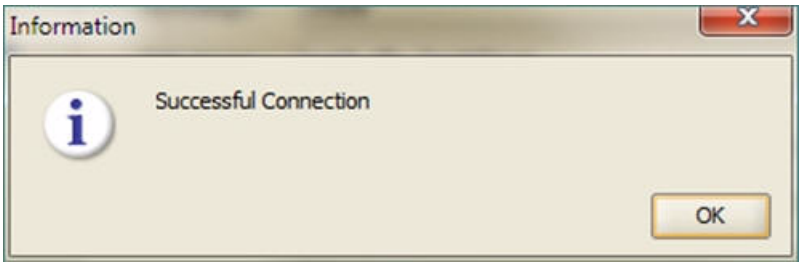
2. Click **OK**. This displays the **Master Repository Creation Wizard** with the **Repository Connection** selected in the left pane.
3. In the **Database Connection** section:
   a. Enter the required JDBC Driver in the **JDBC Driver** field. You can click the Search icon close to the **JDBC Driver**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

Figure 5–4 Master Repository Creation Wizard



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

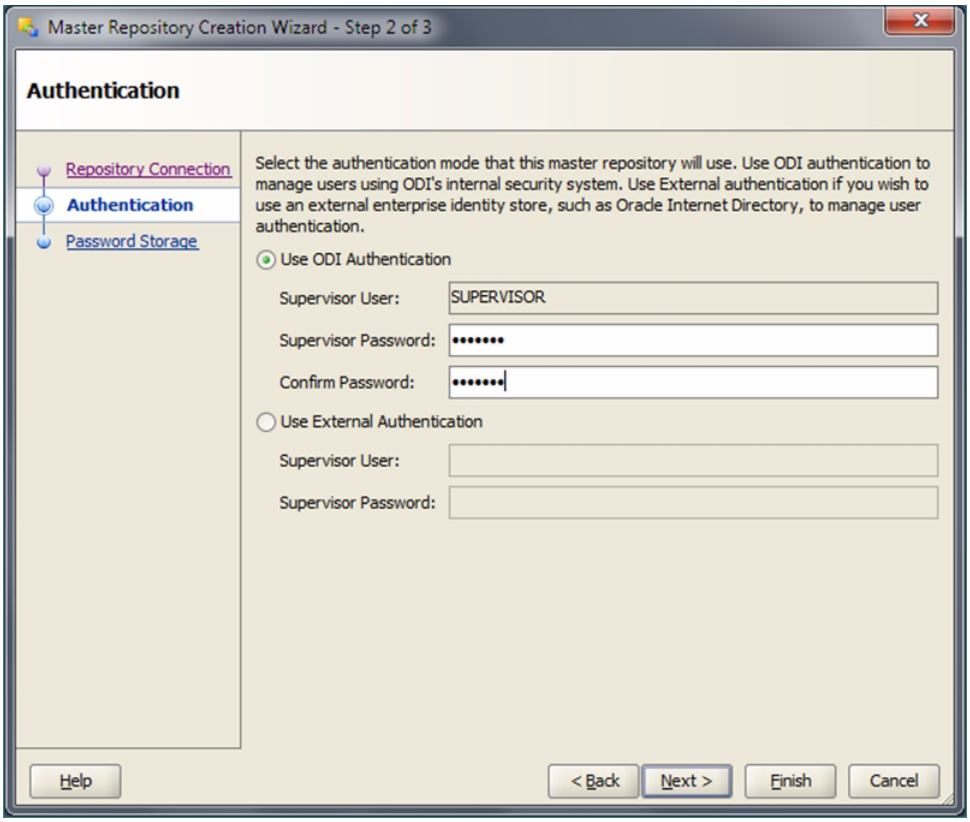
Figure 5–5 Connection Successful Confirmation Message



i. Click **OK**.

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

Figure 5–6 Authentication Screen



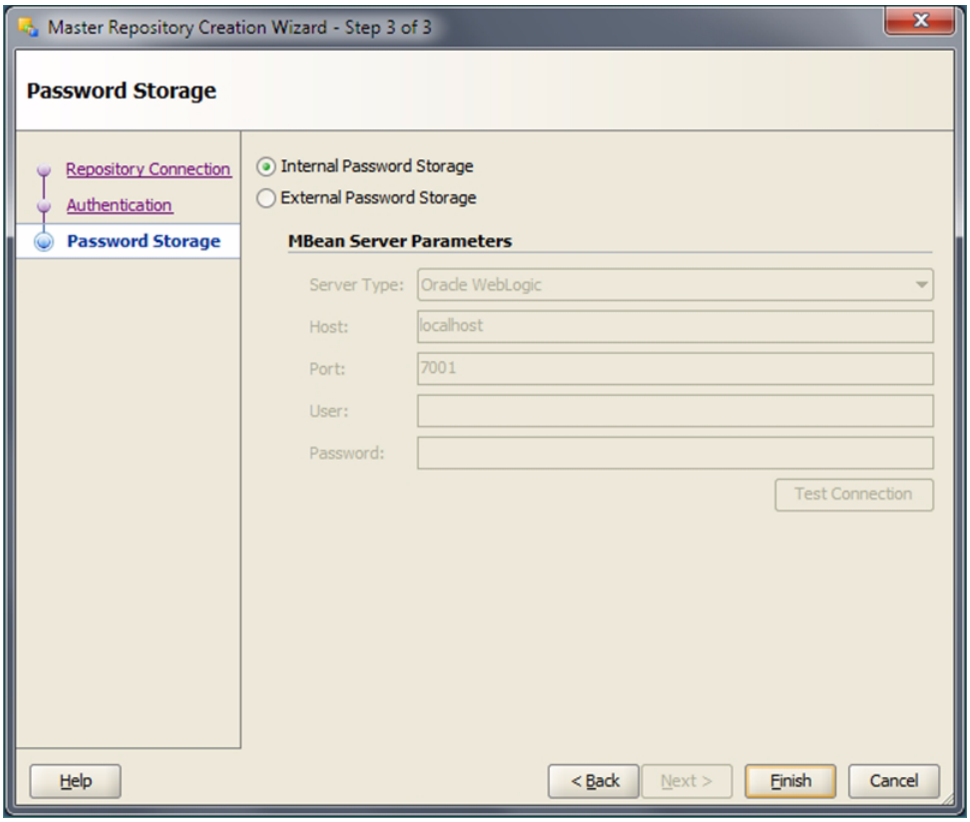
4. On the **Authentication** screen:

   a. Enter the password for the SUPERVISOR user in the Supervisor Password field. The Password that you enter in this field will be used later in the configuration process.

   b. Re-enter the password in the **Confirm Password** field.

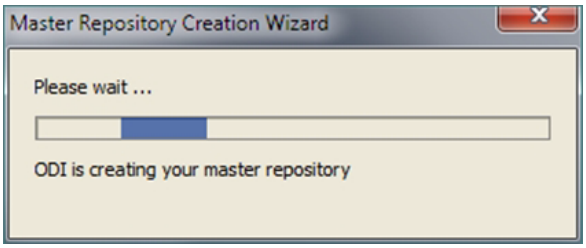
   c. Click **Next**. This displays the **Password Storage** screen, as shown in the following figure:

Figure 5–7 Password Storage Screen



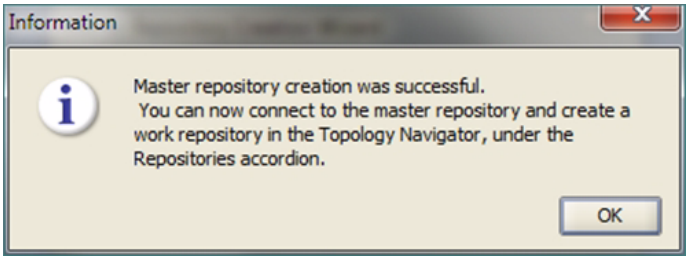
5. Click **Finish**. This displays the **Master Repository Creation Wizard** with the **ODI is creating your master repository** message, as depicted in the following figure:

Figure 5–8 Creating Master Repository



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

Figure 5–9 Master Repository Creation Successful Confirmation Message

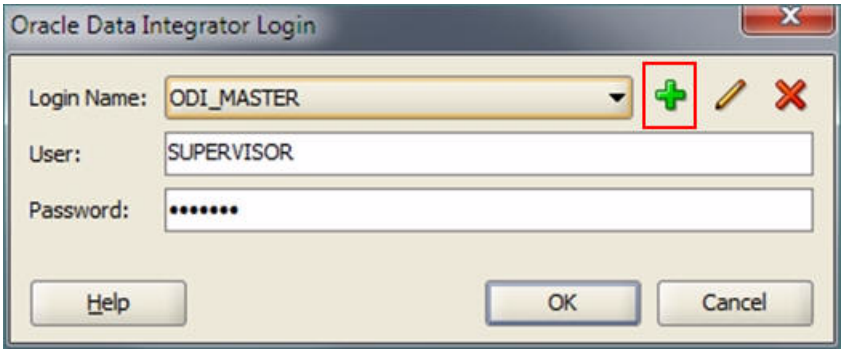


6. Click **OK** to complete the creation of the Master Repository.

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

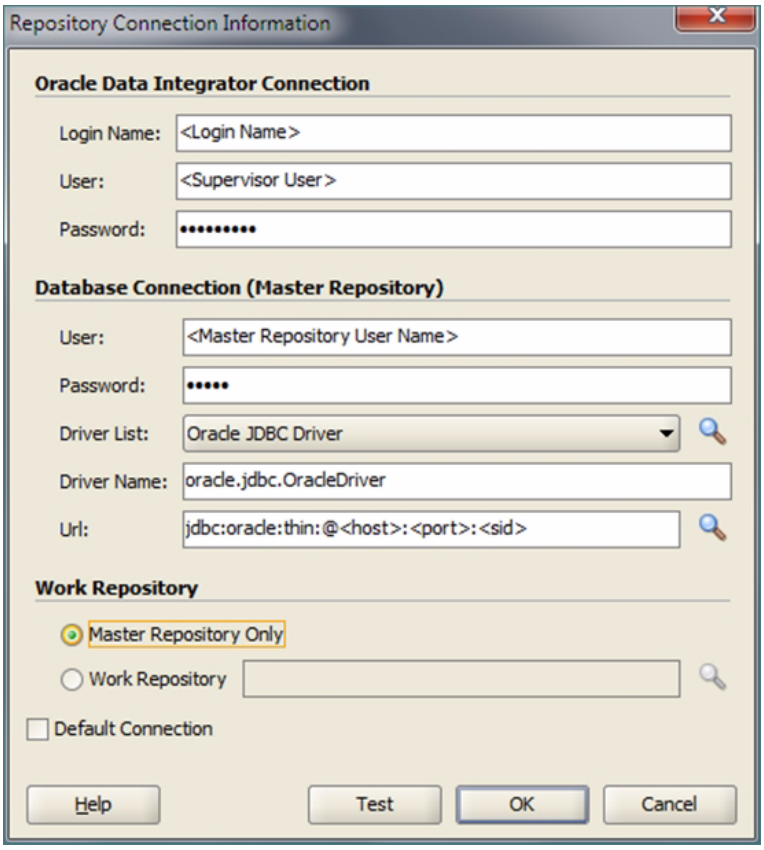
1. On the **Oracle Data Integrator Login** screen, click the **+** icon, as highlighted in the following figure:

Figure 5–10 Creating Login for Master Repository



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

Figure 5–11 Repository Connection Information



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

b. Enter the name of the SUPERVISOR user in the **User** field.

c. Enter the password for the SUPERVISOR user in the **Password** field. This password was specified in step 4 (a) of the steps to create the Master Repository section.

d. In the **Database Connection** section, enter the Master Repository User Name and Password in the **User** and **Password** fields respectively. You have already created the ODI Master Repository User Name (for example, odi_master) and Password using Section 6.1.1, Creating the Database Users for Master and Work Repositories of this guide.

e. Enter the database details in the **Driver List**, **Driver Name** and **URL** fields. You can also click the Search icon adjacent to the **Driver List** and **URL** fields to search for the required Driver List and URL.

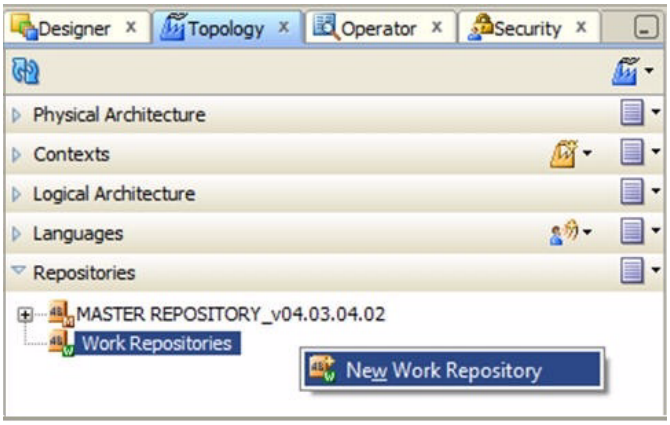
f. Click **OK**. This creates a login for the Master Repository.

5.4 Creating Work Repository

To create the Work Repository, execute the following steps:

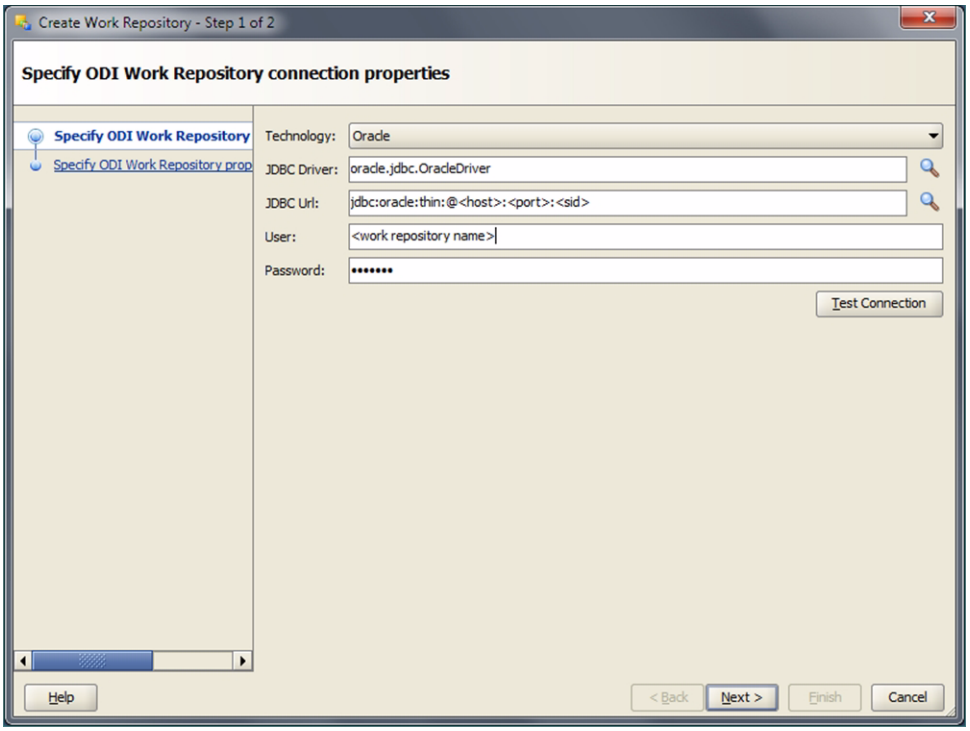
1. Open the ODI, and connect to the repository using the Master Repository credentials that you have just created, as mentioned in the previous section.
2. Select the **Topology** tab.
3. In the **Repositories** section, right-click **Work Repositories** and select **New Work Repository**, as depicted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

Figure 5–12 New Work Repository Option



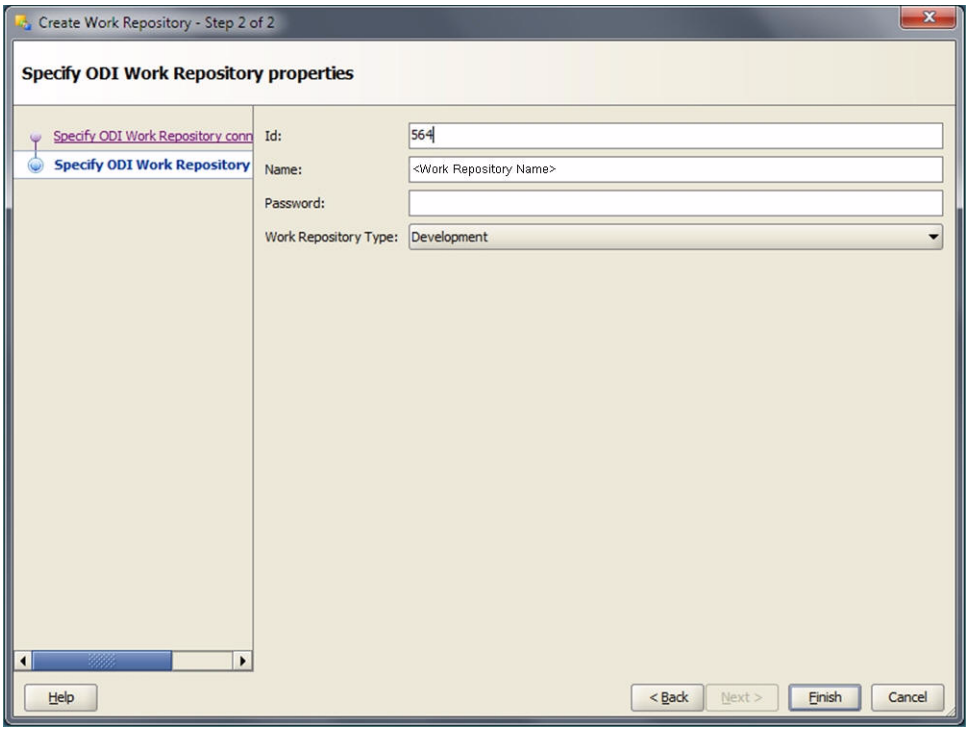
This displays the **Specify ODI Work Repository connection properties** screen, as depicted in the following figure:

Figure 5–13 Specify ODI Work Repository connection properties screen



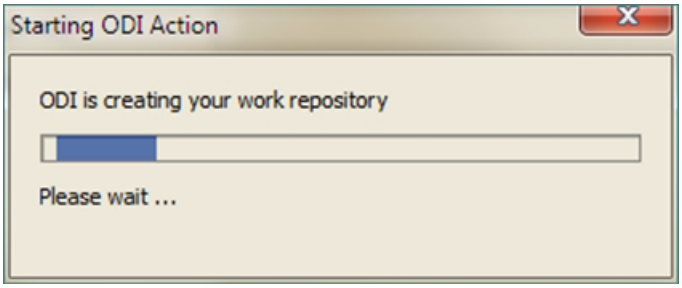
4. Enter the database details in the **JDBC Driver** and **JDBC Url** fields. You can also click the Search icon close to the fields to search for the required JDBC Driver and JDBC URL.
5. Enter the Work Repository User Name in the **User** field. You have already created the ODI Work Repository User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

Figure 5–14 Specify ODI Work Repository properties screen



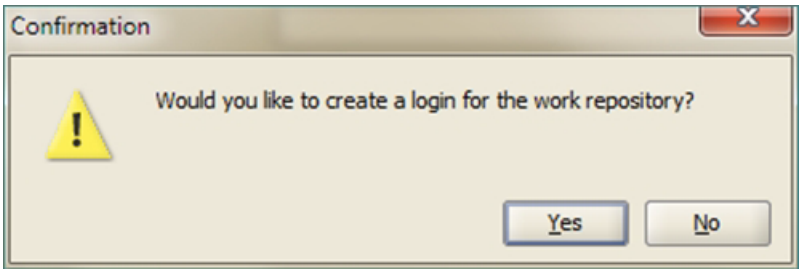
8. Specify the ID for the Work Repository in the **Id** field. For example, 564. You must **not enter 589** in this field as it would result in an error message while importing the **AM.zip** file. This ID has already been used while creating the **AM.zip** file, which you will be importing in the subsequent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

Figure 5–15 Creating Work Repository



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

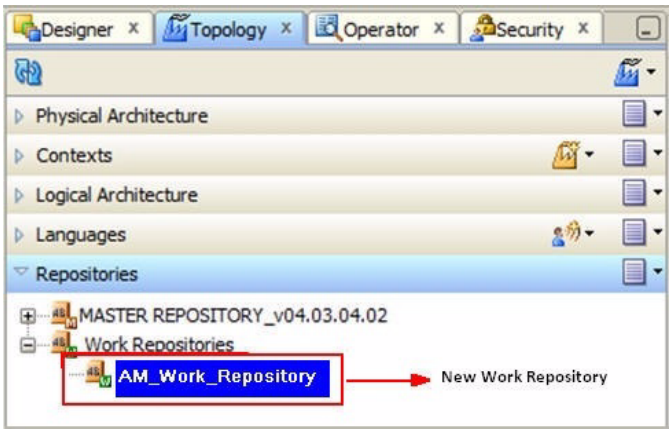
Figure 5–16 Displaying the Option to Create Work Repository Login



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

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

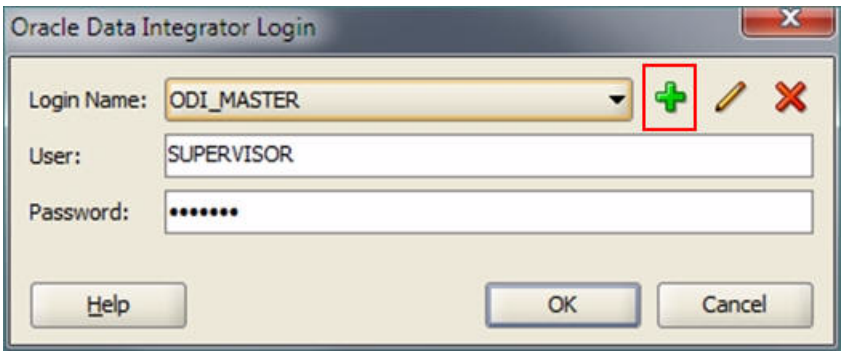
Figure 5–17 Viewing New Work Repository



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

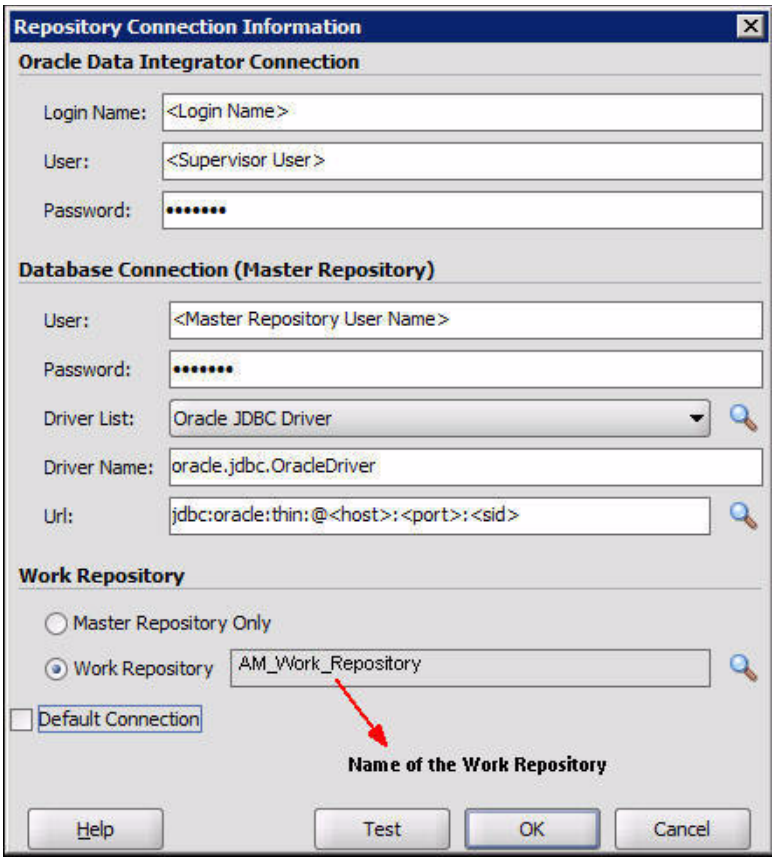
1. On the **Oracle Data Integrator Login** screen, click the **+** icon, as highlighted in the following figure:

Figure 5–18 Creating Login for Work Repository



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

Figure 5–19 Repository Connection Information



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

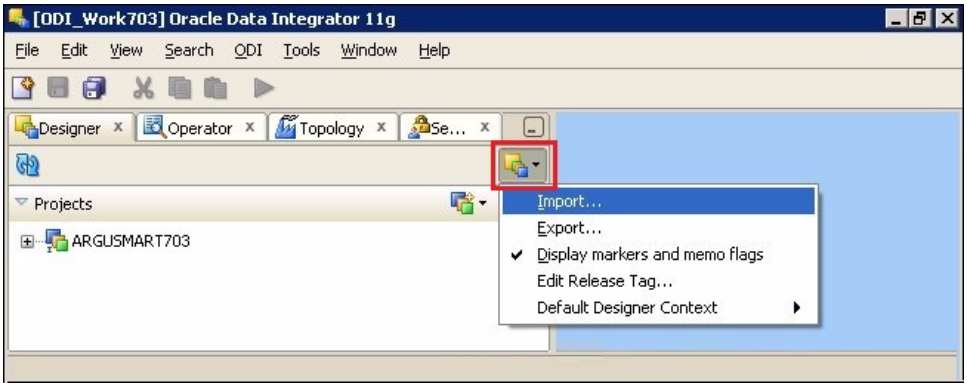
      Select the **Work Repository** radio button and enter the name of the Work Repository in the adjacent text box (for example, AM_Work_Repository), which you have created in the previous section. You can also click the Search icon adjacent to the Work Repository name text box.
   g. Click OK. This creates a login for the Work Repository.

5.5 Importing Argus Mart Schema Object

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

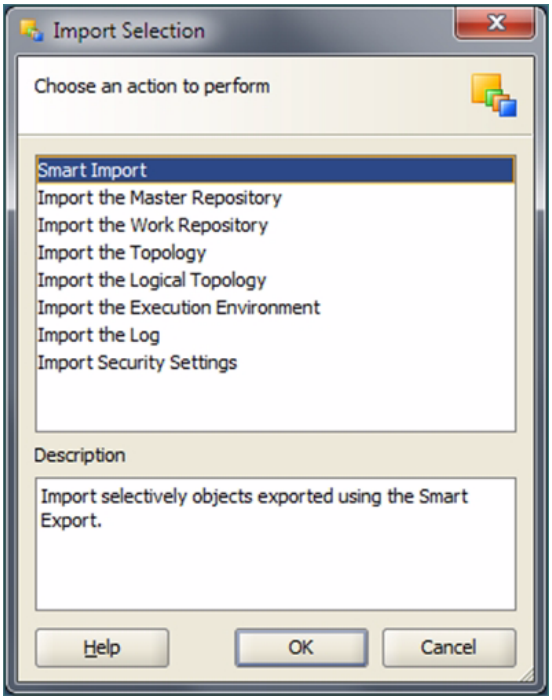
1. Open the ODI, and connect to the repository using the Work Repository credentials that you have just created, as mentioned in the previous section.
2. Click the down arrow under the **Designer** tab. This displays a menu, as depicted in the following figure:

Figure 5–20 Import Link



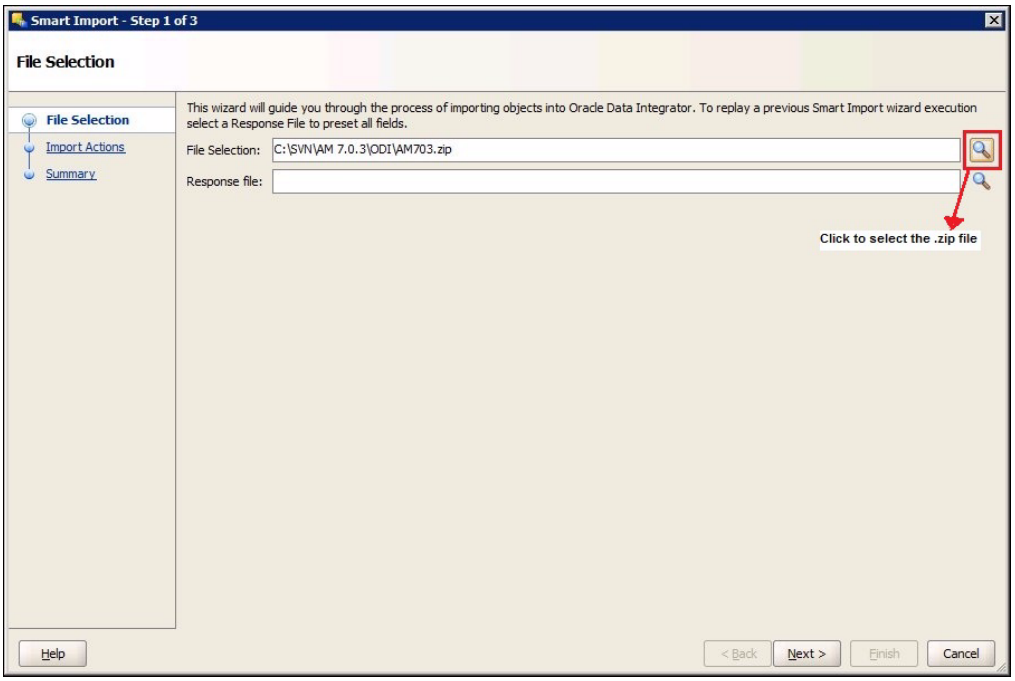
3. Click **Import**. This displays the **Import Selection** dialog box, as shown in the following figure:

Figure 5–21 Import Selection Dialog Box



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

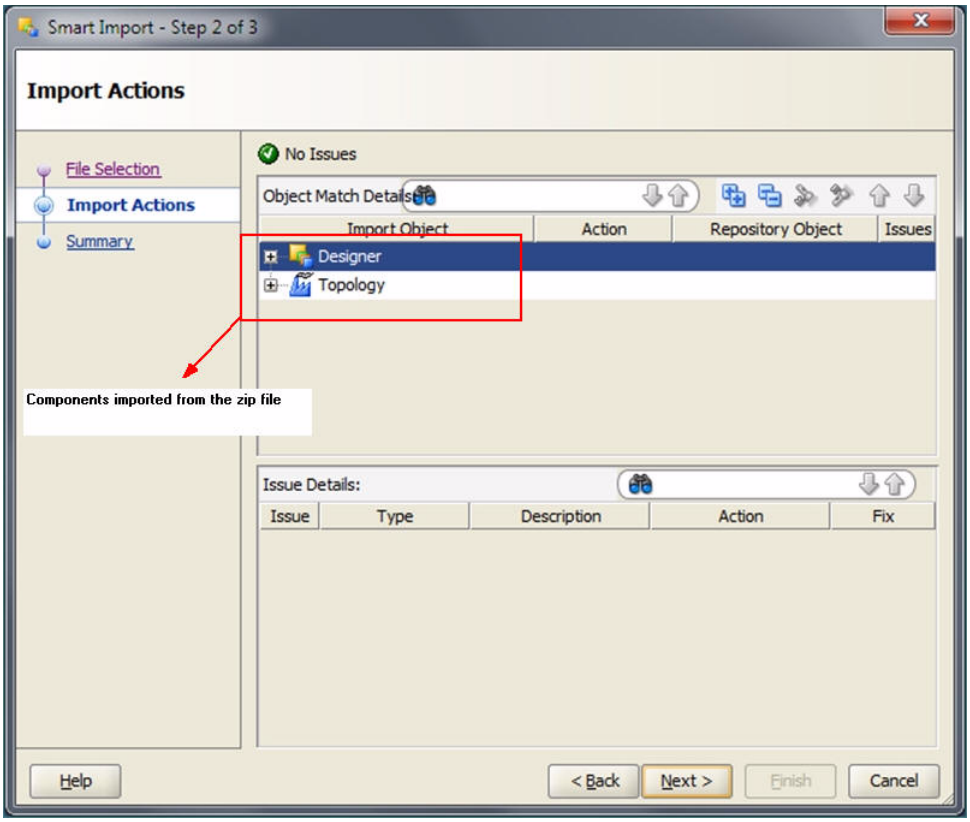
Figure 5–22 Smart Import Window



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

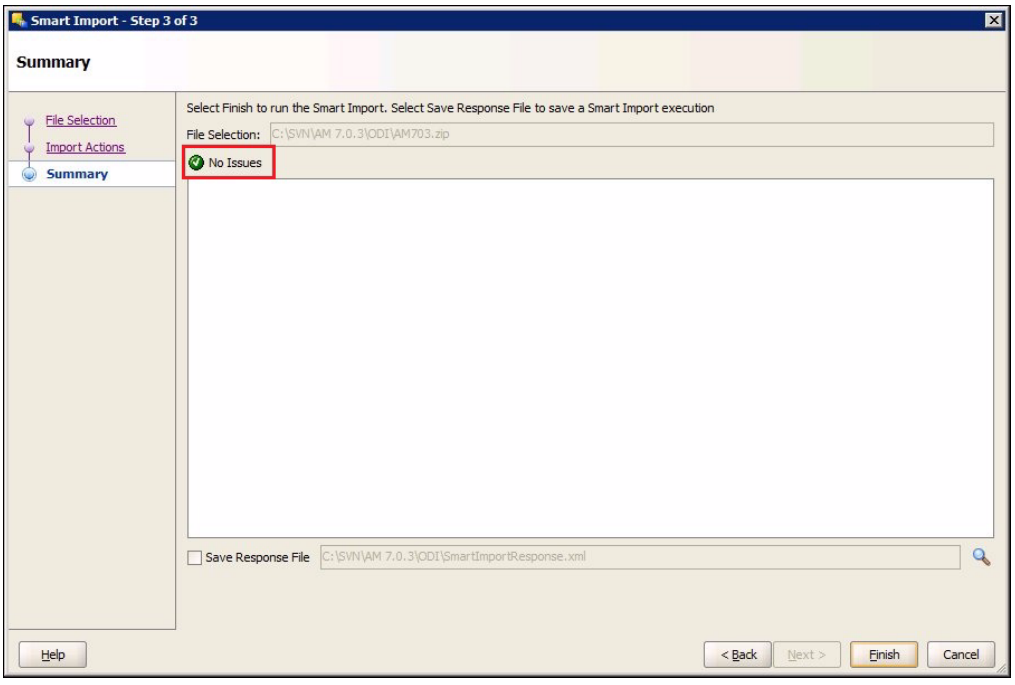
   ...\ArgusMart\ODI\AM.zip
7. Select the **AM.zip** file and click **Open**. This displays the complete path of the zip file in the **File Selection** field.
   Keep the **Response file** field as blank.
8. Click **Next**. This displays the **Please wait** window with a **Matching Import Objects** message.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

Figure 5–23 Displaying Components Imported from the Zip File



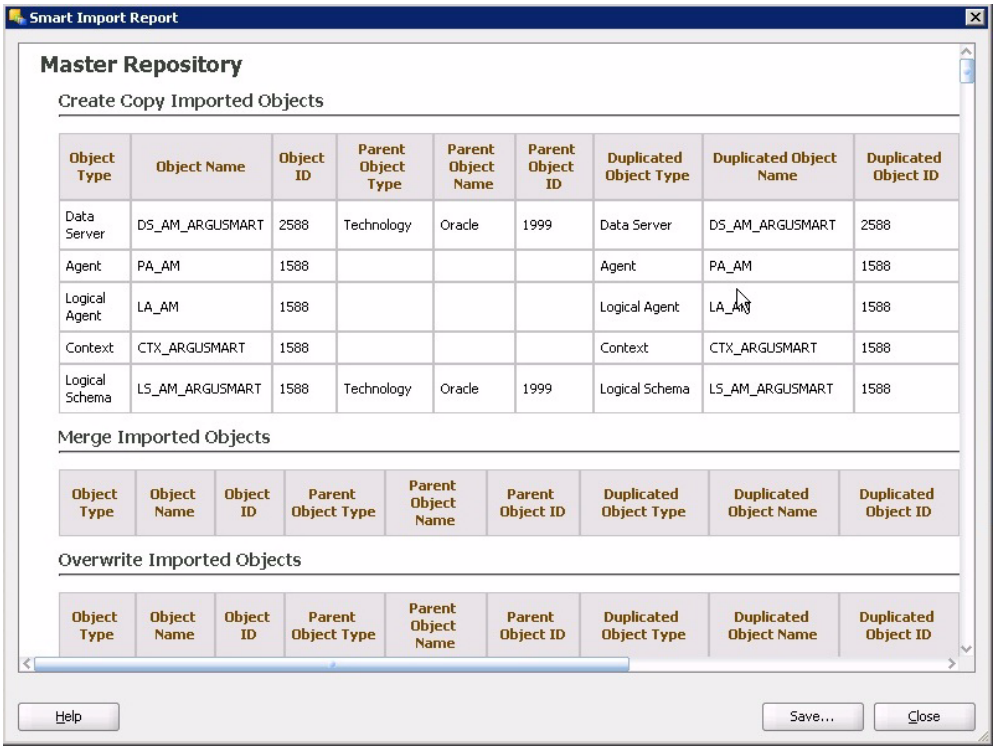
9. Click **Next**. This displays the **Summary** screen with the **No issues** message if there are no errors in the import process, as depicted in the following figure:

Figure 5–24 Import Summary Screen



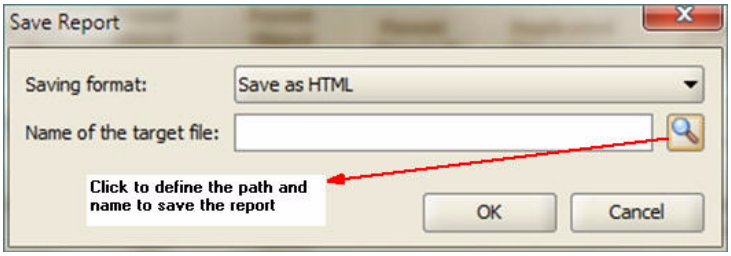
10. Click **Finish**. This displays the **Please wait** window with a **Import in progress** message. Subsequently, this displays the **Smart Import Report** window listing the objects imported using the zip file, as shown in the following figure:

Figure 5–25 Smart Import Report



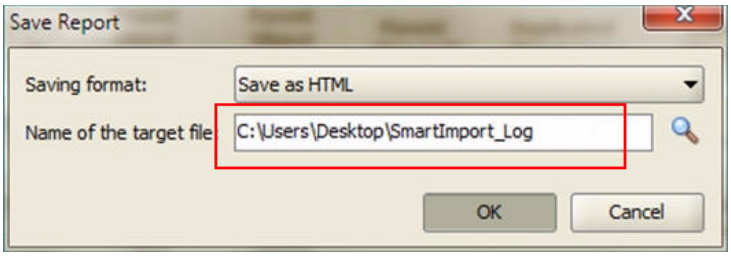
11. Click **Save**. This displays the **Save Report** window, as depicted in the following figure:

Figure 5–26 Save Report Window



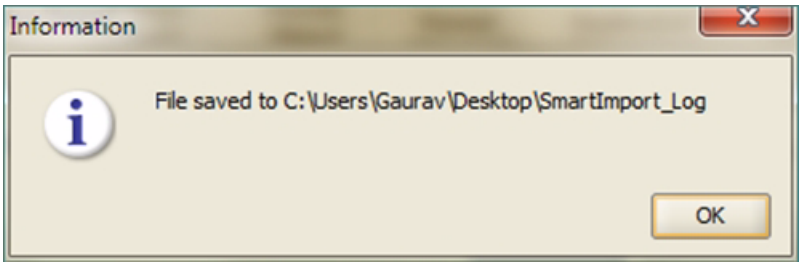
12. Click the Search icon close to the **Name of the target file** field. This displays the **Save** window.
13. Navigate to the path where you want to save the report and enter the name for the report in the **File Name** field.
14. Click **Save**. This displays the name of the report file along with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

Figure 5–27 Path of the Saved Report File



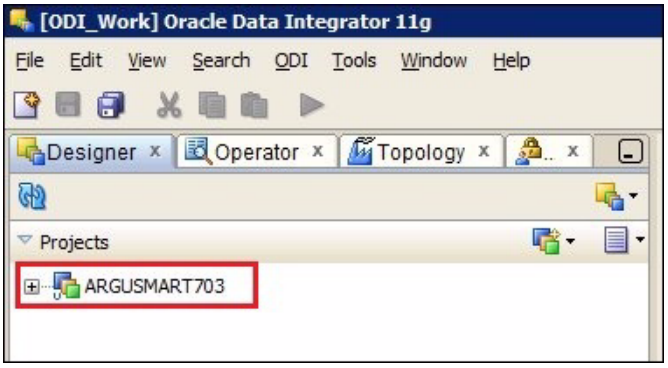
15. Click **OK**. This displays the **Information** dialog box displaying the path where the report file has been saved, as depicted in the following figure:

Figure 5–28 Report File Saved Confirmation



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

Figure 5–29 Verifying the Smart Import

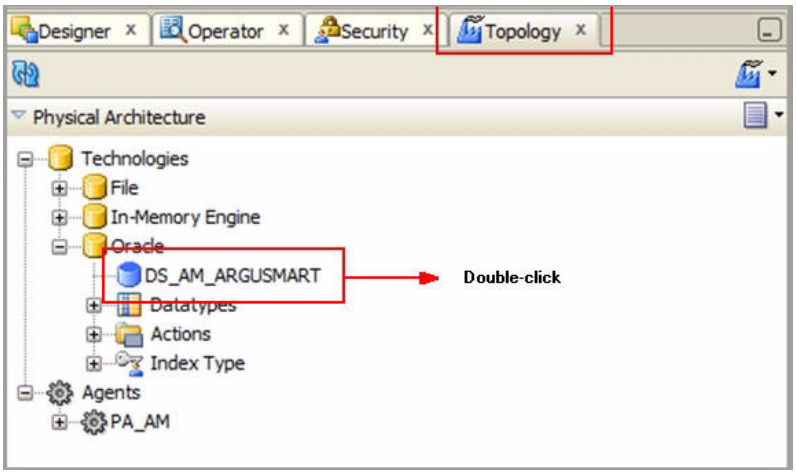


5.6 Creating and Testing Data Server Connection

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

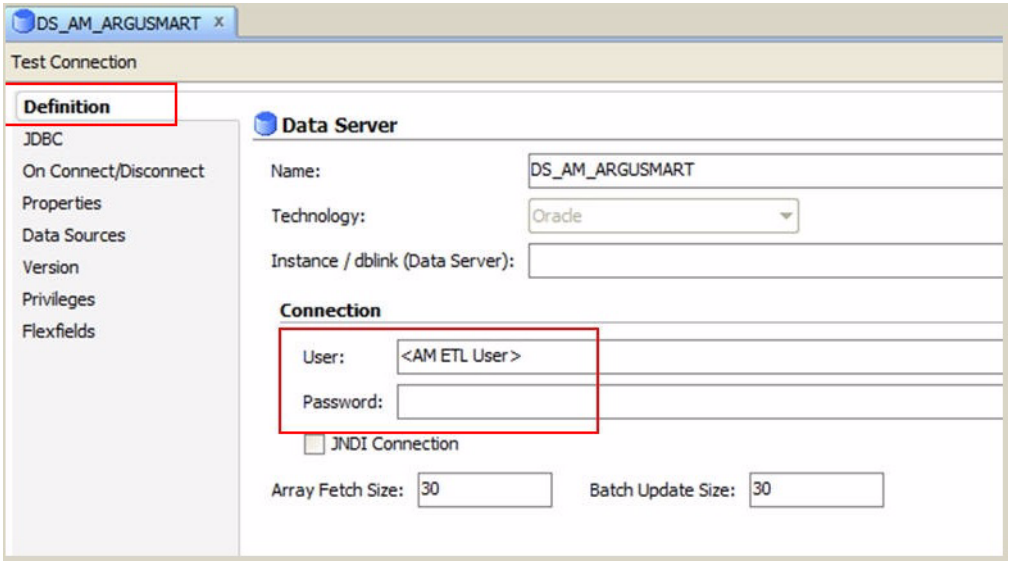
1. Select the **Topology** tab and double-click **DS_AM_ARGUSMART** in the **Oracle** folder of the **Physical Architecture** section, as depicted in the following figure:

Figure 5–30 Creating Data Server Connection



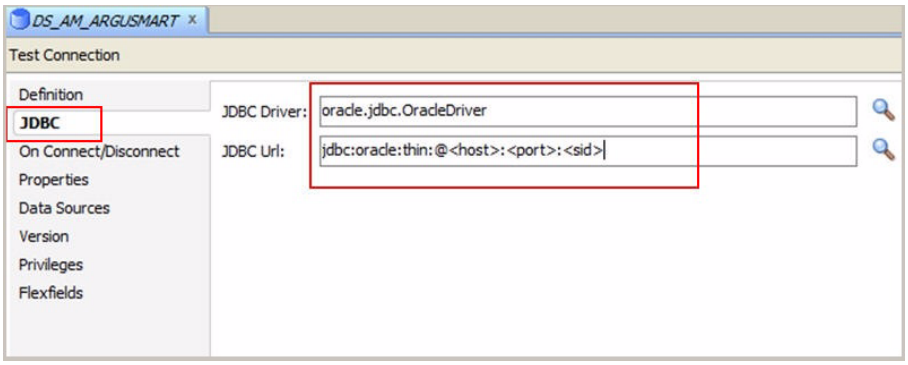
This displays the connection details in the right pane, with **Definition** selected by default, as depicted in the following figure:

Figure 5–31 Entering Connection Details



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

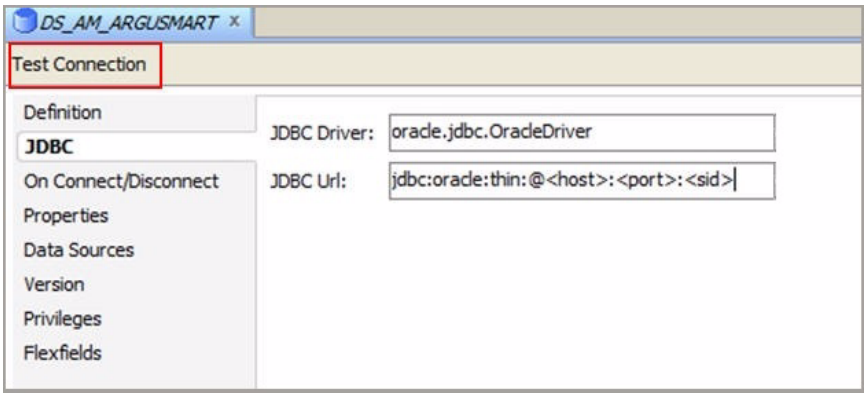
Figure 5–32 Entering Database Details



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

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

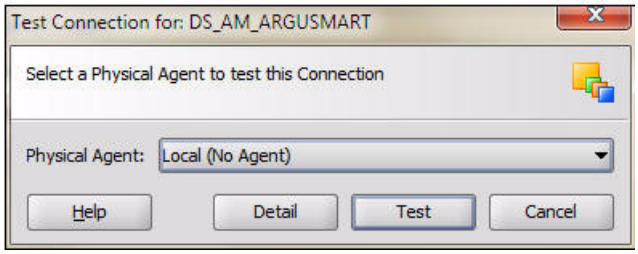
Figure 5–33 Testing the Connection



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

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

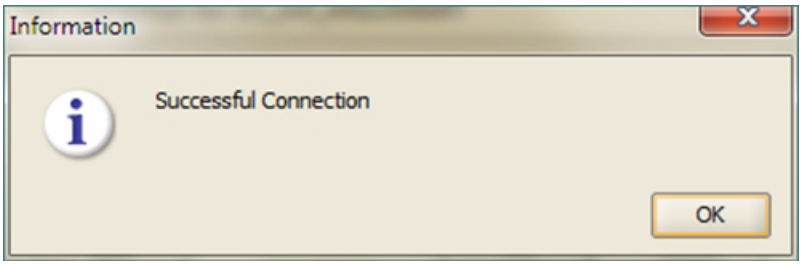
Figure 5–34 Test Connection Dialog Box



7. Select **Local** from the **Physical Agent** drop-down list.

8. Click **OK**. This displays an **Information** dialog box with the **Successful Connection** message, as depicted in the following figure:

Figure 5–35 Successful Connection Confirmation



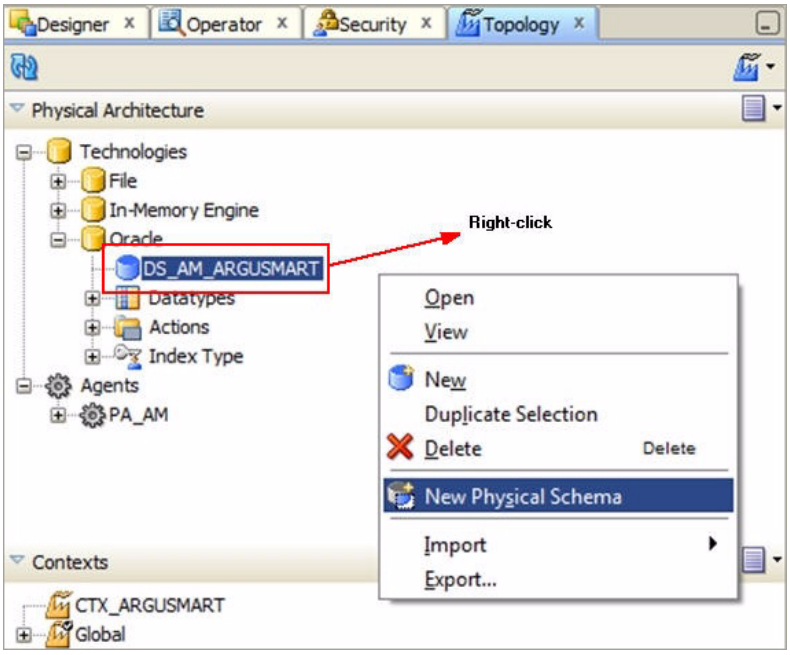
9. Click **OK**. This completes the steps to create and test the Data Server connection.

5.7 Creating New Physical Schema

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

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

Figure 5–36 Selecting New Physical Schema



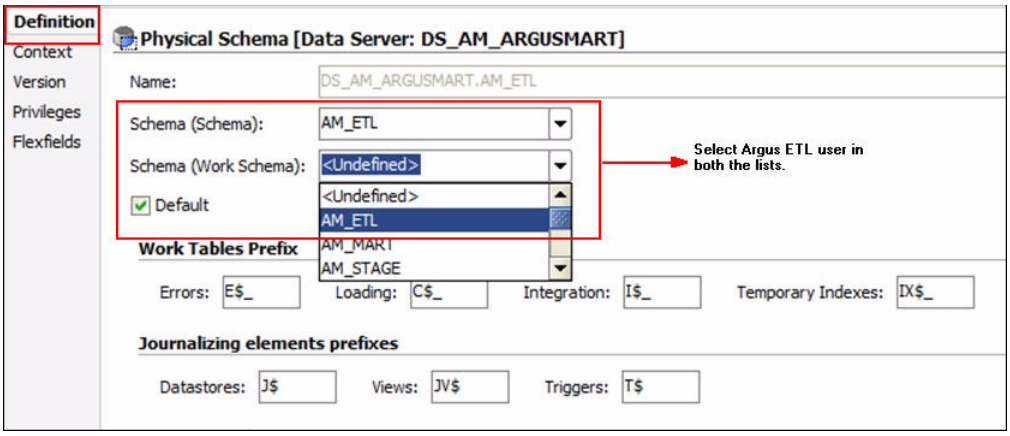
2. Select **New Physical Schema**.

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

3. Select the Argus ETL User (**AM_ETL_USER**) from the **Schema** drop-down list. This user was created in Creating the Database Schema section of the guide.

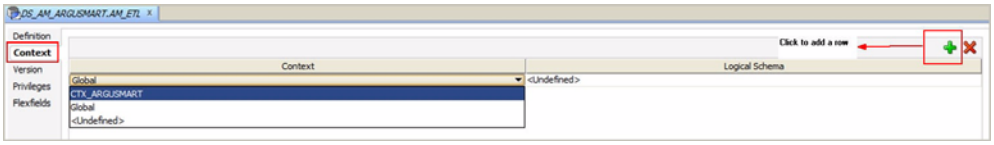
4. Select the Argus ETL User (**AM_ETL_USER**) again from the **Schema (Work Schema)** drop-down list, as depicted in the following figure:

Figure 5–37 Selecting Argus ETL User in Definition Section



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

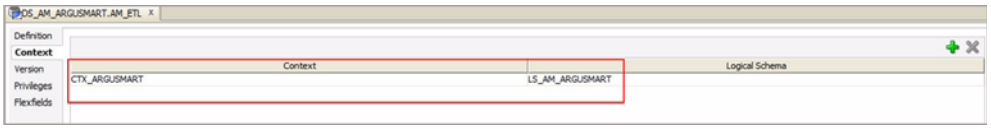
Figure 5–38 Selecting Context for the Data Server



6. Select **CTX_ARGUSMART** from the **Context** drop-down list.

7. Select **LS_AM_ARGUSMART** from the **Logical Schema** drop-down list, as depicted in the following figure:

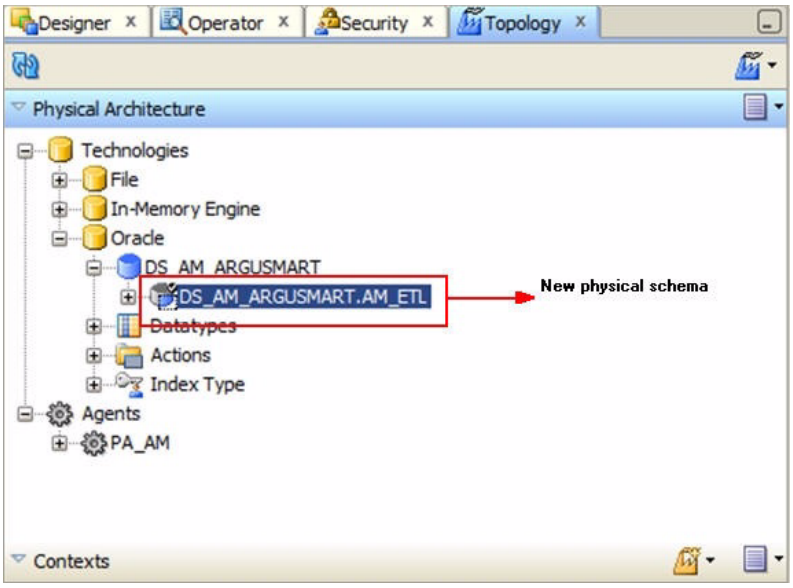
Figure 5–39 Selecting Context and Logical Schema



8. Click **Save** on the menu bar.

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

Figure 5–40 Viewing the New Physical Schema

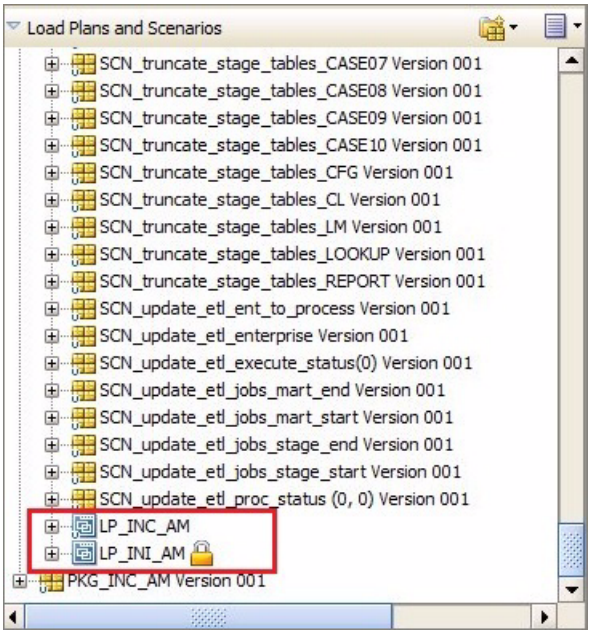


5.8 Validating Load Plan

To validate the Load Plan, execute the following steps:

1. Double-click the **LP_INI_AM** Load Plan in the **Load Plans and Scenarios** > **SCN_LP_ARGUSMART703** section of the **Operator** tab, as shown in the following figure:

Figure 5–41 Double-clicking the LP_INI_AM Load Plan

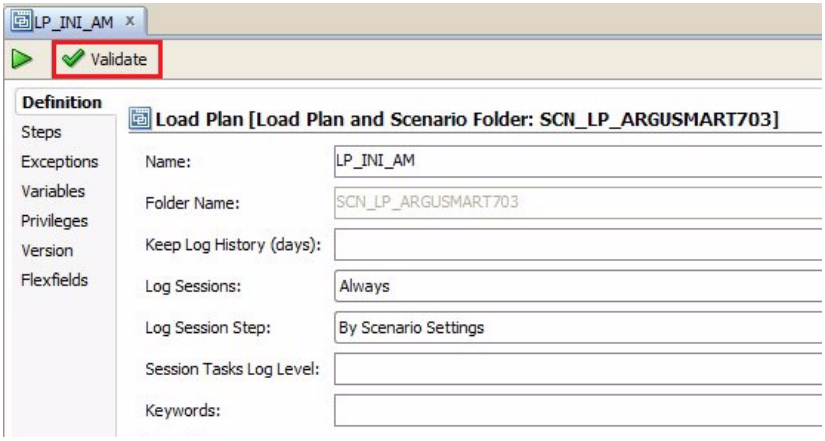


If the **Object Locking** screen is displayed, you can click **No** and proceed with the Validation process, as depicted in the following figure:

Figure 5–42 Selecting No in the Object Locking Screen

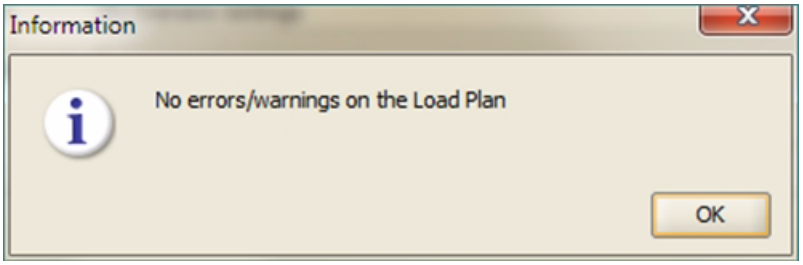
This displays the Load Plan details in the right pane, as depicted in the following figure:

Figure 5–43 Load Plan Details



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

Figure 5–44 No Errors Confirmation for the Load Plan



5.9 Managing the ODI Agent

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

This section comprises the following sub-sections:

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

5.9.1 Managing the Standalone ODI Agent

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

This section comprises the following sub-sections:

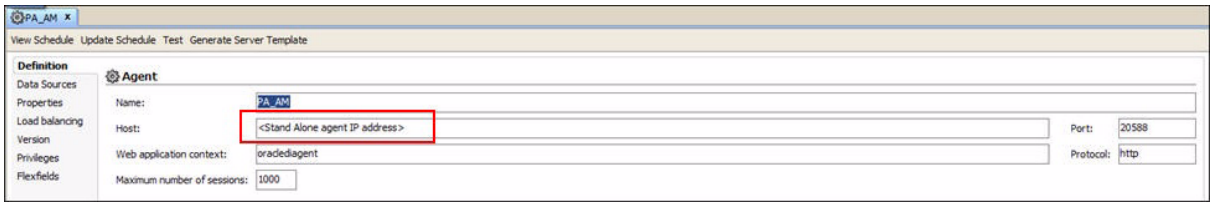
- Setting up the Standalone ODI Agent
- Encoding User's Password
- Starting the Standalone ODI Agent

5.9.1.1 Setting up the Standalone ODI Agent

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

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

Figure 5–45 Setting the Standalone Agent IP Address



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

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

   Example: <ODI_AGENT_HOME>\oracledi\agent\bin

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

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

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

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

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

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

5.9.1.2 Encoding User's Password

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

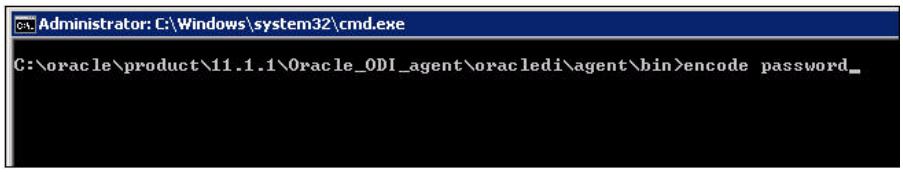
1. Open the Command window and change the directory to the ODI_AGENT_HOME\oracledi\agent\bin directory.

   Where **ODI_AGENT_HOME** refers to the location, where ODI is installed.

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

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

Figure 5–46 Encoding the ODI Master Repository Password



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

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

5.9.1.3 Starting the Standalone ODI Agent

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

To start the ODI Agent:

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

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

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

5.9.2 Creating the Java EE Agent

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

http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/odi/odi_11g/setup_jee_agent/setup_jee_agent.htm

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

5.10 Executing Steps of a Load Plan in Parallel

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

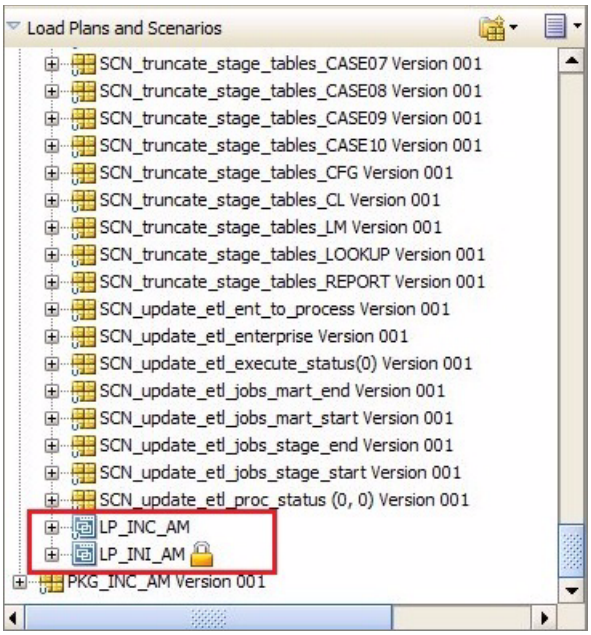
This section explains the procedure for parallel execution of the steps of a Load Plan. In addition, this section also suggests the list of tables of a Load Plan that you can select for parallel execution.

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

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

1. Double-click the **LP_INI_AM** Load Plan in the **Load Plans and Scenarios** section of the **Designer** tab, as shown in the following figure:

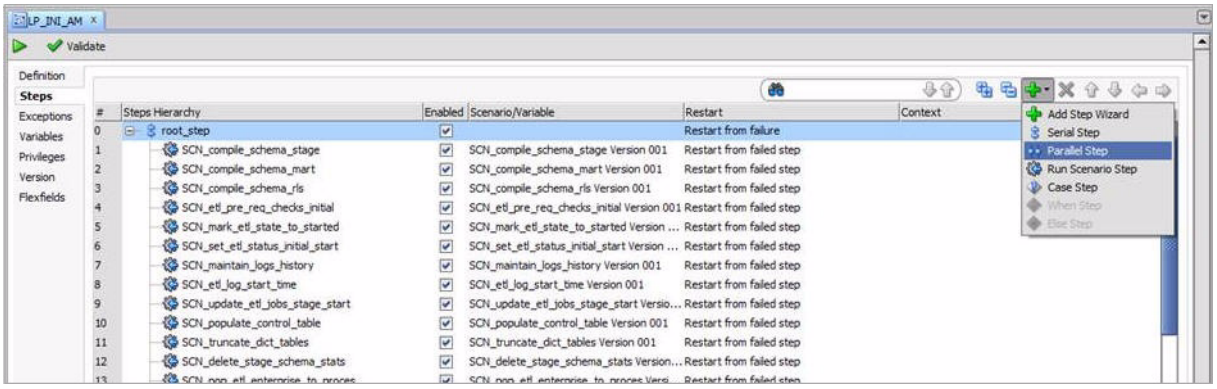
Figure 5–47 Double-clicking the LP_INI_AM Load Plan



This displays the Load Plan details in the right pane.

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

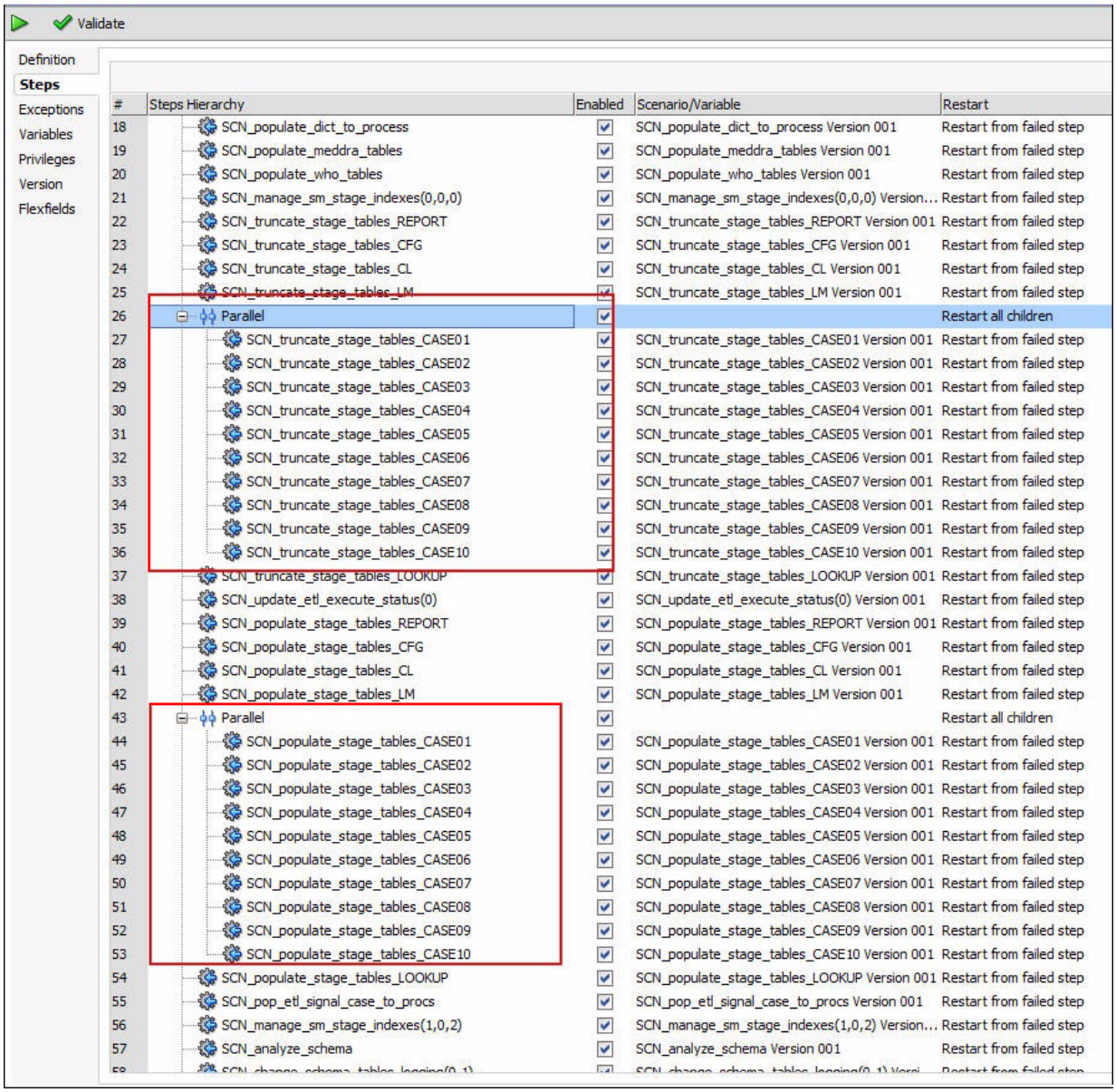
Figure 5–48 Adding Parallel Step to the List of Steps



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

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

Figure 5–49 Executing Load Plan Steps in Parallel



The **AM.zip** file, which you have imported using Importing Argus Mart Schema Object section of this chapter has the provision to execute the Staging Case Table Truncation and Population in parallel, as highlighted in Figure 5–49. The process of Truncation comprises of various tables, which have been divided into different categories. These categories have been named as **SCN_truncate_stage_tables_CASE01**, **SCN_truncate_stage_tables_CASE02**, and so on. Each category contains a list of tables, which are sorted based on size. The larger tables are executed first as compared to the smaller ones.

Similarly, the process of Population also consists of various tables, which are divided into different categories. These categories have been named as **SCN_populate_stage_tables_CASE01**, **SCN_populate_stage_tables_CASE02**, and so on.

6

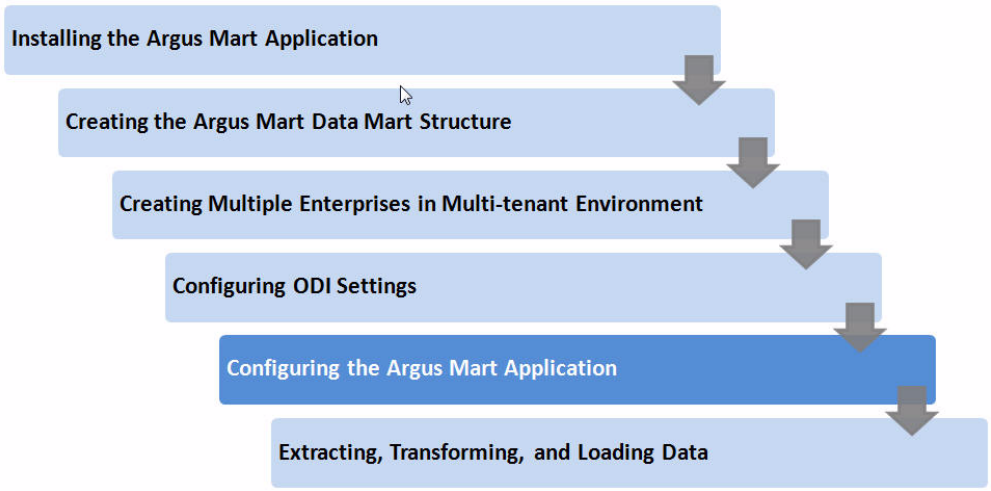
Configuring the Argus Mart Application

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:

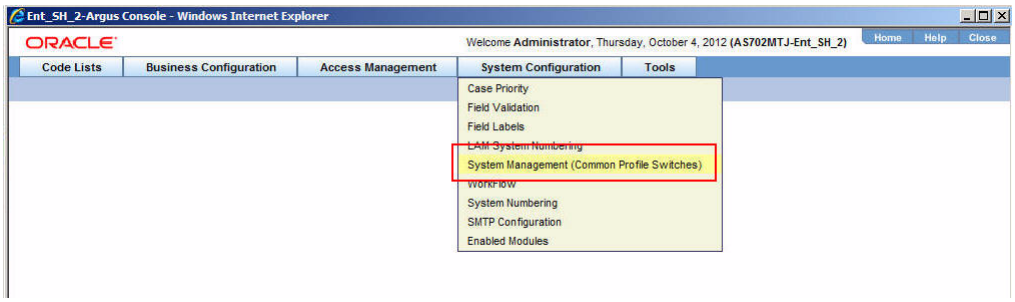
Figure 6–1 Installation Progress: Configuring the Argus Mart Application



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

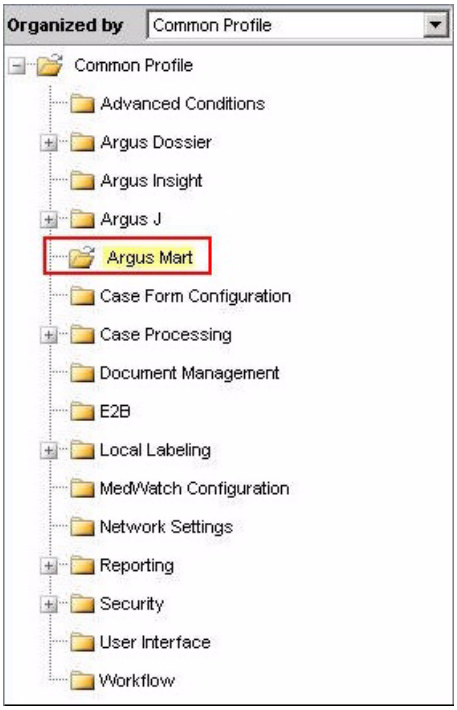
1. Log on to the Argus Safety Console and navigate to **System Configuration** > **System Management (Common Profile Switches)**, as shown in the following figure:

Figure 6–2 System Management Link on Argus Safety Console



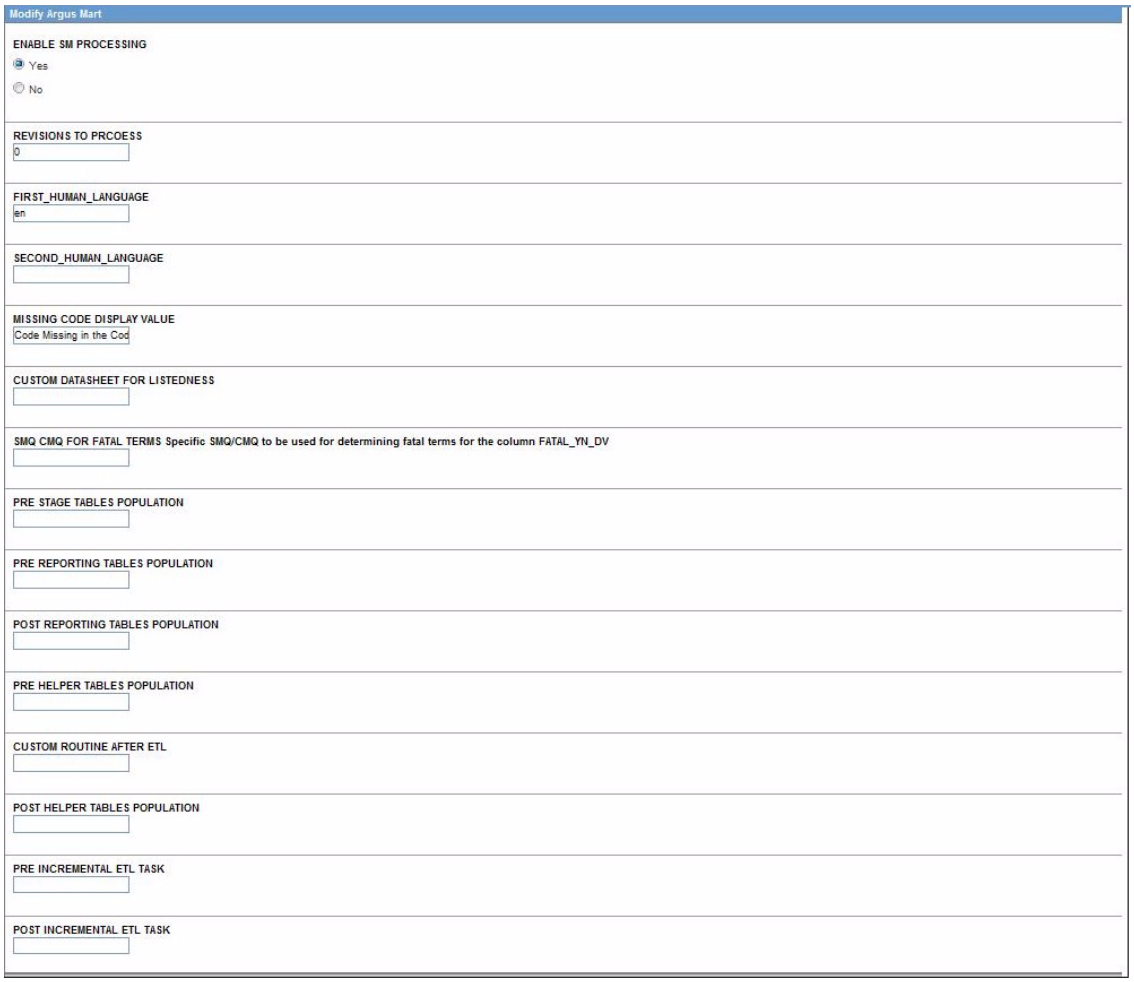
This displays the Common Profile Screen with the list of configuration options in the left pane, as depicted in the following figure:

Figure 6–3 Argus Mart Link in Argus Safety Console



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

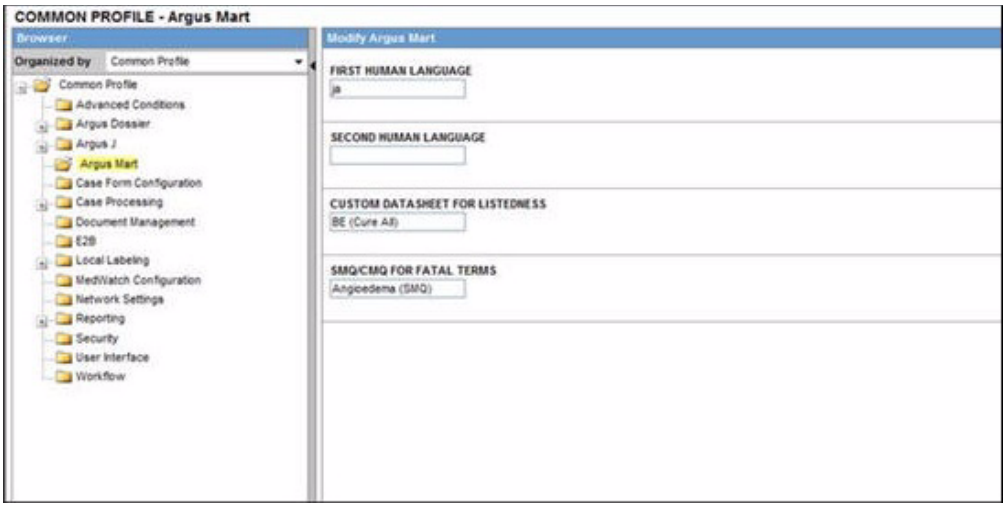
Figure 6–4 List of Common Profile Switches for Argus Mart



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

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

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



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

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

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

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.
REVISIONS TO PROCESS	Global switch	This switch refers to the Configuration Flag to process maximum number of revisions in an incremental ETL run. Setting the value as 0 for this switch represents that the Configuration Flag is not set.

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

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

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

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

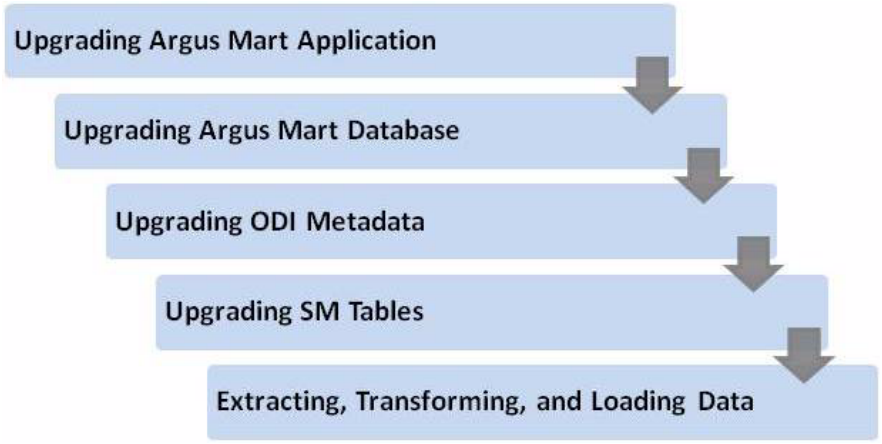
7

Upgrading the Argus Mart

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

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

Figure 7–1 Steps to Upgrade Argus Mart 1.0



This chapter comprises the following sub-sections:

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

7.1 Before Upgrading Argus Mart

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

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

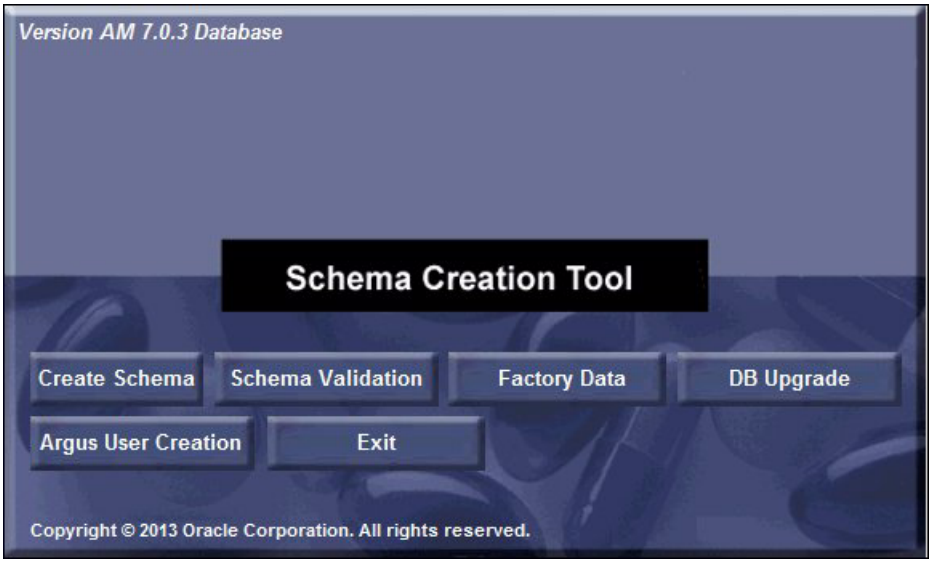
7.2 Upgrading Argus Mart Application

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

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

   This displays the Summary screen (Figure 2–8).
3. Click **Install** to start the upgrade process.
4. After upgrade process is complete, the release version 1.0 is updated to 7.0.3 as shown below:

Figure 7–2 Argus Mart Application Upgrade Tool



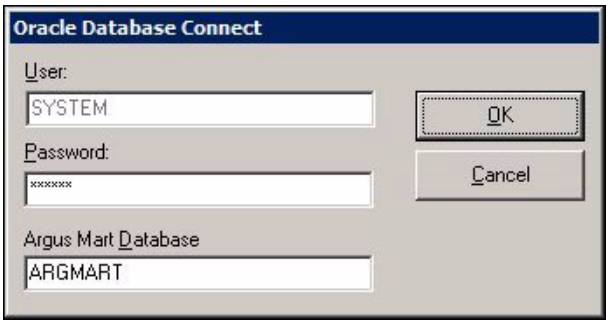
7.3 Upgrading Argus Mart Database

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

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

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

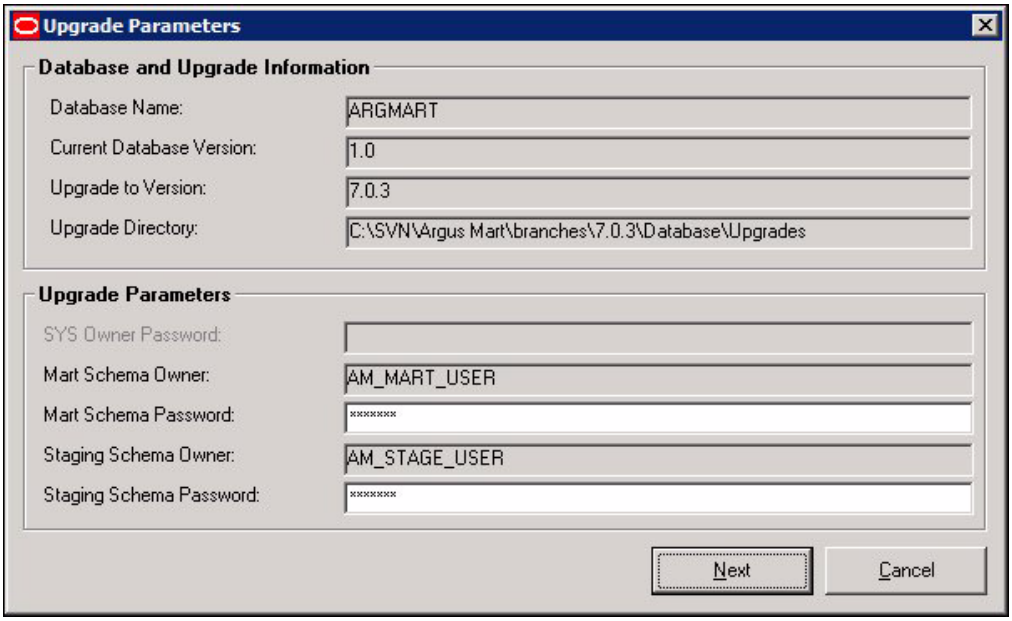
Figure 7–3 Oracle Database Connect Screen



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

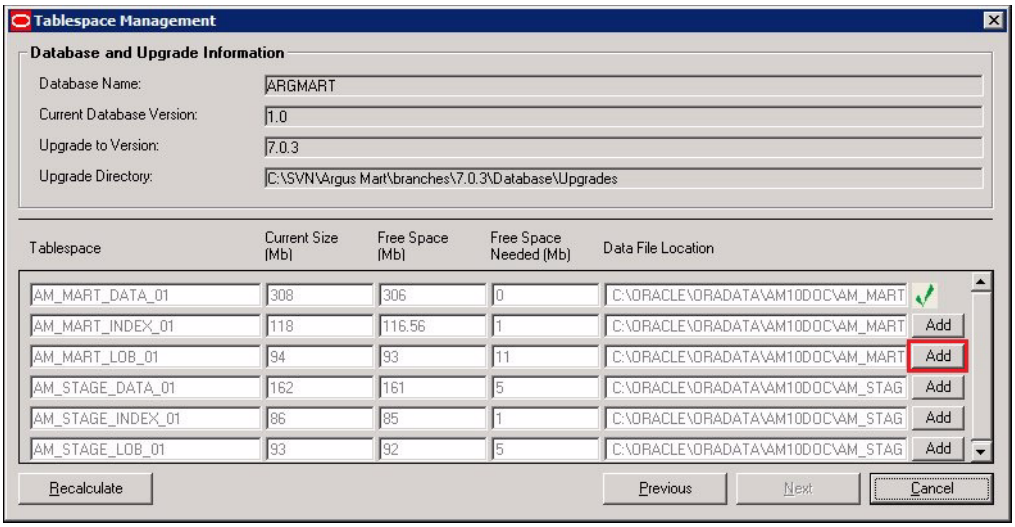
      The Upgrade Parameters dialog box opens.

Figure 7–4 Upgrade Parameters Screen



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

Figure 7–5 Tablespace Management Screen



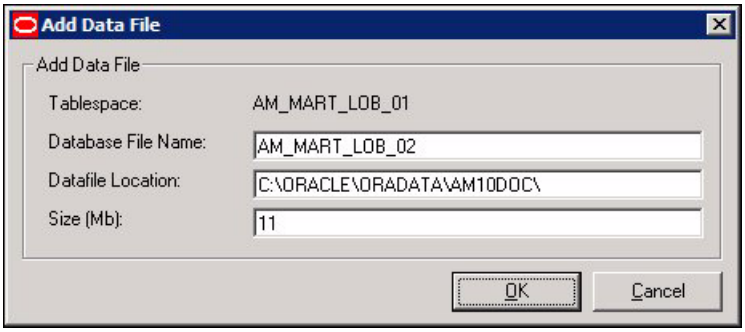
6. Verify that all tablespaces have enough free space.

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

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

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

Figure 7–6 Add Data File Screen

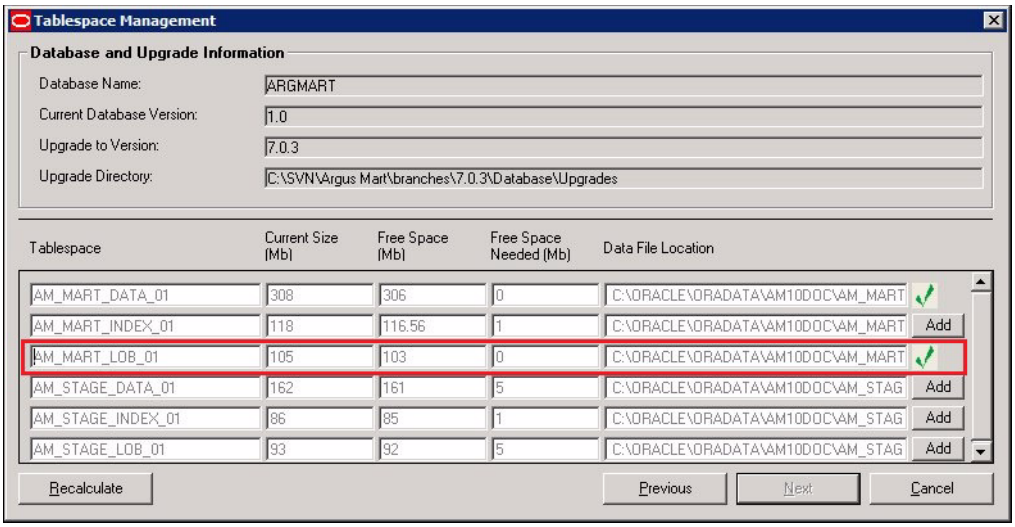


   Enter a name for the new datafile (such as, **AM_MART_LOB_02**), containing the required additional space, and click **OK**.

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

   The tablespace information is updated as shown below:

Figure 7–7 Updated Tablespace Management Screen

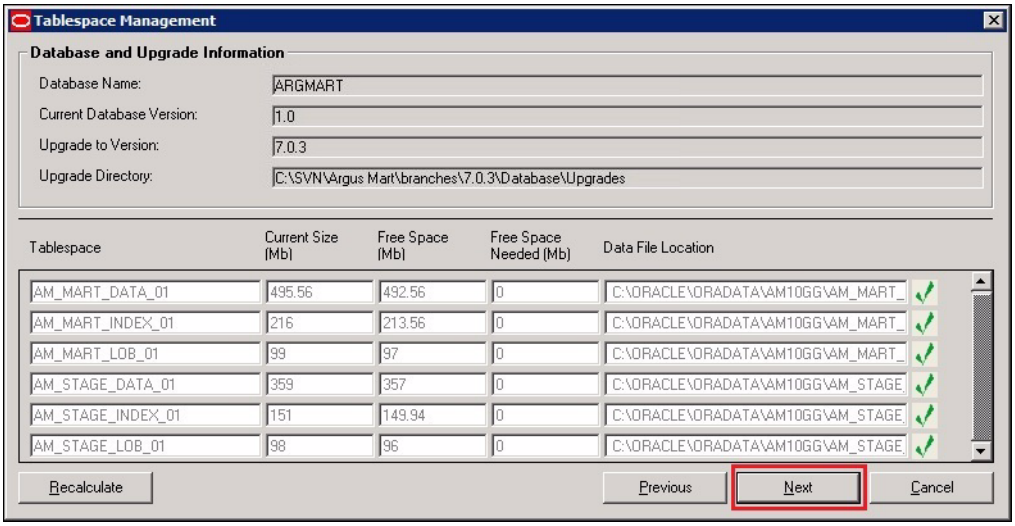


After resizing, click the **Recalculate** button to re-evaluate the tablespace size and refresh the tablespace grid, as per the updated tablespace size.

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

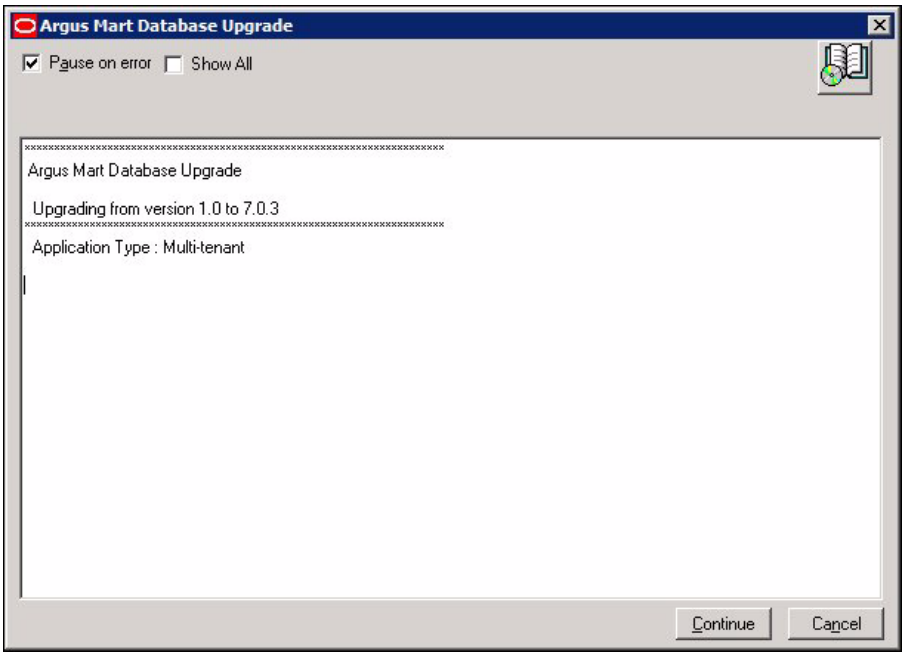
When all the tablespaces have enough free space, the **Next** button is enabled.

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



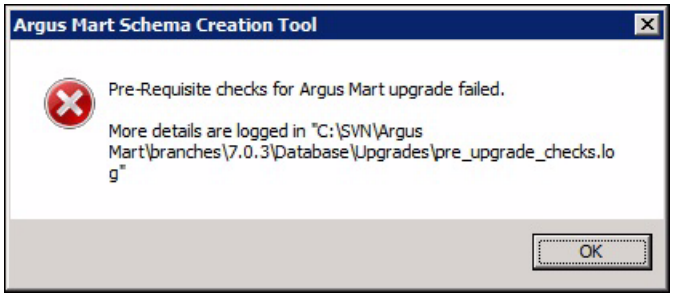
7. Click **Next.**

Figure 7–9 Continue Database Upgrade Screen



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

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



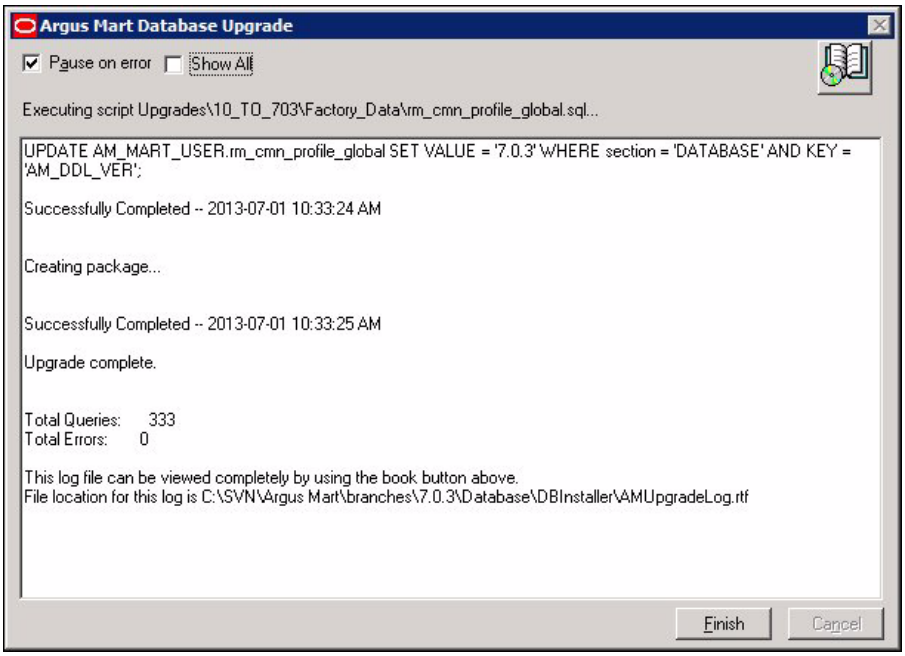
To execute the upgrade process successfully:

1. Stop the current upgrade process.
2. Drop or rename the existing columns as listed in the error message. Also, update all the dependent objects where columns are to be renamed, like views.
3. Re-execute **DB Upgrade**.

---

9. After successful completion of upgrade process, the system displays status information as shown below:

Figure 7–10 Database Upgrade Completion Screen



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

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

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

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

7.4 Validating Upgraded Schema

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

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

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

7.5 Upgrading ODI Metadata

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

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

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

7.6 Post Upgrade Processes

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

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

7.6.1 Upgrading SM Tables

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

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

Table 7–1 Scripts to upgrade SM Tables

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

At the end of the upgrade process, the new high watermark value populated for new revisions is updated in the tables SOURCE_INFO and ETL_ENTERPRISE.

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

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

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

This section comprises the following sub-sections:

- Pre-requisites
- Executing the Scripts

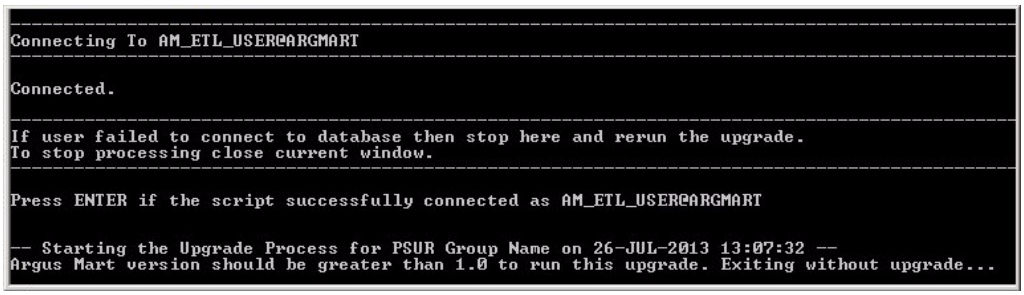
7.6.1.1 Pre-requisites

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

- The scripts to upgrade SM tables are supported on the Argus Mart version where the higher version of Argus Mart (in this case, Argus Mart 7.0.3) has been

installed. The following error message is displayed if Argus Mart is not the upgraded version:

Figure 7–11 Upgrade Script Error Screen

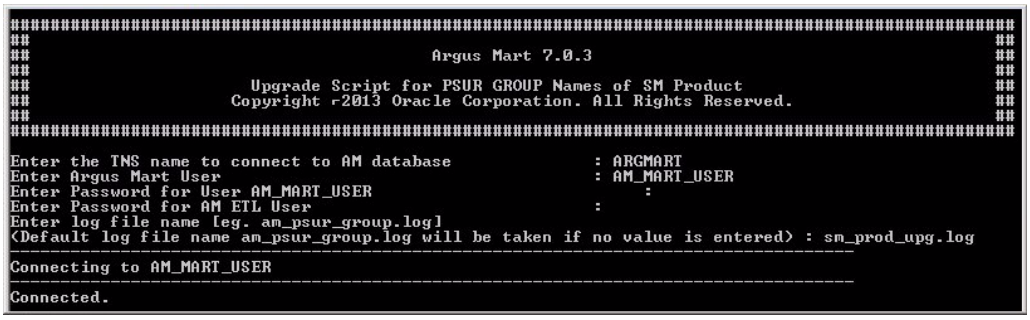


7.6.1.2 Executing the Scripts

To execute a script:

1. Go to <Argus Mart Install>\Database\Upgrades\10_TO_703\Scripts.
2. Double-click the applicable script, as listed below:
   - For table SM_CASE - AM_UPGRADE_EVENT_LIST.BAT
   - For table SM_PRODUCT - AM_UPGRADE_PSUR_GROUP.BAT
3. Enter the values for the following parameters:
   - Argus Mart DB Instance TNS Name
   - Argus Mart User Name
   - Argus Mart User Password
   - ETL User Password

Figure 7–12 List of Parameters



4. A background process is executed to find any open-ended records (a record with column VALIDEND equal to 31-Dec-9999).
   - For table SM_CASE - Find records where column EVENT_LIST_DV is equal to NULL.
   - For table SM_PRODUCT - Find records where column PREF_PSUR_ PRODUCT_NAME is equal to NULL.
5. If such records exist, create a new revision of the identified records by copying the data of all columns, except the following columns:

Table 7–2 Columns of SM_CASE Table

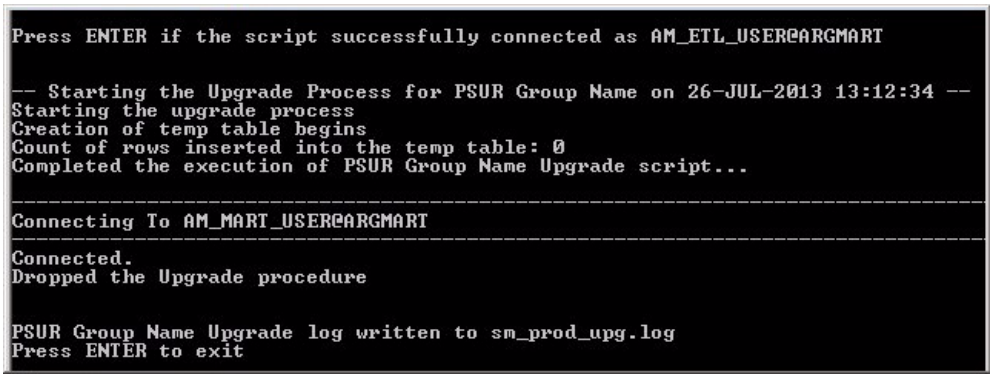
Column Name	Description
VALIDSTART	Populates Last ETL High Watermark of the corresponding enterprise + 1 second.
VALIDEND	Populates the date as 31-Dec-9999.
EVENT_LIST_DV	Populates aggregation of the event terms at a case level.

Table 7–3 Columns of SM_PRODUCT Table

Column Name	Description
VALIDSTART	Populates Last ETL High Watermark of the corresponding enterprise + 1 second.
VALIDEND	Populates the date as 31-Dec-9999.
PROD_PSUR_GROUP_NAME	Displays the PSUR Group Name of the Product.
EXPOS_PSUR_GROUP_NAME	Displays the PSUR Group Name of the Exposure Product.
PROD_EXPOS_PSUR_GROUP_NAME	Displays the PSUR Group Name for one of the following: ■ The Exposure Product if its value is NOT NULL ■ The Product, if the value of Exposure Product is NULL
PREF_PSUR_PRODUCT_NAME	Displays one of the following values: ■ PROD_EXPOS_PSUR_GROUP_NAME if its value is NOT NULL ■ PREFERRED_PRODUCT_NAME_DV, if the value of PROD_EXPOS_PSUR_GROUP_NAME is NULL

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

Figure 7–13 Event List Upgrade Script: Completion Screen



8

Extracting, Transforming, and Loading Data

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

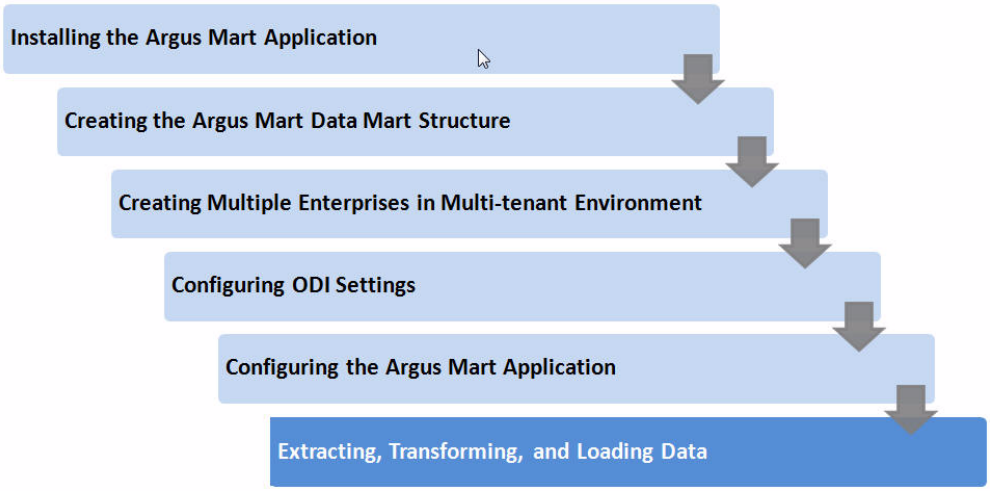
The following table illustrates some of the terms along with the name of the Load Plan that has been used to refer the different types of ETL in the later sections of this chapter:

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

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

This section comprises the following sub-sections:

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

8.1.1 Running the ETL

To run the Initial ETL, execute the following steps:

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

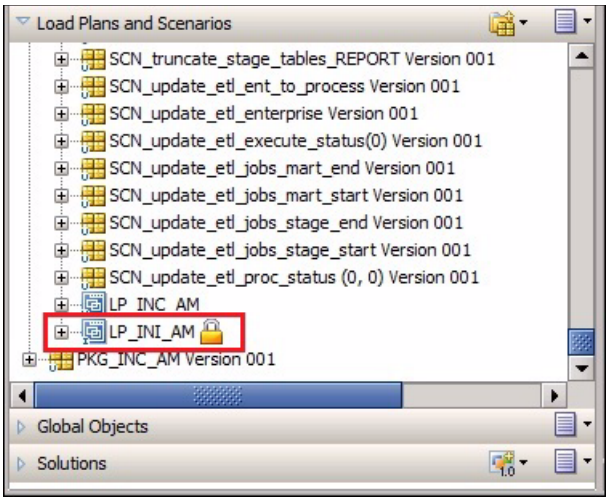
Figure 8–2 Oracle Data Integrator Login Window

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

Figure 8–3 Load Plans and Scenarios

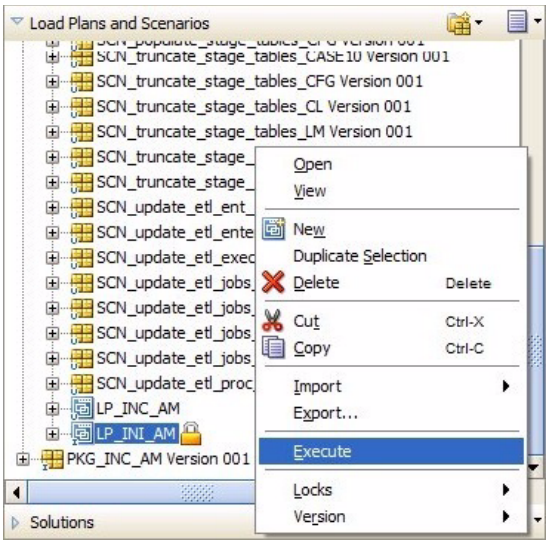
5. Expand **SCN_LP_ARGUSMART703** and scroll-down to **LP_INI_AM**. This option in this section represents the load plan for the initial ETL process for Argus Mart.

Figure 8–4 Load Plan for Initial ETL



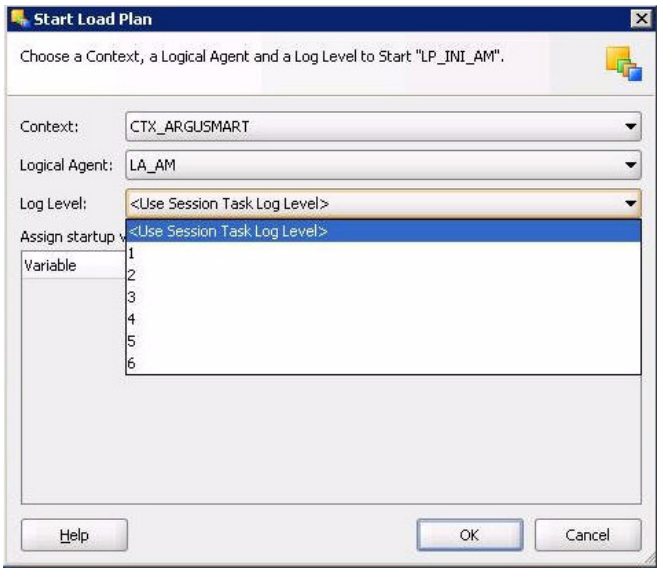
6. Right-click the **LP_INI_AM** option. This displays a menu, as shown in the following figure:

Figure 8–5 Executing the Initial ETL



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

Figure 8–6 Start Load Plan Window



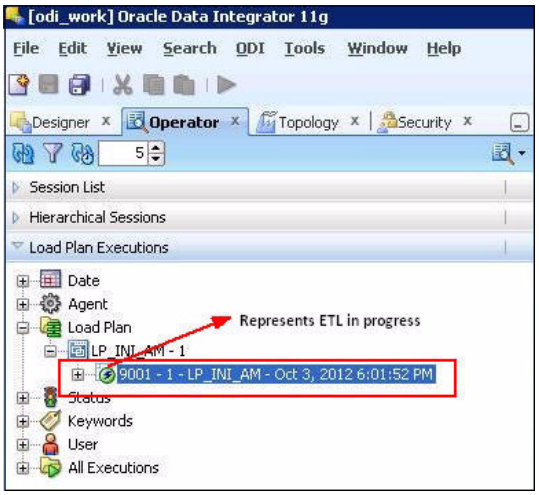
8. In the **Start Load Plan** window:
   a. Select **CTX_ARGUSMART** from the **Context** drop-down list.
   b. Select **LA_AM** from the **Logical Agent** drop-down list.
   c. Select the desired log level from the **Log Level** drop-down list.
   d. Click **OK**. This displays the **Information** dialog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

Figure 8–7 Load Plan Started Confirmation Message

9. Click **OK**.

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

Figure 8–8 Status of the Load Plan

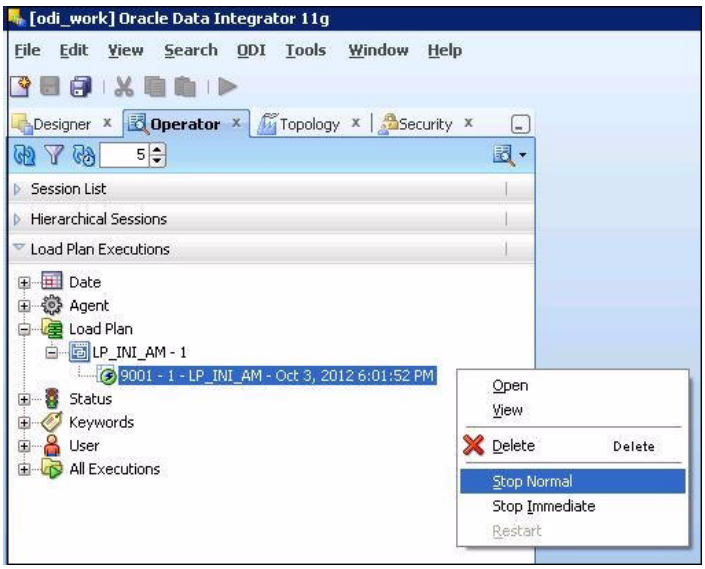


8.1.2 Stopping the ETL

To stop the initial ETL, execute the following steps:

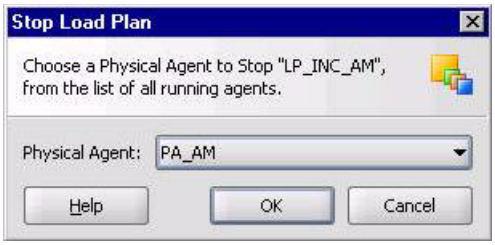
1. Right-click the Load Plan, which you want to stop, in the **Load Plan** folder of the **Load Plan Executions** section. This displays a menu, as shown in the following figure:

Figure 8–9 Stopping the Initial ETL



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

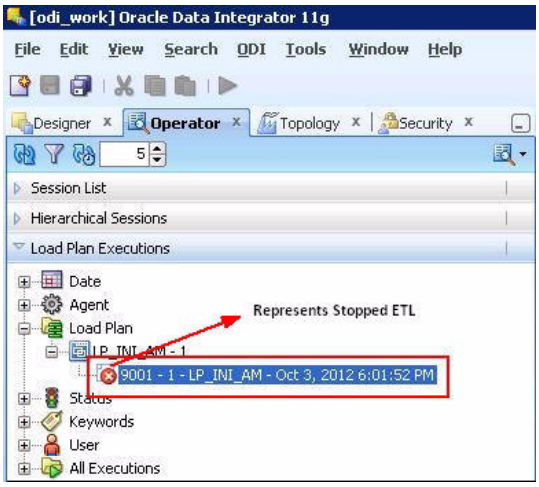
Figure 8–10 Selecting the Physical Agent



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

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

Figure 8–11 Stopped Initial ETL Session



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

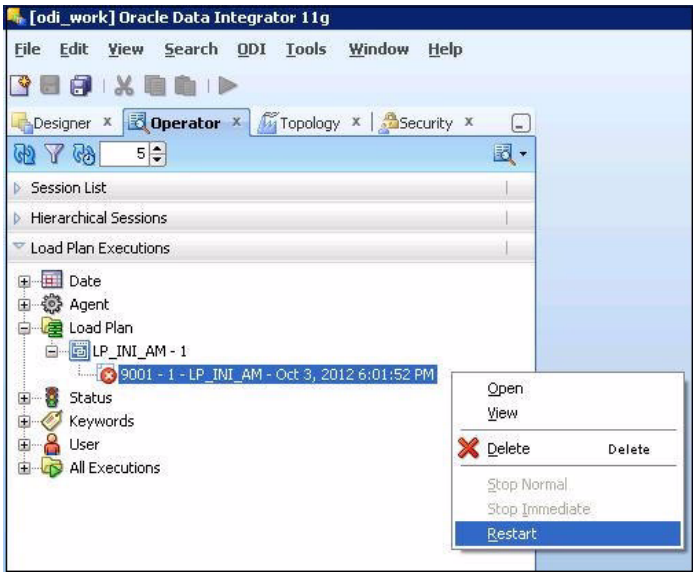
8.1.3 Restarting the ETL

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:

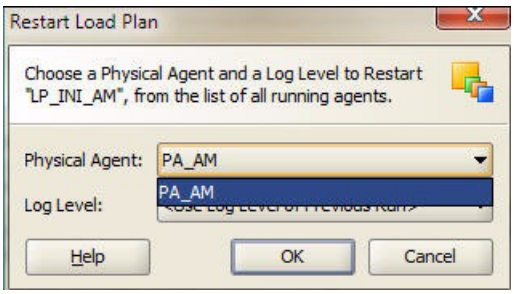
1. Right-click the Load Plan, which you want to restart, in the **Load Plan** folder of the **Load Plan Executions** section. This displays a menu, as shown in the following figure:

Figure 8–12 Restarting the Initial ETL



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

Figure 8–13 Restart Load Plan Dialog Box



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

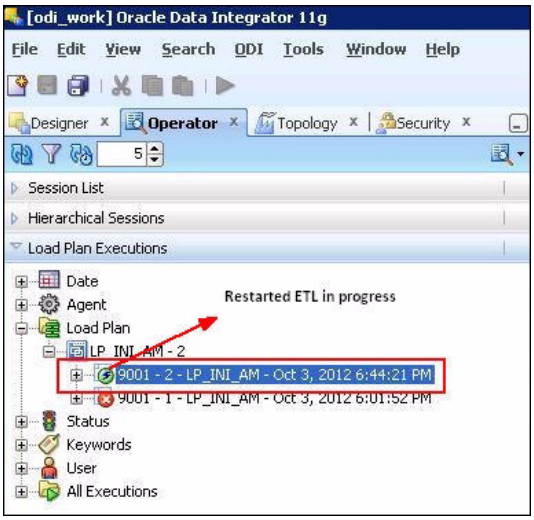
Figure 8–14 Loan Plan restarted Confirmation Message

6. Click **OK**.

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

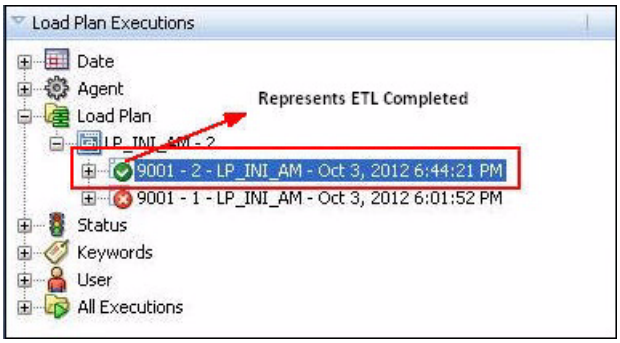
of the ETL Process is in Green color with a tilted S, which signifies that the ETL is in progress, as highlighted in the following figure:

Figure 8–15 Restarted Load Plan



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

Figure 8–16 Completed Load Plan



8.1.4 Processing a Failed ETL

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

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

This section comprises the following sub-sections:

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

8.1.4.1 Continuing the Failed Initial ETL

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

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

8.1.4.2 Restarting the Failed Initial ETL

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

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

EXEC pkg_sm_stage_util.p_set_cmn_profile_value ('DATABASE', 'ODI_ETL_STATUS', '0');

EXEC pkg_sm_stage_util.p_set_cmn_profile_value ('DATABASE', 'ETL_SM_ITERATION_NUMBER', NULL);

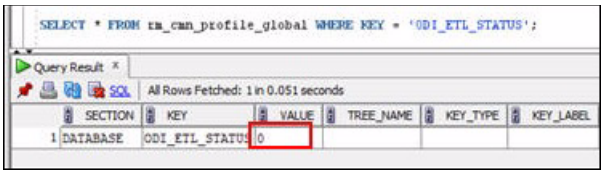
COMMIT;

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

- SELECT * FROM rm_cmn_profile_global WHERE KEY = 'ODI_ETL_STATUS';

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

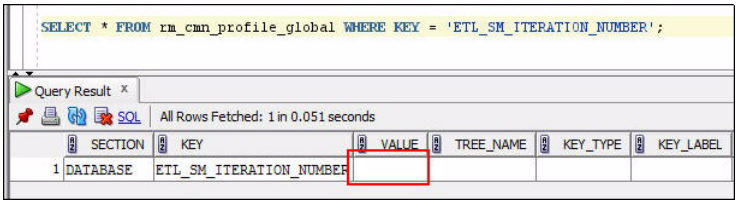
Figure 8–17 Select Statement 1 to Verify Successful Execution



- SELECT * FROM rm_cmn_profile_global WHERE KEY = 'ETL_SM_ITERATION_NUMBER';

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

Figure 8–18 Select Statement 2 to Verify Successful Execution



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

8.2 Monitoring Initial ETL Process: ODI Studio

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

This section comprises the following sub-sections:

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

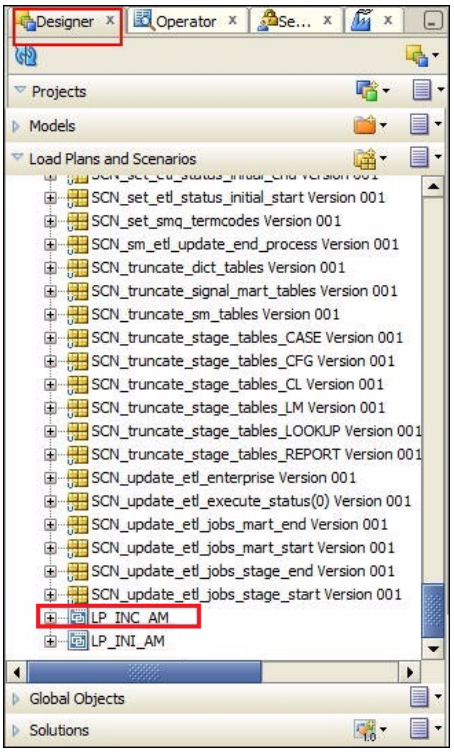
8.2.1 Viewing the Steps of Load Plan

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

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

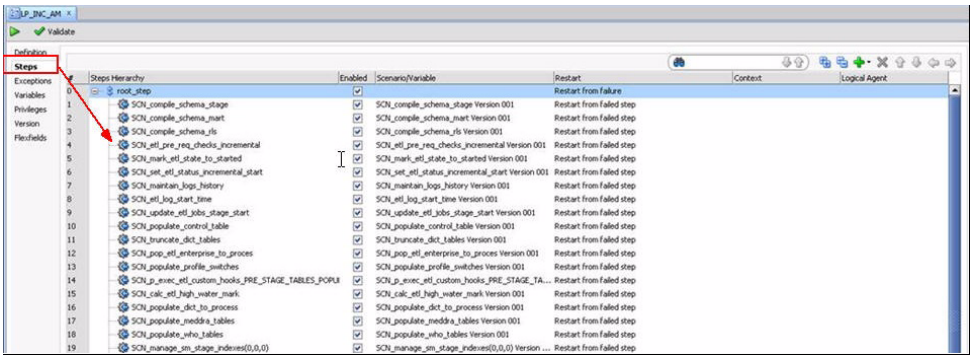
1. Open the Oracle Data Integrator Studio and click **Connect To Repository**.
2. Log on to the ODI Work Repository using the ODI User credentials.
3. Select the **Designer** tab and expand the **Load Plans and Scenarios** section, as shown in the following figure:

Figure 8–19 Navigating to the LP_INC_AM Load Plan



4. Double-click the **LP_INC_AM** load plan.
5. Select the **Steps** option in the right pane. This displays all the steps of the Load Plan, as depicted in the following figure:

Figure 8–20 Viewing Steps of the Load Plan



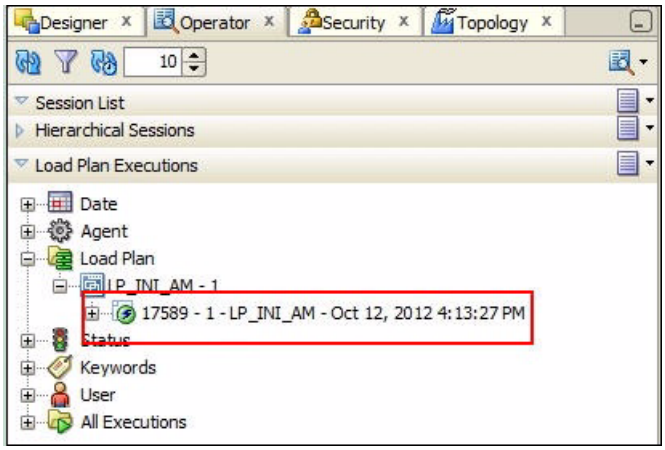
Similarly, you can also view the steps for the Incremental Load Plan by double-clicking the **LP_INC_AM** Load Plan from the **Load Plans and Scenarios** section of the **Designer** tab.

8.2.2 Monitoring the ETL

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

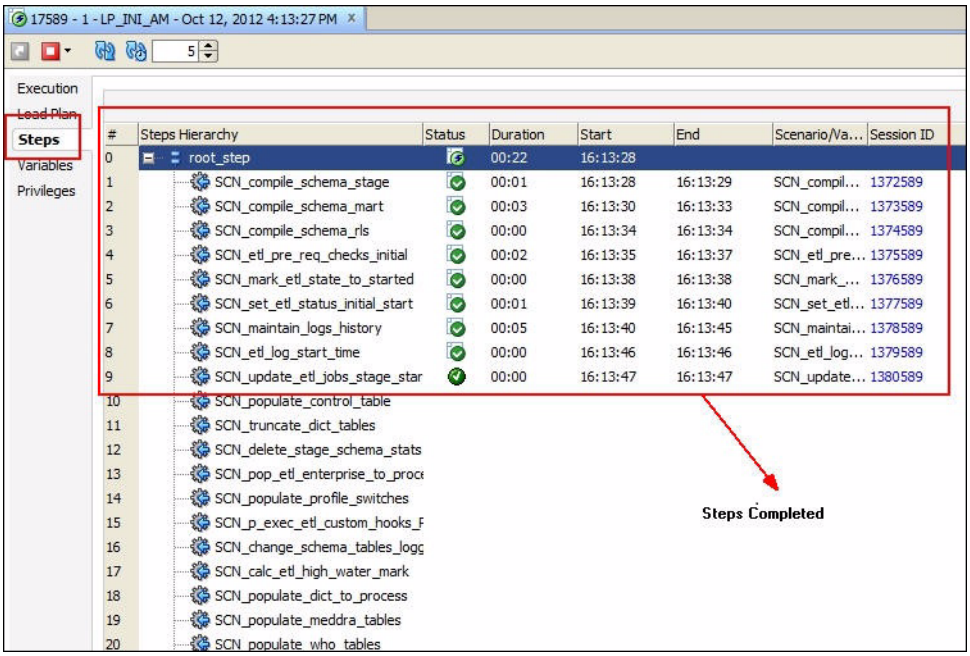
1. Select the **Operator** tab and expand the **Load Plan** folder in the **Load Plan Executions** section.
2. Expand the **LP_INI_AM** load plan to view the ETL process in progress. You can view a tilted **s** in Green color, which signifies that the process is running properly, as depicted in the following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

Figure 8–21 Viewing the Status of the ETL Process



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

Figure 8–22 Viewing Completed Steps in the ETL Process

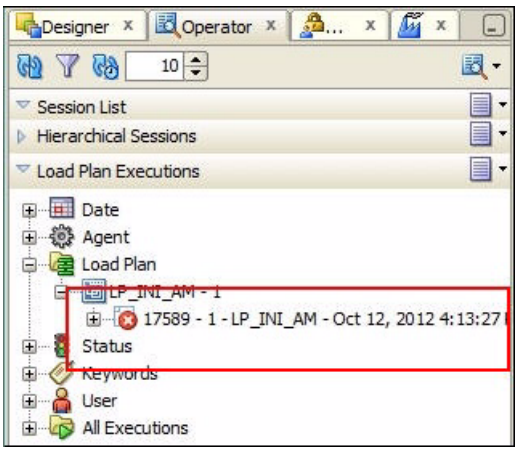


8.2.3 Debugging the Failed ETL

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

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

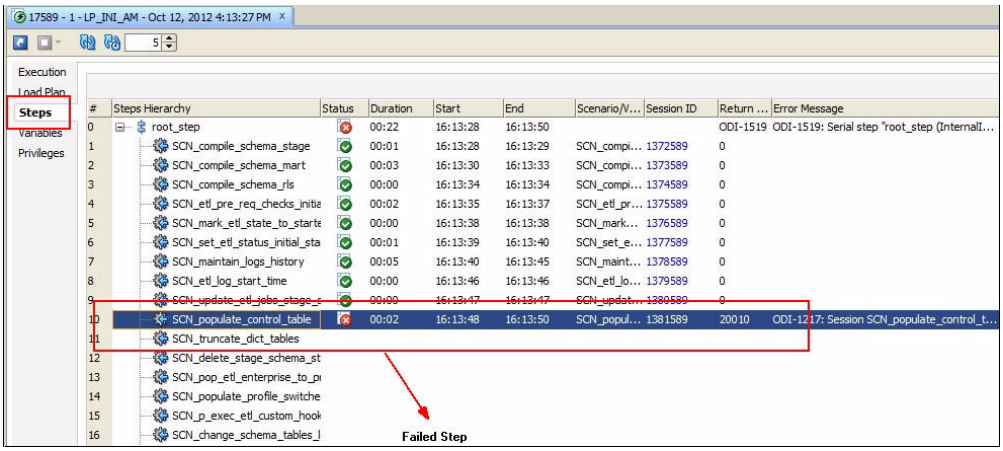
Figure 8–23 Viewing the Failed ETL Process



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

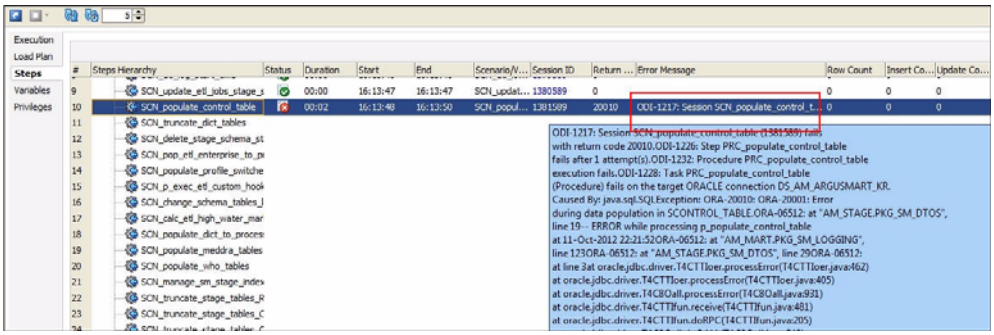
2. Double-click the Load Plan and select **Steps**. This displays the list of steps for the Load Plan in the right pane. The step because of which the ETL process has failed, is highlighted in Red color with the X symbol, as highlighted in the following figure:

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



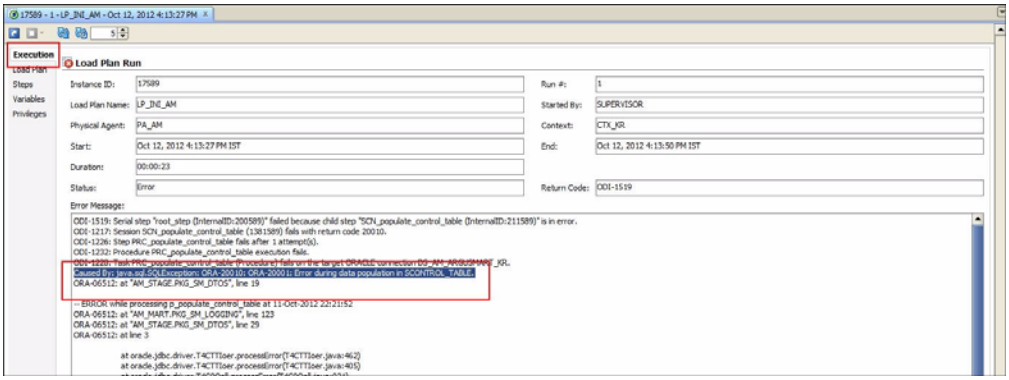
You can move the mouse cursor over the error message to view the complete message, as shown in the following figure:

Figure 8–25 Viewing the Error Message



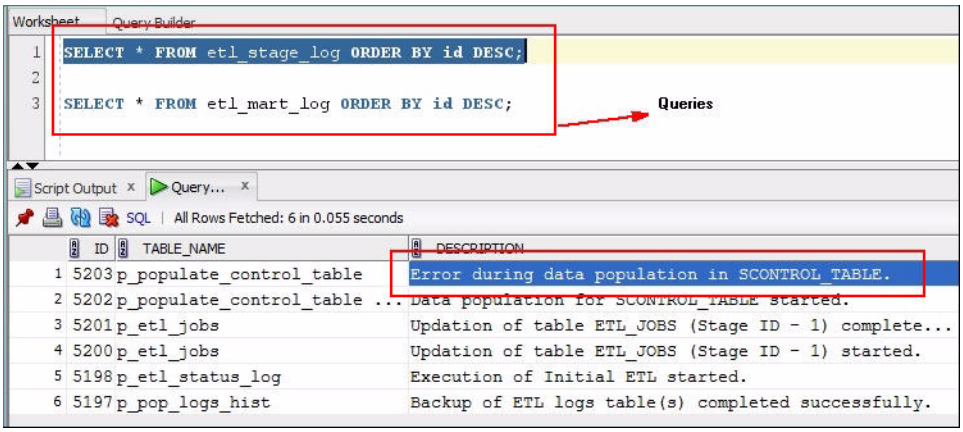
You can also select **Execution** for more information about the error message, as depicted in the following figure:

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



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

Figure 8–27 Viewing Error Message using SQL Developer



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

1. SELECT * FROM etl_stage_log ORDER BY id DESC;

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

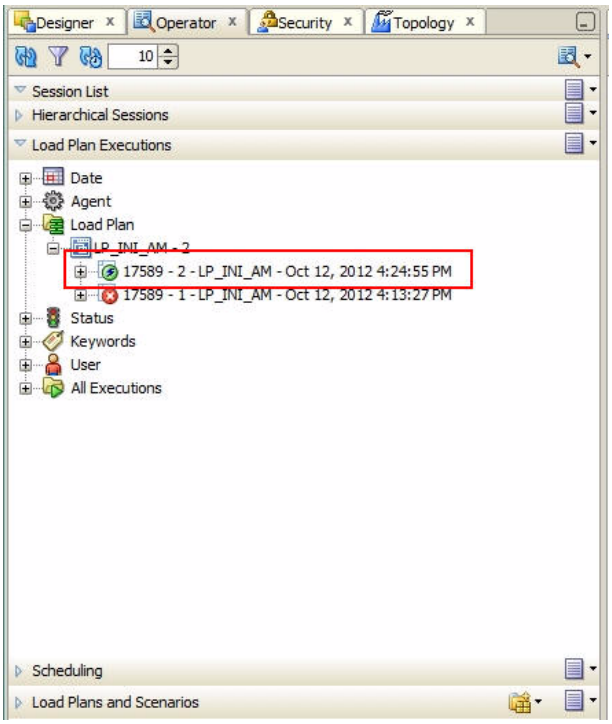
2. SELECT * FROM etl_mart_log ORDER BY id DESC;

8.2.4 Monitoring the Restarted ETL (Resume)

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

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

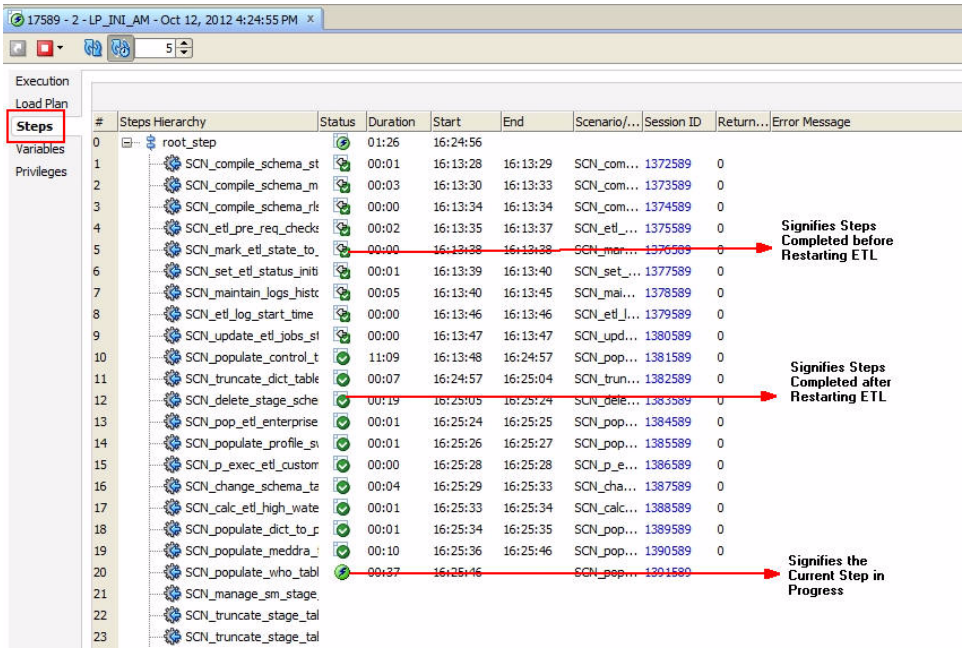
Figure 8–28 Viewing the Restarted ETL Process Status



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

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

Figure 8–29 Viewing the Steps of the Restarted ETL



8.3 Managing Initial ETL Process: ODI Console

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

This section comprises the following sub-sections:

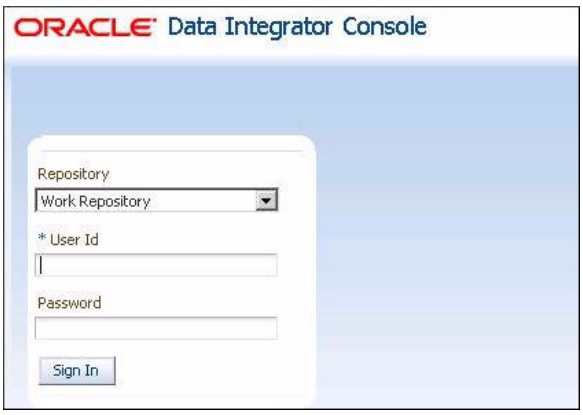
- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Failed ETL

8.3.1 Running the ETL

To run the Initial ETL, execute the following steps:

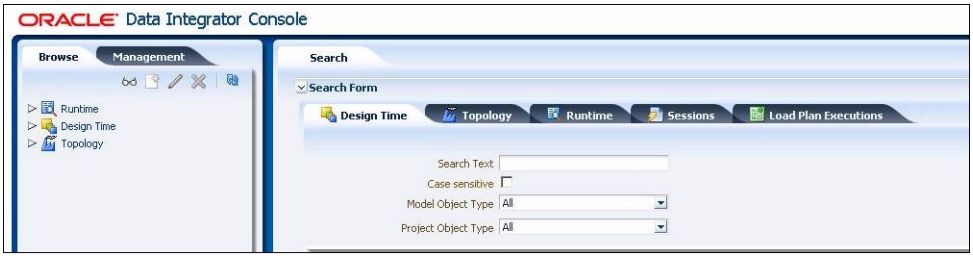
1. Open the ODI Console. This displays the **Oracle Data Integrator Console Sign In** window, as depicted in the following figure:

Figure 8–30 Oracle Data Integrator Sign In Window



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

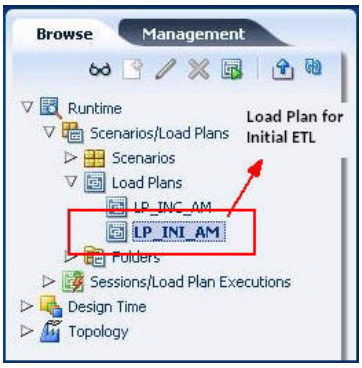
Figure 8–31 Oracle Data Integrator Console Screen



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

4. Expand the **Runtime** folder and navigate to **Runtime** > **Scenarios/Load Plans** > **LP_INI_AM**, as highlighted in the following figure:

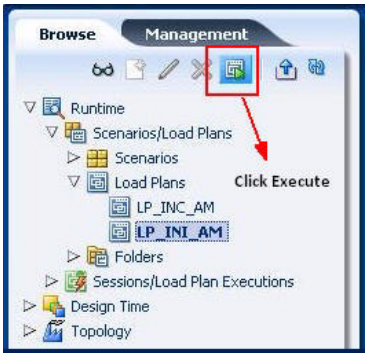
Figure 8–32 Scenarios/Load Plans



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

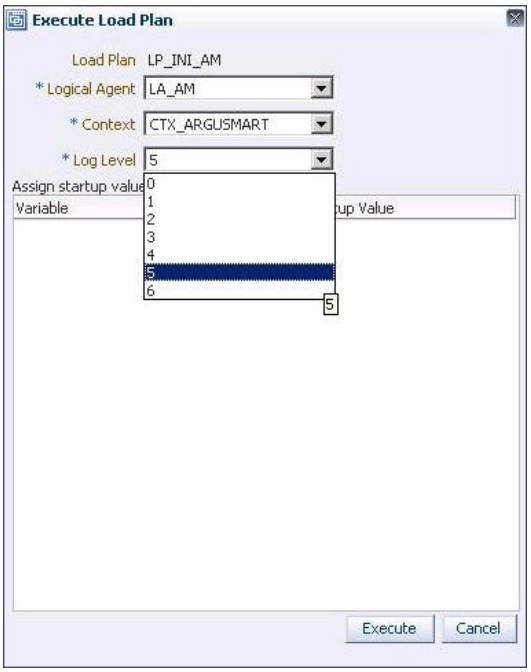
5. Click **Execute**, as highlighted in the following figure:

Figure 8–33 Executing the Initial ETL



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

Figure 8–34 Execute Load Plan Window



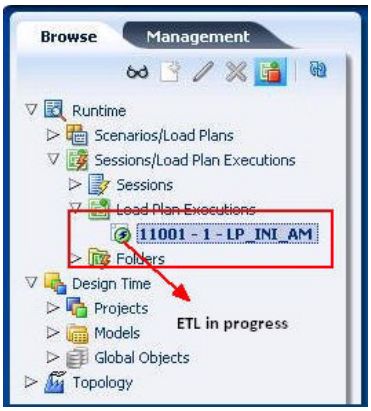
6. In the **Execute Load Plan** window:
   a. Select **LA_AM** from the **Logical Agent** drop-down list.
   b. Select **CTX_ARGUSMART** from the **Context** drop-down list.
   c. Select the desired log level from the **Log Level** drop-down list.
   d. Click **Execute**. This displays the **Information**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

Figure 8–35 Load Plan Started Confirmation Message

7. Click **OK**.

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

Figure 8–36 Status of the Load Plan

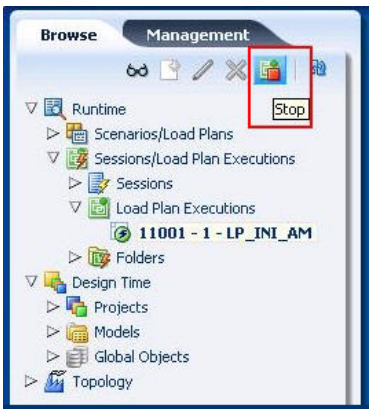


8.3.2 Stopping the ETL

To stop the initial ETL, execute the following steps:

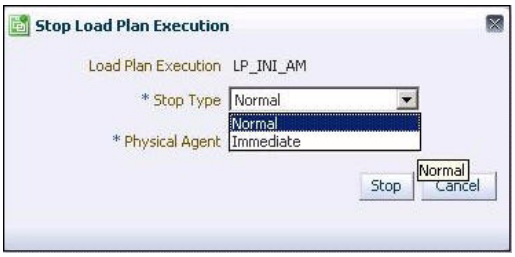
1. Select the Load Plan, which you want to stop, by expanding the **Load Plan Executions** folder of the **Sessions/Load Plan Executions** section and click **Stop**, as shown in the following figure:

Figure 8–37 Stopping the Initial ETL



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

Figure 8–38 Stop Load Plan Execution Dialog Box



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

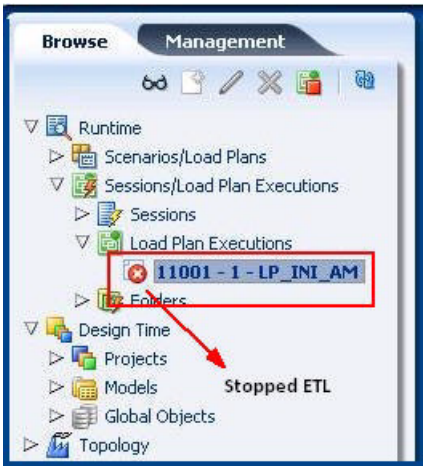
4. Click **Stop**. This displays the **Information** dialog box with the **Load Plan was Stopped Successfully** confirmation message, as depicted in the following figure:

Figure 8–39 Load Plan Stopped Confirmation Message

5. Click **OK**.

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

Figure 8–40 Stopped Initial ETL Session



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

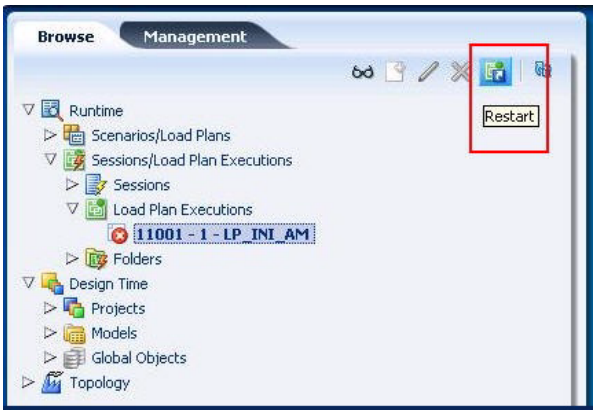
8.3.3 Restarting the ETL

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

To restart the Initial ETL, execute the following steps:

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 8–41 Restarting the Initial ETL

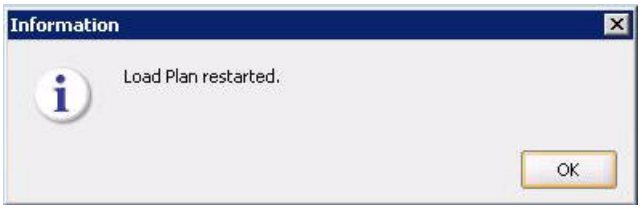


This displays the **Restart Load Plan Execution** dialog box, as depicted in the following figure:

Figure 8–42 Restart Load Plan Execution Dialog Box

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

Figure 8–43 Loan Plan restarted Confirmation Message



5. Click **OK**.

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

8.3.4 Processing a Failed ETL

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

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

This section comprises the following sub-sections:

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

8.3.4.1 Continuing the Failed Initial ETL

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

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

8.3.4.2 Restarting the Failed Initial ETL

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

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

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

8.4 Monitoring Initial ETL Process: ODI Console

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

This section comprises the following sub-sections:

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

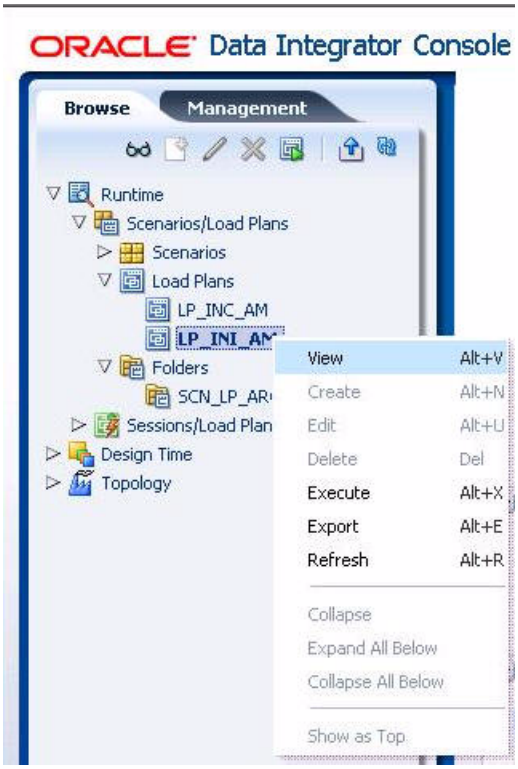
8.4.1 Viewing the Steps of Load Plan

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

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

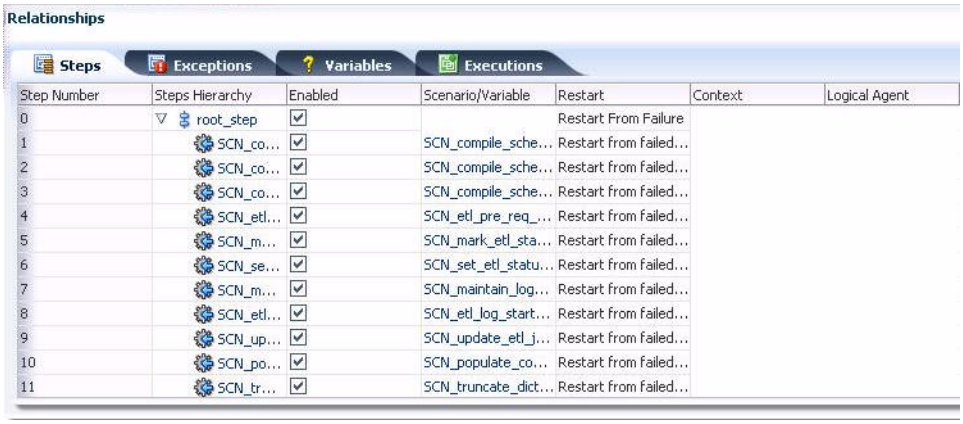
1. Log on the Oracle Data Integrator Console and select the **Management** tab.
2. Navigate to **Runtime** > **Scenarios/Load Plans** > **Load Plans**.
3. Right-click **LP_INI_AM** (Load Plan for Initial ETL) or **LP_INC_AM** (Load Plan for Incremental ETL) and select **View**, as shown in the following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

Figure 8–44 Navigating to the Load Plans



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

Figure 8–45 Viewing the Steps of the Load Plan



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:

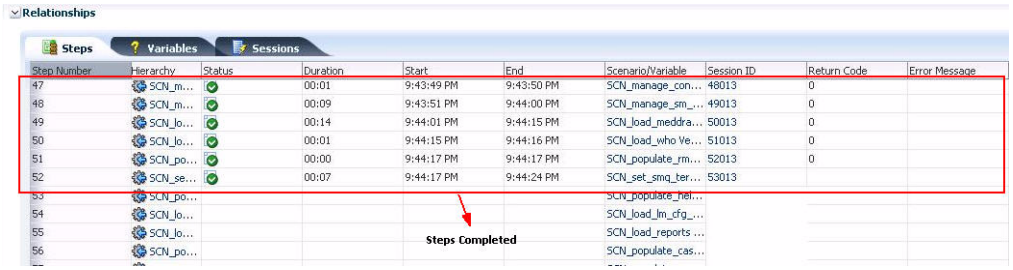
1. Select the **Management** tab and navigate to **Runtime** > **Sessions/Load Plan Executions** > **Load Plan Executions**.

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

Figure 8–46 Initial ETL in Progress

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

Figure 8–47 Viewing Completed Steps in the ETL Process



8.4.3 Debugging the Failed ETL

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

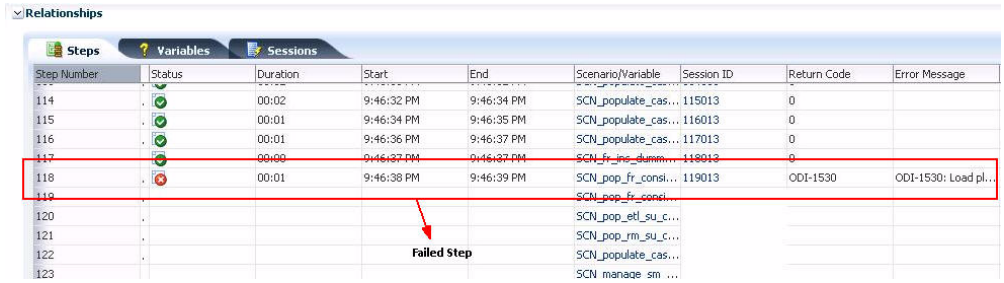
1. In the **Management** tab, navigate to **Runtime** > **Sessions/Load Plan Executions** > **Load Plan Executions**, to view the current status of the ETL process, as shown in the following figure:

Figure 8–48 Viewing the Failed ETL Process

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

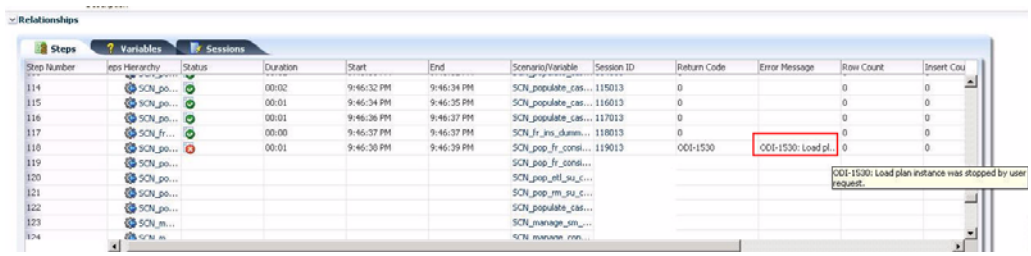
2. Double-click the Load Plan. This displays the list of steps for the Load Plan in the **Relationship** section in the right pane. The step because of which the ETL process has failed, is highlighted in Red color with the **X** symbol, as highlighted in the following figure:

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



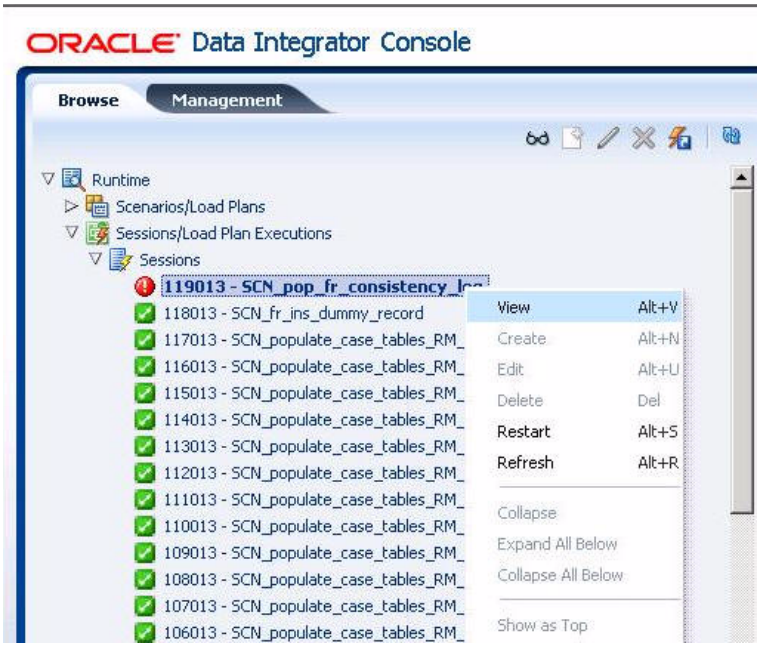
You can move the mouse cursor over the error message to view the complete message, as shown in the following figure:

Figure 8–50 Viewing the Error Message



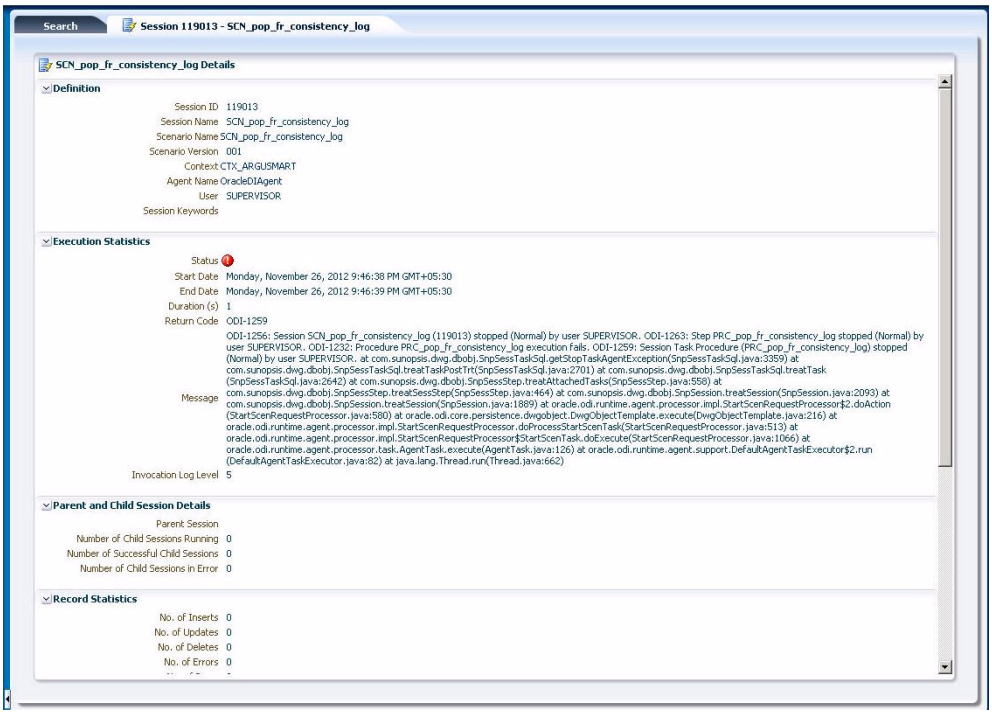
You can also navigate to **Runtime** > **Sessions/Load Plan Executions** > **Sessions**, right-click the stopped session, highlighted in Red color with the ! symbol, and select **View**, as depicted in the following figure:

Figure 8–51 Viewing the Stopped Session



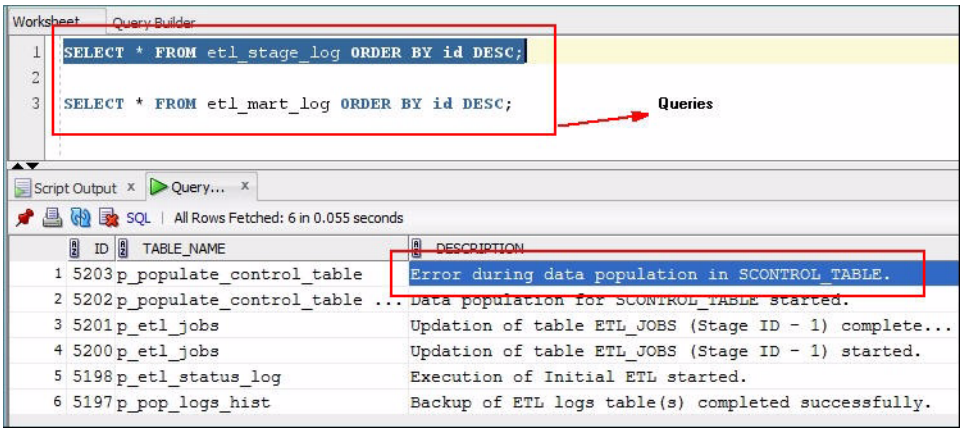
This displays the error details in the right pane, as depicted in the following figure:

Figure 8–52 Viewing the Error Details



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

Figure 8–53 Viewing Error Message using SQL Developer



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

1. SELECT * FROM etl_stage_log ORDER BY id DESC;

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

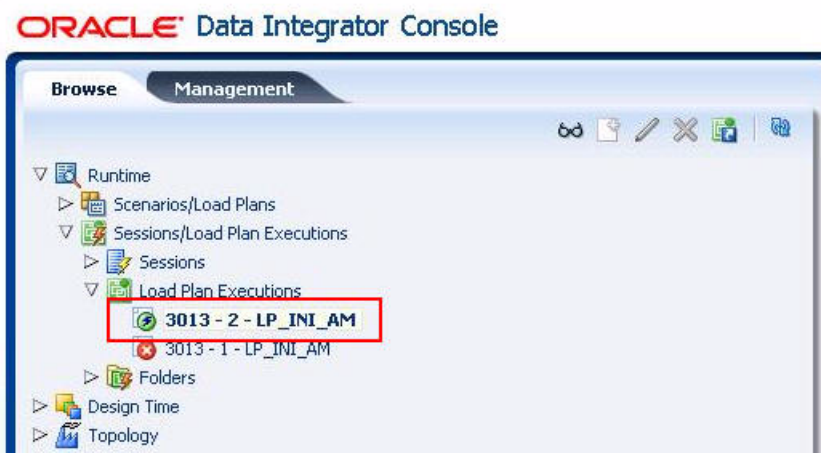
2. SELECT * FROM etl_mart_log ORDER BY id DESC;

8.4.4 Monitoring the Restarted ETL (Resume)

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

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

Figure 8–54 Viewing the Restarted ETL Process Status

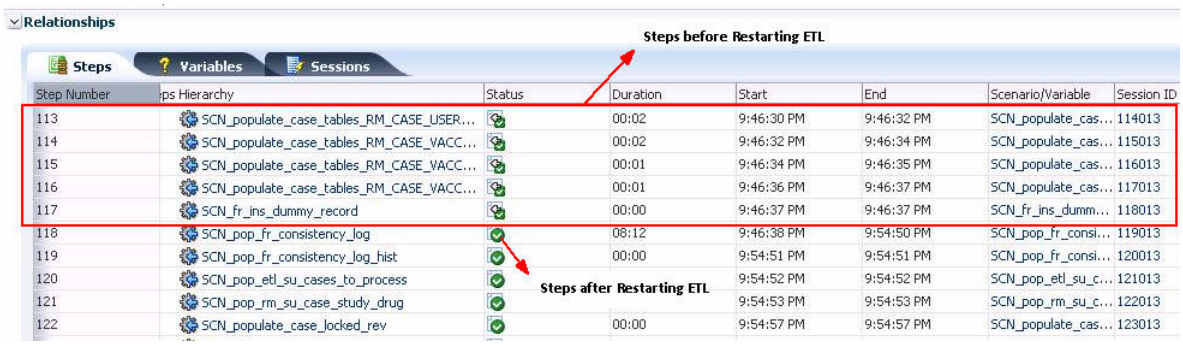


This restarted ETL Process is in Green color with a tilted **s**, which signifies that the ETL is in progress again.

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

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

Figure 8–55 Viewing the Steps of the Restarted ETL



Step Number	ps Hierarchy	Status	Duration	Start	End	Scenario/Variable	Session ID
113	SCN_populate_case_tables_RM_CASE_USER...		00:02	9:46:30 PM	9:46:32 PM	SCN_populate_cas...	114013
114	SCN_populate_case_tables_RM_CASE_VACC...		00:02	9:46:32 PM	9:46:34 PM	SCN_populate_cas...	115013
115	SCN_populate_case_tables_RM_CASE_VACC...		00:01	9:46:34 PM	9:46:35 PM	SCN_populate_cas...	116013
116	SCN_populate_case_tables_RM_CASE_VACC...		00:01	9:46:36 PM	9:46:37 PM	SCN_populate_cas...	117013
117	SCN_fr_ins_dummy_record		00:00	9:46:37 PM	9:46:37 PM	SCN_fr_ins_dumm...	118013
118	SCN_pop_fr_consistency_log		08:12	9:46:38 PM	9:54:50 PM	SCN_pop_fr_consi...	119013
119	SCN_pop_fr_consistency_log_hist		00:00	9:54:51 PM	9:54:51 PM	SCN_pop_fr_consi...	120013
120	SCN_pop_etl_su_cases_to_process			9:54:52 PM	9:54:52 PM	SCN_pop_etl_su_c...	121013
121	SCN_pop_rm_su_case_study_drug			9:54:53 PM	9:54:53 PM	SCN_pop_rm_su_c...	122013
122	SCN_populate_case_locked_rev		00:00	9:54:57 PM	9:54:57 PM	SCN_populate_cas...	123013

8.5 Running the Incremental ETL

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

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

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:

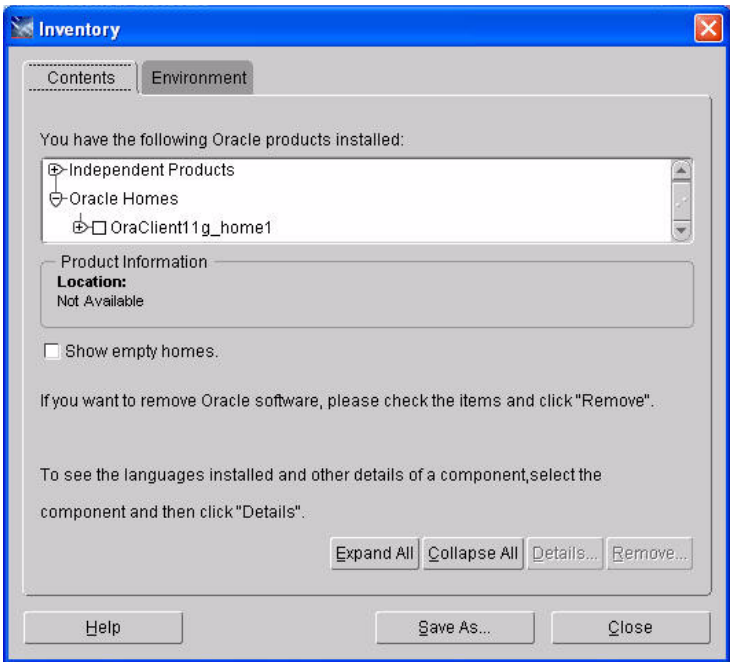
   <ArgusMart_HOME>\Disk1\install

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

Figure 9–1 Uninstalling Argus Mart

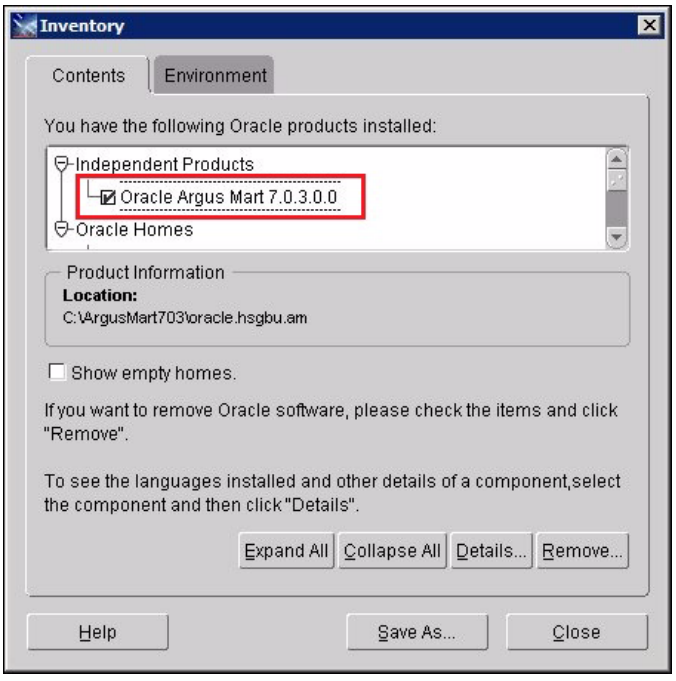
This displays the **Inventory** screen, as depicted in the following figure:

Figure 9–2 Inventory Screen



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

Figure 9–3 Selecting Argus Mart for Uninstallation



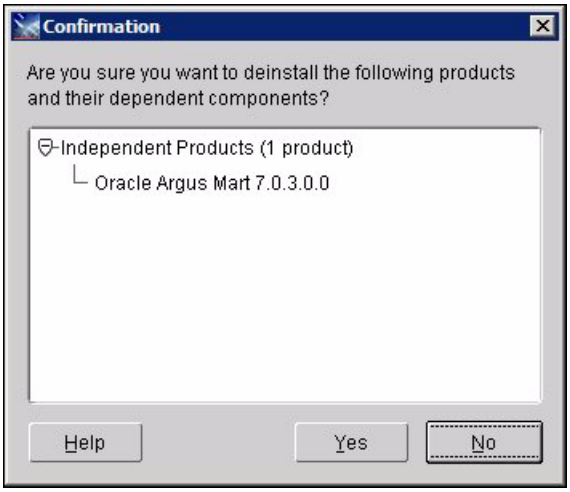
5. Note the installation location displayed under the **Product Information** frame.

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

6. Click **Remove**.

   This displays the following confirmation message:

Figure 9–4 Confirmation to Un-install Argus Mart

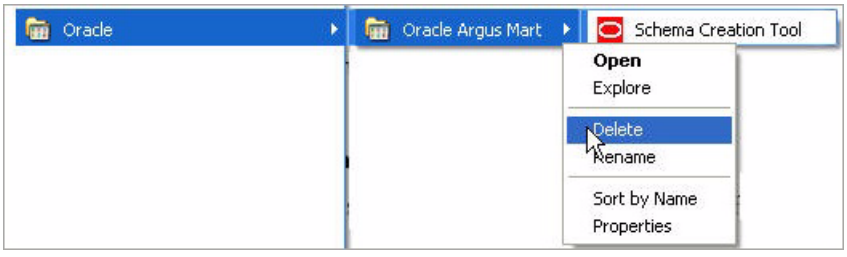


7. Click **Yes**. This displays a progress bar and subsequently removes Argus Mart from the list of Independent Products.
8. Click **Close** to exit from the **Inventory** window.
9. Click **Cancel** in the Oracle Universal Installer window to exit.
10. Delete the folder, where the Argus Mart was installed, from the local file system.

    Example: C:\AM

11. Navigate to **start** > **All Programs** > **Oracle** > **Oracle Argus Mart**.
12. Right-click **Oracle Argus Mart**. This displays a menu, as depicted in the following figure:

Figure 9–5 Deleting Oracle Argus Mart through Start Menu



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

    ..\network\admin\tnsnames.ora

15. Restart the system.

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

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

Part II

Administration

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

Part II contains the following chapters:

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

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);
```

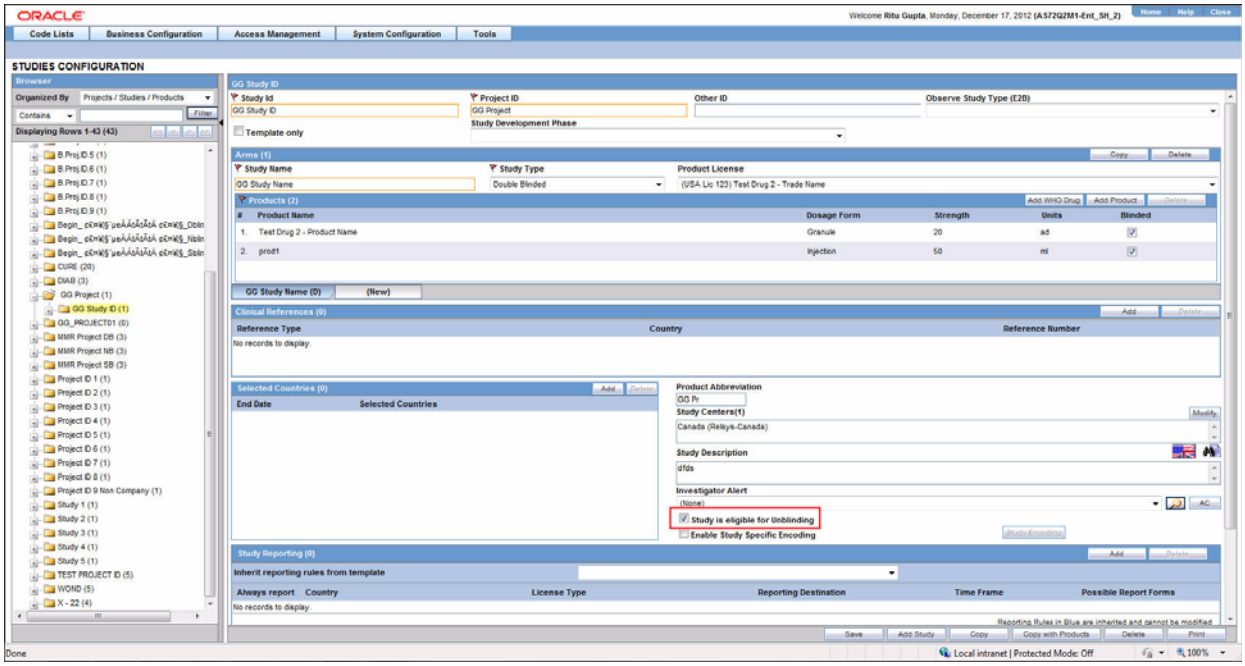
11

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

Incremental ETL: ODI Studio

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

This chapter comprises the following sub-sections:

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

12.1 Scheduling Incremental ETL

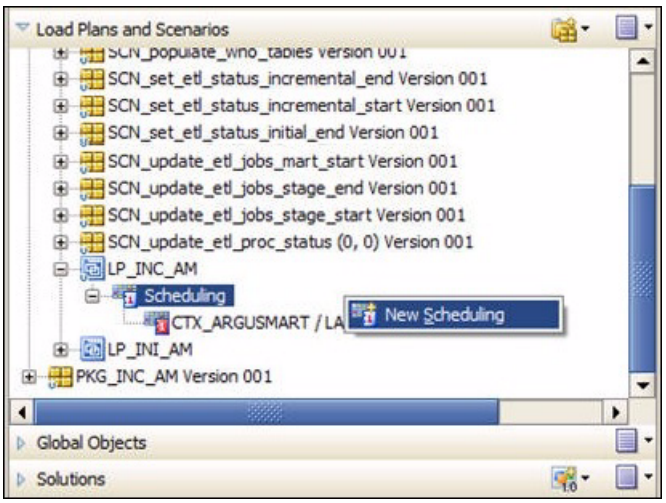
The **AM.zip** file contains pre-configured ETL scheduling in **Inactive** mode.

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

To schedule a Load Plan, execute the following steps:

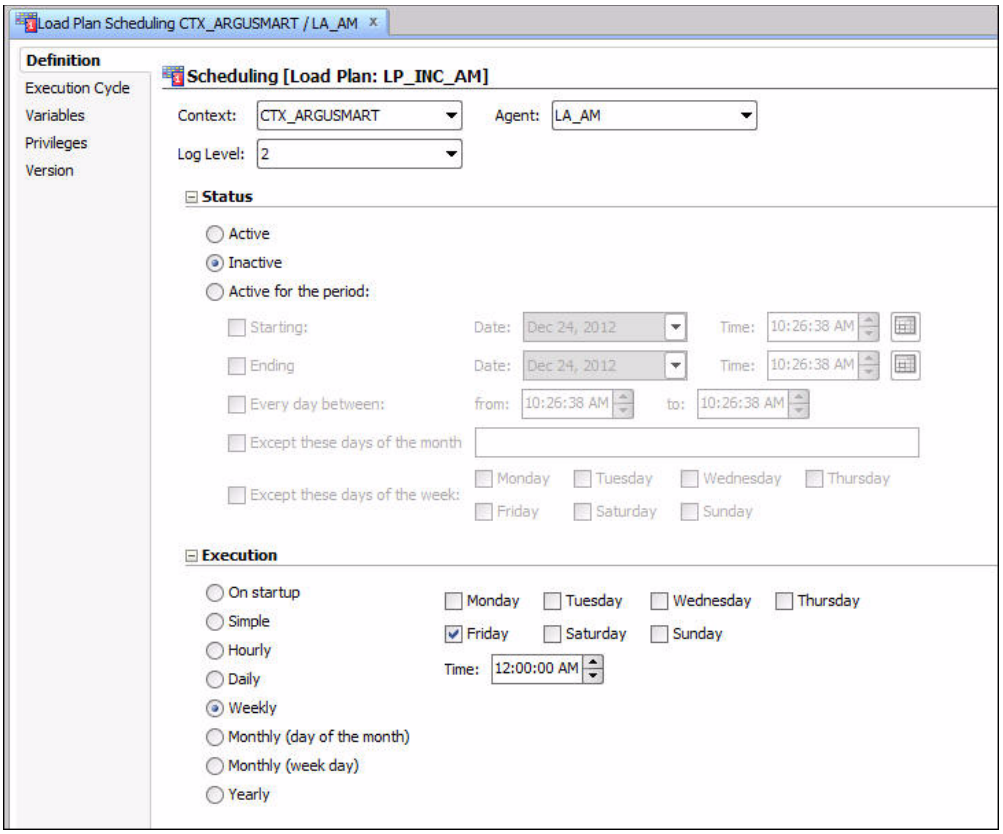
1. In the **Designer** tab, navigate to **Load Plans and Scenarios** section and expand **LP_INC_AM** (Load Plan for Incremental ETL).
2. Right-click **Scheduling** and select **New Scheduling**, as depicted in the following figure:

Figure 12–1 Scheduling ETL



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

Figure 12–2 Scheduling the Load Plan Dialog Box



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

12.2 Monitoring Incremental ETL Process

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

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

12.3 Managing Incremental ETL Process

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

This section comprises the following sub-sections:

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

12.3.1 Running the ETL

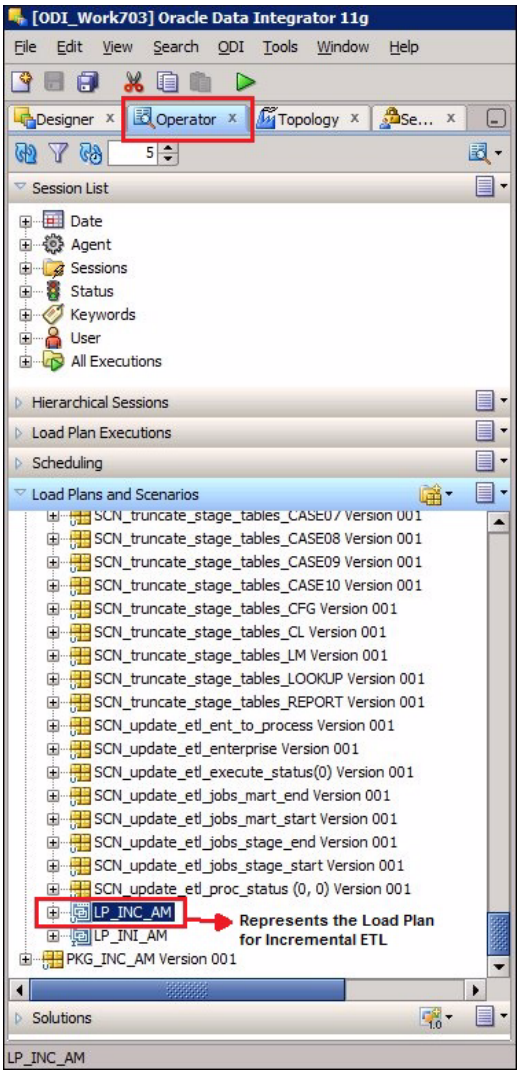
To run the Incremental ETL, execute the following steps:

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

Figure 12–3 Oracle Data Integrator Login Window

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

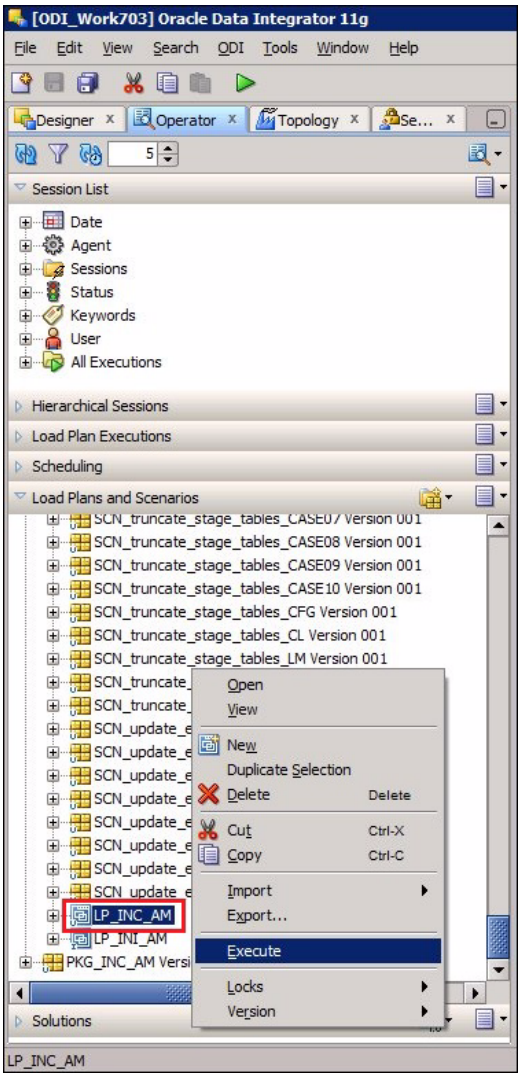
Figure 12–4 Load Plans and Scenarios



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

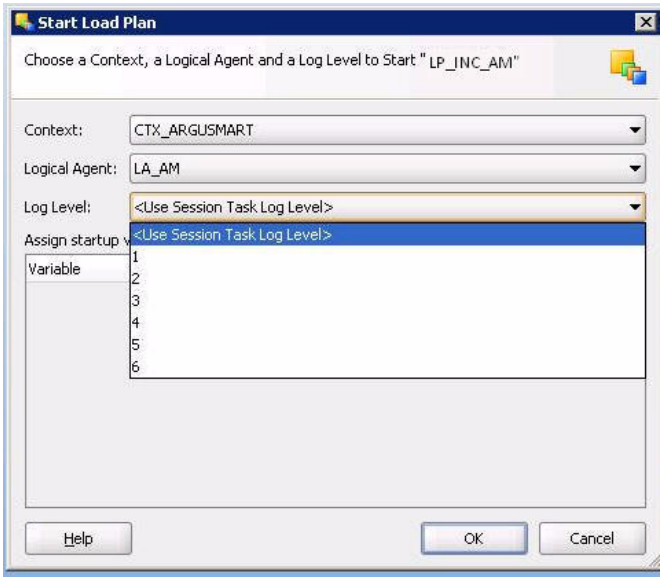
5. Right-click the **LP_INC_AM** option. This displays a menu, as shown in the following figure:

Figure 12–5 Executing the Incremental ETL



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

Figure 12–6 Start Load Plan Window



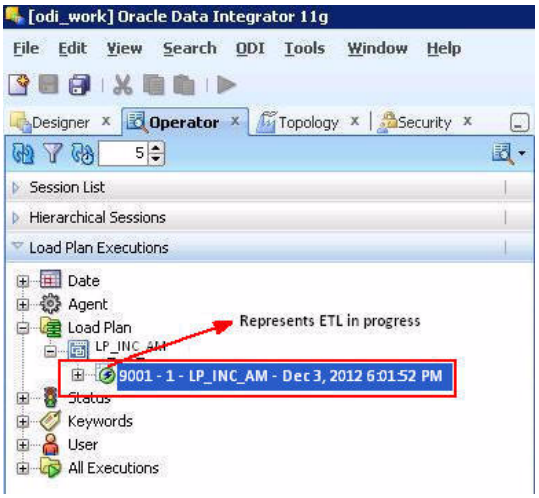
7. In the **Start Load Plan** window:
   a. Select **CTX_ARGUSMART** from the **Context** drop-down list.
   b. Select **LA_AM** from the **Logical Agent** drop-down list.
   c. Select the desired log level from the **Log Level** drop-down list.
   d. Click **OK**. This displays the **Information** dialog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

Figure 12–7 Load Plan Started Confirmation Message

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 12–8 Status of the Load Plan

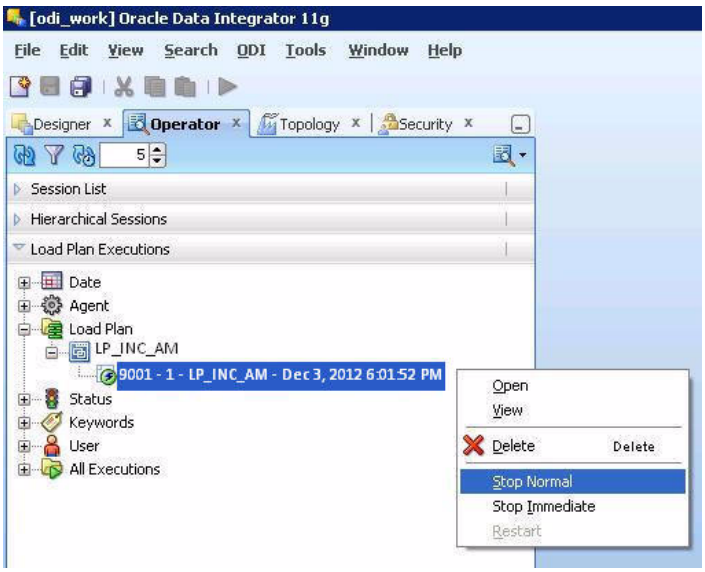


12.3.2 Stopping the ETL

To stop the Incremental ETL, execute the following steps:

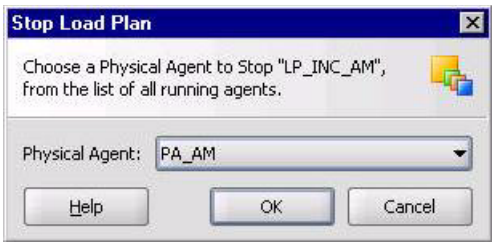
1. Right-click the Load Plan, which you want to stop, in the **Load Plan** folder of the **Load Plan Executions** section. This displays a menu, as shown in the following figure:

Figure 12–9 Stopping the Incremental ETL



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

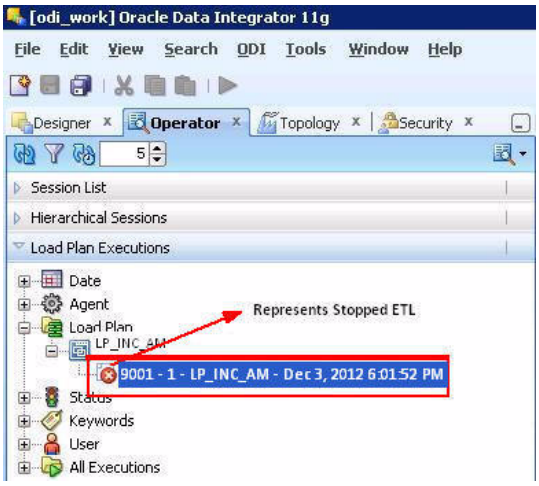
Figure 12–10 Selecting the Physical Agent



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

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

Figure 12–11 Stopped Incremental ETL Session



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

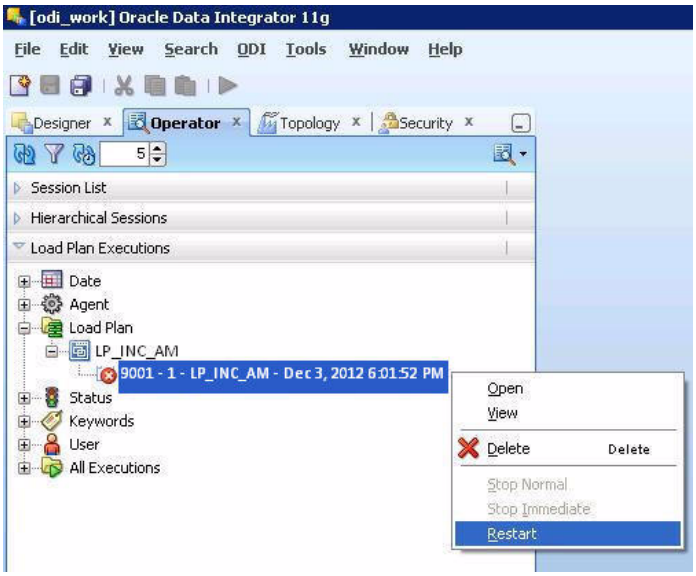
12.3.3 Restarting the ETL

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

To restart the Incremental ETL, execute the following steps:

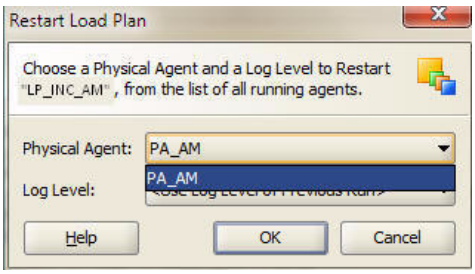
1. Right-click the Load Plan, which you want to restart, in the **Load Plan** folder of the **Load Plan Executions** section. This displays a menu, as shown in the following figure:

Figure 12–12 Restarting the Incremental ETL



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

Figure 12–13 Restart Load Plan Dialog Box



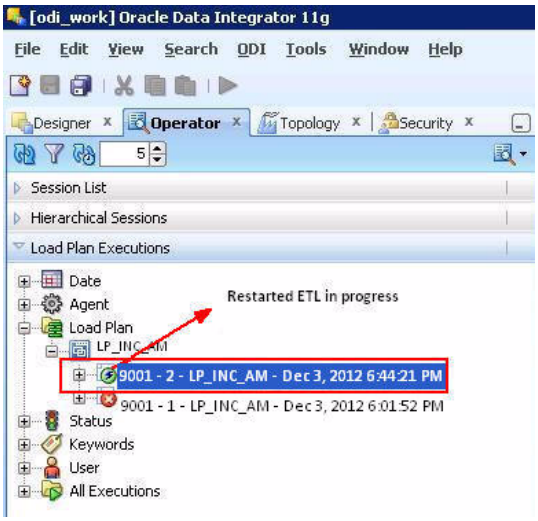
3. Select **PA_AM** from the **Physical Agent** drop-down list.
4. Select the required log level from the **Log Level** drop-down list.
5. Click **OK**. This displays the **Information** dialog box with the **Load Plan restarted** message, as depicted in the following figure:

Figure 12–14 Loan Plan restarted Confirmation Message

6. Click **OK**.

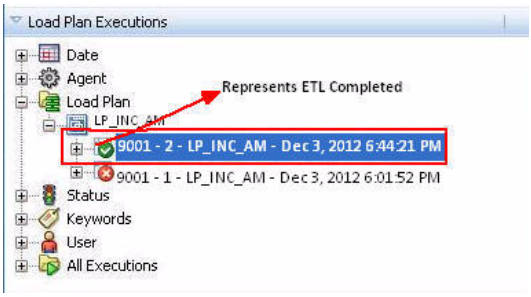
   This adds another Load Plan, with the same name as that of the stopped ETL, in the **Load Plan** folder of the **Load Plan Executions** section. However, this instance of the ETL Process is in Green color with a tilted S, which signifies that the ETL is in progress, as highlighted in the following figure:

Figure 12–15 Restarted Load Plan



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

Figure 12–16 Completed Load Plan



12.3.4 Processing a Stopped or a Failed ETL

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

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

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

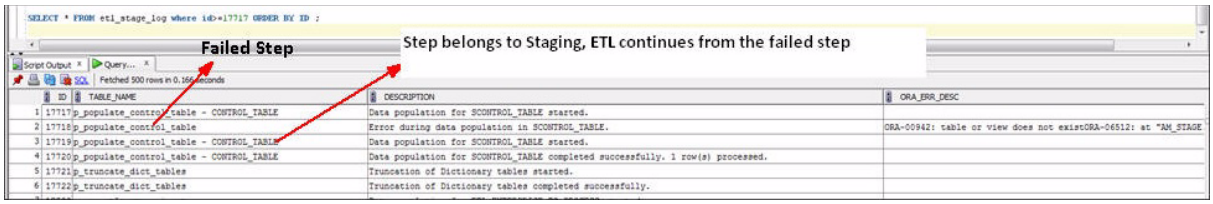
This section comprises the following sub-sections:

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

12.3.4.1 Continuing the Failed Incremental ETL

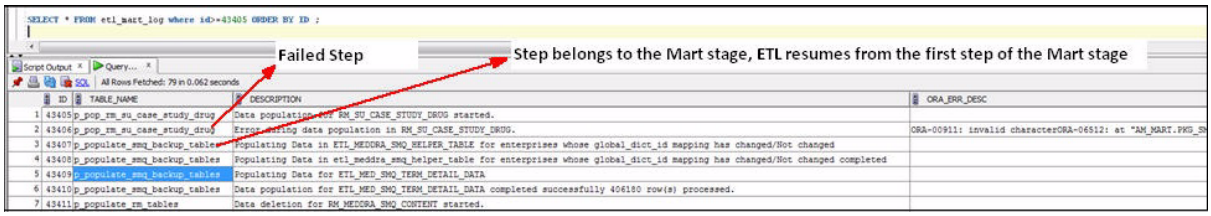
If the last execution step of the failed or stopped ETL belongs to the Staging phase, the ETL resumes from the failed or stopped point, as shown in the following figure:

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



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

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



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

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

12.3.4.2 Restarting the Failed Incremental ETL

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

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

EXEC pkg_sm_stage_util.p_set_cmn_profile_value ('DATABASE', 'ODI_ETL_STATUS', '0');

EXEC pkg_sm_stage_util.p_set_cmn_profile_value ('DATABASE', 'ETL_SM_ITERATION_NUMBER', NULL);

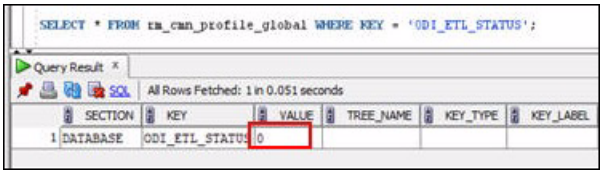
COMMIT;

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

- SELECT * FROM rm_cmn_profile_global WHERE KEY = 'ODI_ETL_STATUS';

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

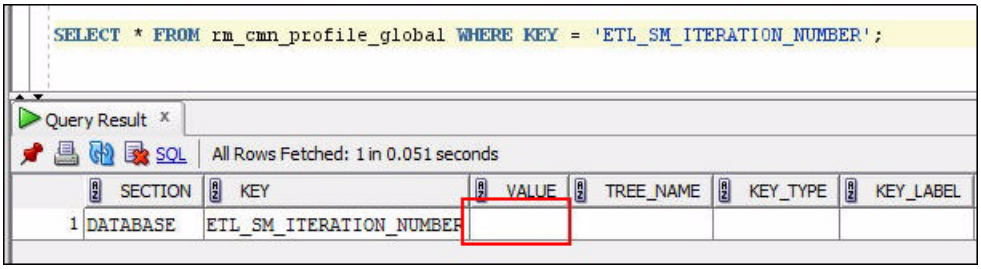
Figure 12–19 Select Statement 1 to Verify Successful Execution



- SELECT * FROM rm_cmn_profile_global WHERE KEY = 'ETL_SM_ITERATION_NUMBER';

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

Figure 12–20 Select Statement 2 to Verify Successful Execution



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

13

Incremental ETL: ODI Console

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

This chapter comprises the following sub-sections:

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

13.1 Scheduling an ETL

The ETL can be scheduled through ODI Studio only.

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

13.2 Monitoring Incremental ETL Process

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

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

13.3 Managing Incremental ETL Process

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

This section comprises the following sub-sections:

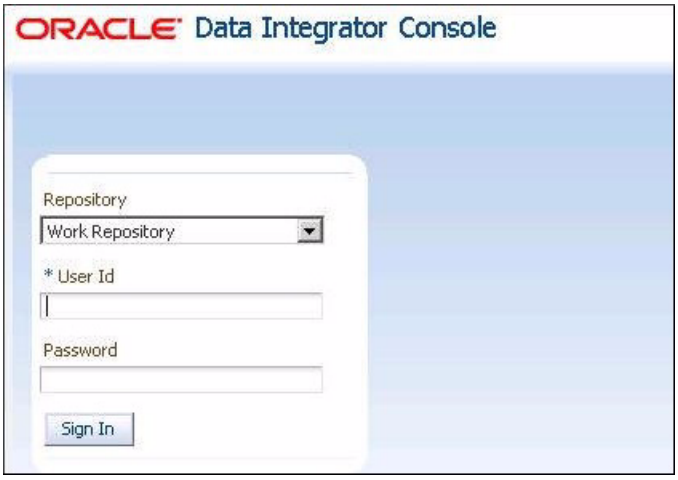
- Running the ETL
- Stopping the ETL
- Restarting the ETL
- Processing a Stopped or a Failed ETL

13.3.1 Running the ETL

To run the Incremental ETL, execute the following steps:

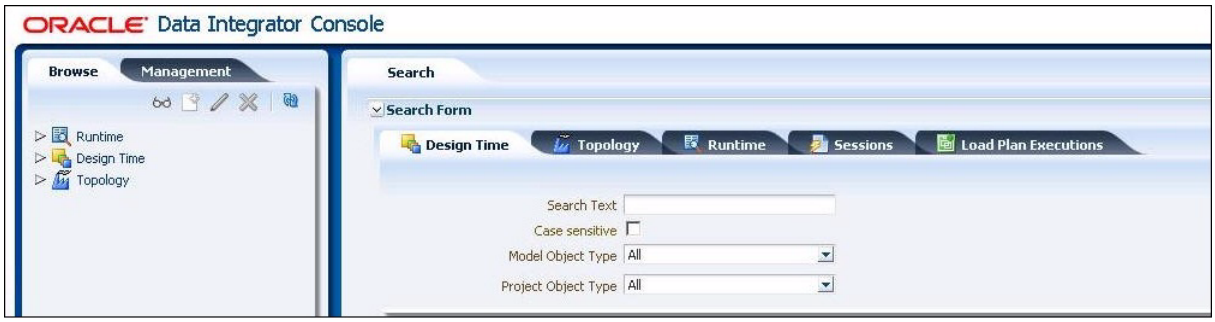
1. Open the Oracle Data Integrator Console. This displays the **Oracle Data Integrator Console Sign In** window, as depicted in the following figure:

Figure 13–1 Oracle Data Integrator Sign In Window



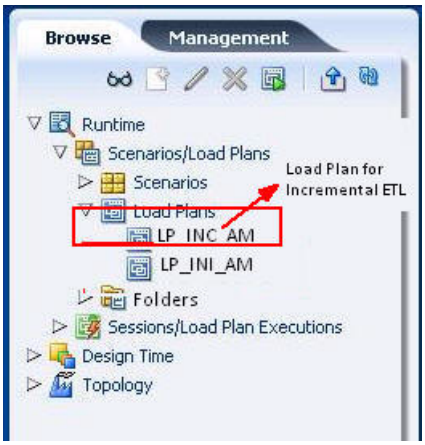
2. In the **Oracle Data Integrator Sign In** window:
   a. Select the ODI Work Repository name from the **Repository** drop-down list.
   b. Enter the name of the ODI user in the **User Id** field.
   c. Enter the password for the ODI user in the **Password** field.
   d. Click **Sign In**. This displays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

Figure 13–2 Oracle Data Integrator Console Screen



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:

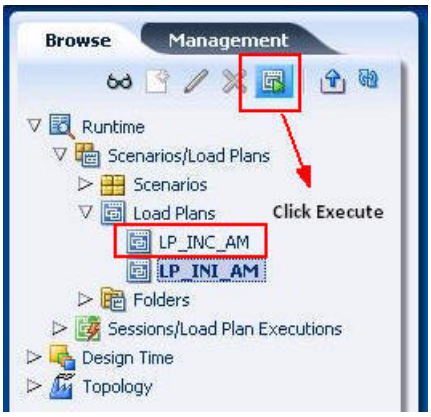
Figure 13–3 Scenarios/Load Plans



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

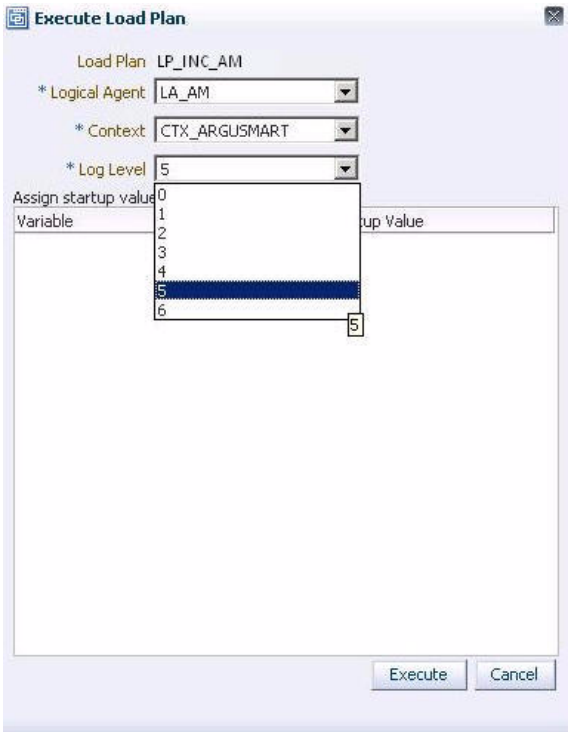
5. Click **Execute**, as highlighted in the following figure:

Figure 13–4 Executing the Incremental ETL



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

Figure 13–5 Execute Load Plan Window



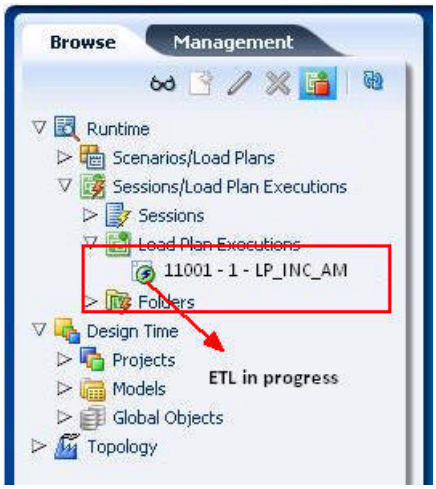
6. In the **Execute Load Plan** window:
   a. Select **LA_AM** from the **Logical Agent** drop-down list.
   b. Select **CTX_ARGUSMART** from the **Context** drop-down list.
   c. Select the desired log level from the **Log Level** drop-down list.
   d. Click **Execute**. This displays the **Information**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

Figure 13–6 Load Plan Started Confirmation Message

7. Click **OK**.

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

Figure 13–7 Status of the Load Plan

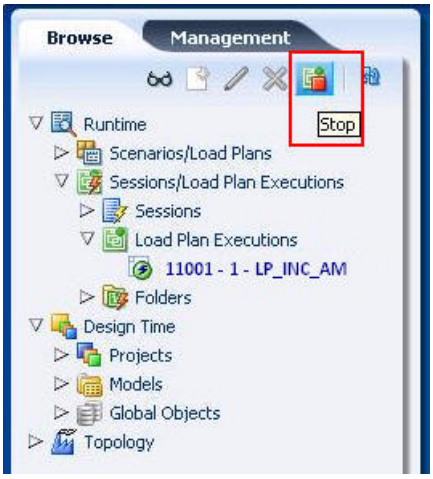


13.3.2 Stopping the ETL

To stop the Incremental ETL, execute the following steps:

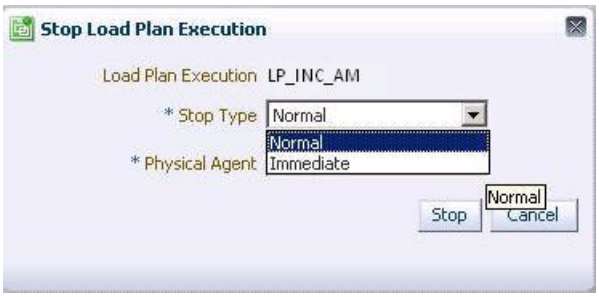
1. Select the Load Plan, which you want to stop, by expanding the **Load Plan Executions** folder of the **Sessions/Load Plan Executions** section and click **Stop**, as shown in the following figure:

Figure 13–8 Stopping the Incremental ETL



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

Figure 13–9 Stop Load Plan Execution Dialog Box



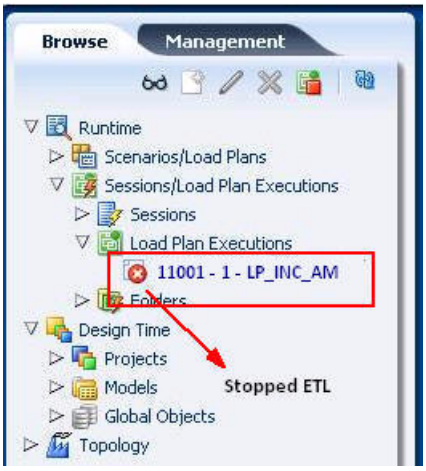
2. Select **Normal** from the **Stop Type** drop-down list.
3. Select **OracleDIAgent** from the **Physical Agent** drop-down list.
4. Click **Stop**. This displays the **Information** dialog box with the **Load Plan was Stopped Successfully** confirmation message, as depicted in the following figure:

Figure 13–10 Load Plan Stopped Confirmation Message

5. Click **OK**.

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

Figure 13–11 Stopped Incremental ETL Session



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

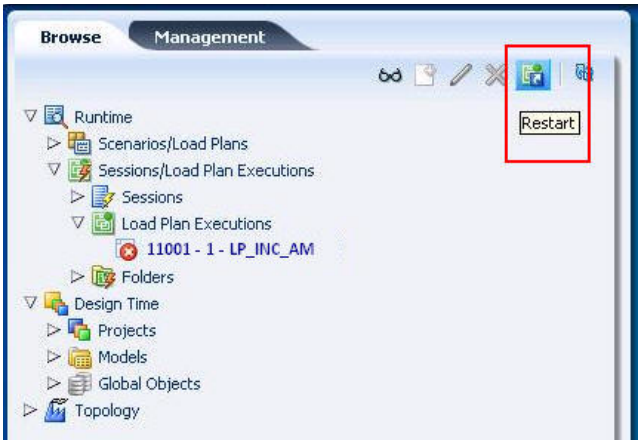
13.3.3 Restarting the ETL

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

Figure 13–12 Restarting the Incremental ETL



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

Figure 13–13 Restart Load Plan Execution Dialog Box

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

Figure 13–14 Loan Plan restarted Confirmation Message

5. Click **OK**.

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

13.3.4 Processing a Stopped or a Failed ETL

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

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

14

Re-initializing the ETL Process

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

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

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

1. Double-click the **am_environment_reset.bat** file available at the following path:

   ...\ArgusMart\Database\Utils\am_environment_reset.bat

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

Figure 14–1 Confirmation of Resetting the Mart Environment

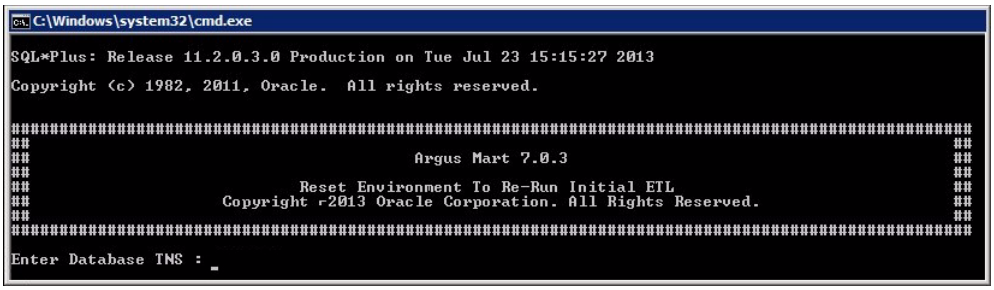
2. Enter **Y**, which represents **Yes**, in the **Do You Want to Continue (Y/N)?** field, if you want to continue with resetting the Mart environment to be able to run the Initial ETL on the database again.

   Or

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

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

Figure 14–2 Entering TNS Name to Connect to Database



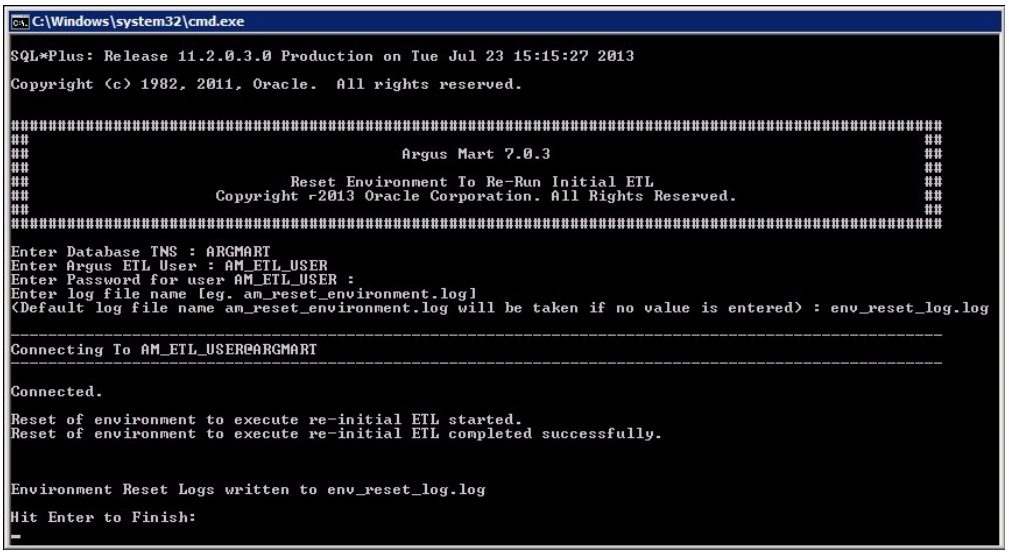
3. Enter the TNS Name to connect to the Argus Mart database in the **Enter Database TNS** field and press **Enter**.
4. Enter the following parameters for the user who have administrator rights to access the ETL process.

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

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

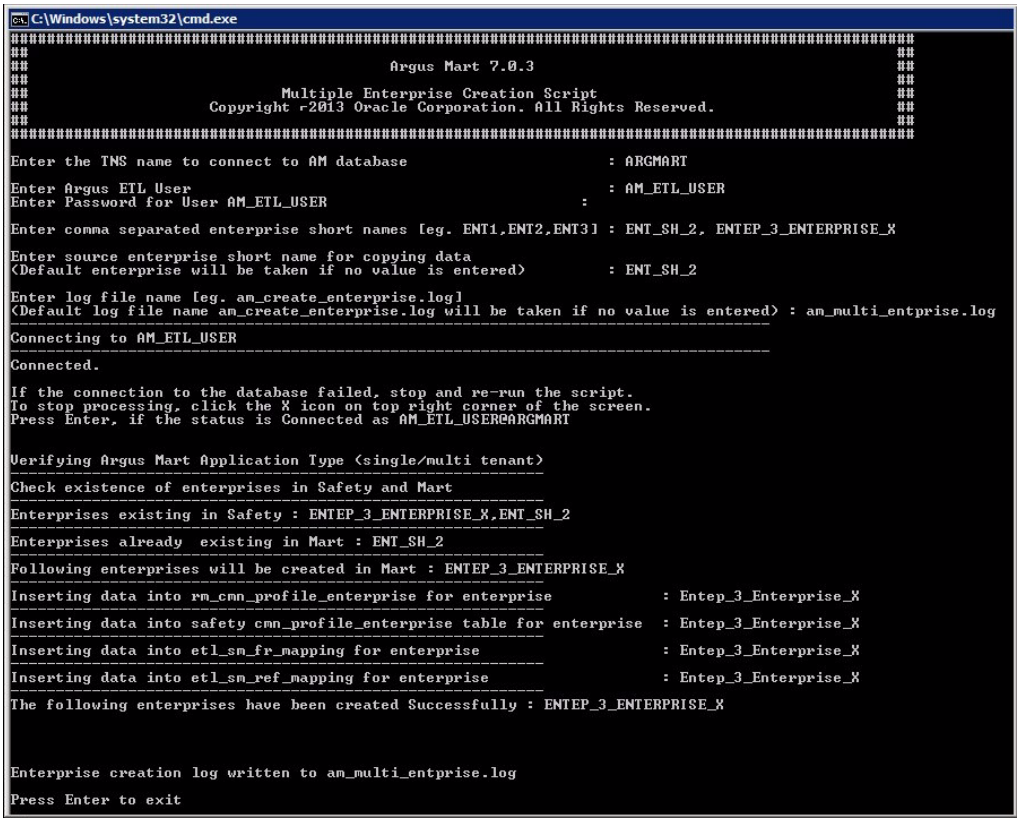
      The system displays a **Connecting** status message and once connected displays **Connected**, as shown in the following figure:

Figure 14–3 Connecting to the Database



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

Figure 14–4 Writing Enterprise Creation Logs



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

15

Troubleshooting

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

The following is the list of error messages:

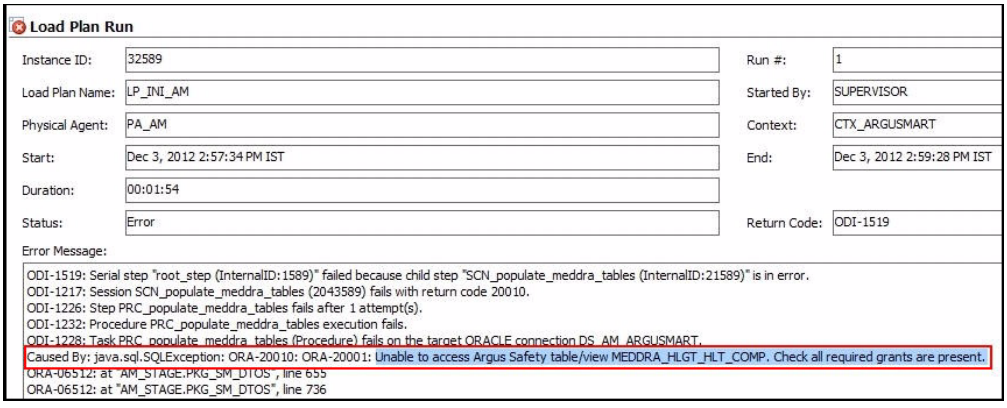
- Dictionary Reload Error
- ETL Execution Pre-Requisite Check Failed Error
- FR Consistency Log Error
- MedDRA Mismatch Error
- Multiple Enterprise Creation Messages
- SMQ-CMQ Loop Error

15.1 Dictionary Reload Error

Error Message

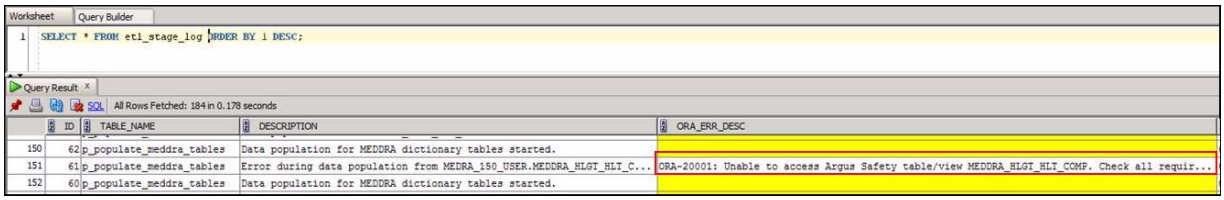
The following error message is displayed during the ETL process, whenever the dictionary is reloaded in Argus Safety:

Figure 15–1 Dictionary Reload 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 15–2 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.

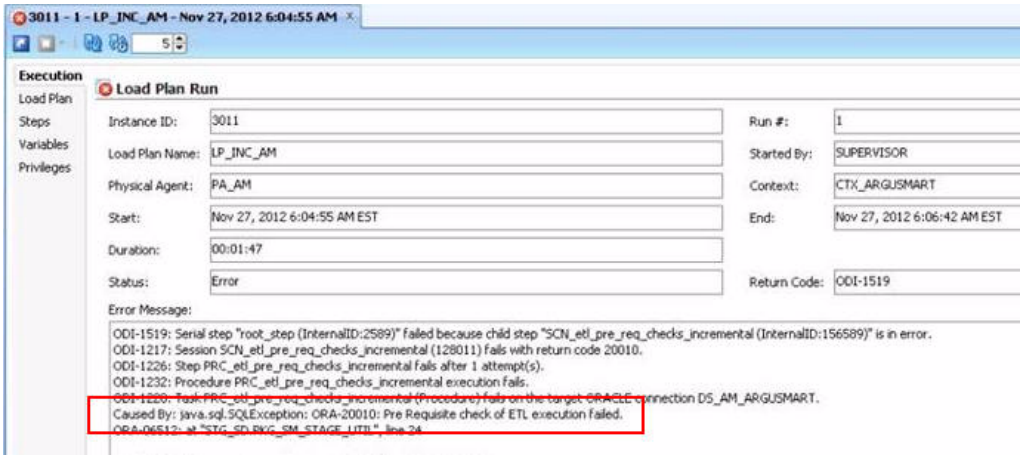
You can refer to Section 3.5.1, Creating User for the Argus Safety Database, for more information.

15.2 ETL Execution Pre-Requisite Check Failed Error

Error Message

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

Figure 15–3 Pre-Requisite Check Failed Error



Cause of Error

The following are the possible causes of this error message:

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

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

Resolution

To resolve this error message, you must:

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

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

15.3 FR Consistency Log Error

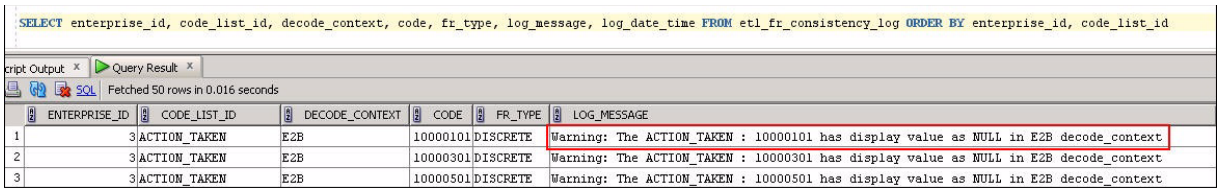
Error Message

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

SELECT enterprise_id, code_list_id, decode_context, code, fr_type, log_message, log_date_time FROM etl_fr_consistency_log ORDER BY enterprise_id, code_list_id

The following is the error message:

Figure 15–4 FR Consistency Error



Cause of Error

The display value for a codelist is NULL in the **rm_code_list_detail_discrete** table in Argus Safety.

Resolution

You must update the value for the codelist in the **rm_code_list_detail_discrete** table in Argus Safety and re-run the ETL.

15.4 MedDRA Mismatch Error

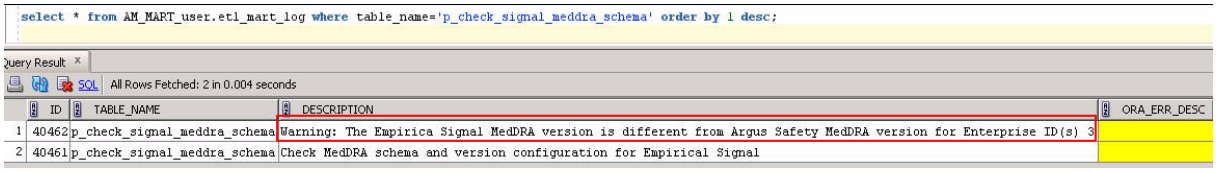
Error Message

You can run the following query using the SQL developer to view the MedDRA mismatch warning message in the **etl_mart_log** table:

```
SELECT * FROM am_mart_user.etl_mart_log WHERE table_name = 'p_check_signal_meddra_
schema' ORDER BY 1 DESC;
```

The following is the error message:

Figure 15–5 MedDRA Mismatch Error



Cause of Error

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

Resolution

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

15.5 Multiple Enterprise Creation Messages

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

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

15.5.1 Source Enterprise Does Not Exist In Mart

Error Message

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

Cause of Error

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

If the name of the Source Enterprise that you have entered while creating multiple enterprises does not exist in Argus Mart, this validation message is displayed.

Resolution

The name of the Source Enterprise that you enter while creating multiple enterprises must exist in Argus Mart.

15.5.2 Enterprise Does Not Exist In Argus Safety

Error Message

From the list provided, no enterprise exists in Argus Safety. Close the window and run application again.

Cause of Error

The name of the enterprises that you enter while creating multiple enterprises in Argus Mart must also exist in the Argus Safety database.

If these enterprise names do not exist in Argus Safety, this validation message is displayed.

Resolution

You must ensure that the name of the enterprises that you enter while creating multiple enterprises in Argus Mart exist in the Argus Safety database.

15.5.3 Enterprise Does Not Exist For Configuration In Mart

Error Message

From the list provided, no enterprise is valid for configuration in Mart. Close the window and run application again.

Cause of Error

This validation message is displayed if all the enterprise names that you have entered on the Multiple Enterprise Creation screen already exist in the Argus Mart database.

Resolution

You must ensure that the enterprise names that you want to create in Argus Mart using the Multiple Enterprise Creation screen do not already exist in Argus Mart.

15.6 SMQ-CMQ Loop Error

Error Message

Error in p_set_Child_Record while processing term code self referencing parent child relationship leading to an infinite loop

Cause of Error

There is an SMQ, which is a Parent in the hierarchy, and has also been referenced as a Child in the hierarchy. This is termed as the Self Referencing Parent Child relationship, which leads to an infinite loop.

Resolution

You must ensure that an SMQ, which serves as a Parent in the hierarchy, must not also be present as a Child in the hierarchy.