

Oracle® Healthcare Analytics Data Integration

Secure Installation and Configuration Guide

Release 3.1 for Oracle Data Integrator

E29531-12

May 2016

Oracle Healthcare Analytics Data Integration Secure Installation and Configuration Guide, Release 3.1 for Oracle Data Integrator

E29531-12

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Preface

This guide provides information about how to install Oracle Healthcare Analytics Data Integration (OHADI).

This preface contains the following topics:

- [Audience](#) on page v
- [Documentation Accessibility](#) on page v
- [Finding Documentation on Oracle Technology Network](#) on page vii
- [Related Documents](#) on page vii
- [Conventions](#) on page ix

Audience

This installation guide is intended for those who are responsible for installing Oracle Healthcare Analytics Data Integration. You should be familiar with:

- Oracle Database
- Oracle Data Integrator (ODI) application
- Oracle Healthcare Data Warehouse Foundation (HDWF)
- UNIX operating system (OS)

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Finding Information and Patches on My Oracle Support

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

Before you install and use an Oracle software release, always visit the My Oracle Support Web site for the latest information, including alerts, release notes, documentation, and patches.

Creating a My Oracle Support Account

You must register at My Oracle Support to obtain a user name and password account before you can enter the Web site.

To register for My Oracle Support:

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.

Signing In to My Oracle Support

To sign in to My Oracle Support:

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.

Searching for Knowledge Articles by ID Number or Text String

The fastest way to search for product documentation, release notes, and white papers is by the article ID number.

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 Documentation on Oracle Technology Network

The Oracle Technology Network Web site contains links to all Oracle user and reference documentation. To find user documentation for Oracle products:

1. Go to the Oracle Technology Network at <http://www.oracle.com/technetwork/index.html> and log in.
2. Mouse over the Support tab, then click the **Documentation** hyperlink.
Alternatively, go to Oracle Documentation page at <http://www.oracle.com/technology/documentation/index.html>
3. Navigate to the product you need and click the link.
For example, scroll down to the Applications section and click Oracle Health Sciences Applications.
4. Click the link for the documentation you need.

Related Documents

For more information, see the following documents:

Oracle Data Integrator

- *Oracle Data Integrator Release Notes*
- *Oracle Data Integrator Getting Started Guide*
- *Oracle Data Integrator Installation Guide*
- *Oracle Data Integrator Oracle Fusion Middleware Patching Guide*

- *Oracle Data Integrator Upgrade Guide*
- *Oracle Data Integrator Developer's Guide*
- *Oracle Data Integrator Application Adapters Guide*
- *Oracle Data Integrator Knowledge Module Developer's Guide*
- *Oracle Data Integrator Connectivity and Knowledge Modules Guide:*

Oracle Healthcare Data Warehouse Foundation

- *Oracle Healthcare Data Warehouse Foundation Release Notes*
- *Oracle Healthcare Data Warehouse Foundation Readme*
- *Oracle Healthcare Data Warehouse Foundation Data Dictionary*
- *Oracle Healthcare Data Warehouse Foundation Glossary*
- *Oracle Healthcare Data Warehouse Foundation Electronic Technical Reference Manual [eTRM]*
- *Oracle Healthcare Data Warehouse Foundation Programmer's Guide*
- *Oracle Healthcare Data Warehouse Foundation Secure Installation and Configuration Guide*
- *Oracle Healthcare Data Warehouse Foundation Quick Start Guide*
- *Oracle Healthcare Data Warehouse Foundation Interface Table Electronic Technical Reference Manual [eTRM]*
- *Oracle Healthcare Data Warehouse Foundation Interface Table Programmer's Guide*

Oracle Healthcare Analytics Data Integration

- *Oracle Healthcare Analytics Data Integration Release Notes*
- *Oracle Healthcare Analytics Data Integration Secure Installation and Configuration Guide*
- *Oracle Healthcare Analytics Data Integration Administrator's Guide*
- *Oracle Healthcare Analytics Data Integration Programmer's Guide*
- *Oracle Healthcare Analytics Data Integration Rules Catalog*
- *Oracle Healthcare Analytics Data Integration Attribute Level Mappings*
- *Oracle Healthcare Analytics Data Integration Electronic Technical Reference Manual*
- *Oracle Healthcare Analytics Data Integration Security Guide*

Oracle Healthcare Analytics Data Integration Application Toolkit Documentation

- *Oracle Healthcare Analytics Data Integration Release Notes*
- *Oracle Healthcare Analytics Data Integration Application Toolkit Secure Installation and Configuration Guide*
- *Oracle Healthcare Analytics Data Integration Application Toolkit Administrator's Guide*
- *Oracle Healthcare Analytics Data Integration Application Toolkit Programmer's Guide*
- *Oracle Healthcare Analytics Data Integration Application Toolkit Programmer's Guide for EHA Self-Service Analytics*
- *Oracle Healthcare Analytics Data Integration Application Toolkit Electronic Technical Reference Manual*

- *Oracle Healthcare Analytics Data Integration Application Toolkit Security Guide*

Conventions

The following text conventions are used in this document:

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.

This section presents an overview of the Oracle Healthcare Analytics Data Integration (OHADI) requirements. It also describes the tasks that you must complete before you install the OHADI application.

1.1 Introduction

OHADI processes data from diverse source systems and loads the homogenized, consistent, complete, correct, and standardized data into HDWF for analysis.

1.2 Technology Stack and System Requirements

The following hardware and software technology stacks are required for OHADI installation:

- Oracle Database 11.2.0.4 (11g)
- Oracle Data Integrator 11.1.1.7.0 (11g)
- Oracle Healthcare Data Warehouse Foundation 6.1
- Linux operating system with at least 8 GB RAM

Note: All references to media pack server in this document refer to the computer onto which you download the media pack for Oracle Healthcare Analytics Data Integration.

[Table 1–1](#) lists system requirement references:

Table 1–1 System Requirements

Product	Reference
Oracle Database 11.2.0.4 (11g)	Database Installation Guide for <platform>
Oracle Data Integrator 11.1.1.7.0	Oracle Data Integrator Installation Guide
Oracle Healthcare Data Warehouse Foundation 6.1	Oracle Healthcare Data Warehouse Foundation Patch Readme and Release Notes

Prerequisites

This chapter contains the following topics:

- [Section 2.1, "Prerequisites for the Installation"](#)
- [Section 2.2, "General Guidelines for the Installer"](#)
- [Section 2.3, "Preinstallation Steps for Upgrading from OHADI 3.0 to 3.1"](#)
- [Section 2.4, "Installation Log Files"](#)

2.1 Prerequisites for the Installation

Before you can install the OHADI application, complete the following pre-installation tasks:

- You should have good knowledge of Oracle Database, Oracle Data Integrator (ODI), and Linux OS.
- For 11g installation, install Oracle Database 11.2.0.4 (11g) and Oracle Data Integrator 11.1.1.7.0.
- Install Oracle Healthcare Data Warehouse Foundation 6.1. Follow the instructions in *Oracle Healthcare Data Warehouse Foundation Patch Readme* and *Release Notes*.
- Make sure that Temporary tablespace (Temp) is available for DB schema creation through installer.
- Make sure that Temporary Tablespace (Temp) is available in the DB where the Metadata Configuration schema (for HDWF DB) and Repository schemas (Repository DB) are created. If it is not available, make sure that it is created manually before starting the installer.
- Create a separate Permanent Tablespace or provide existing Permanent Tablespace for ODI repository DB schema creation. The installer does not create any table spaces.
- At least 2 GB space should be available in the installation directory.
- For remote installation (that is, if the ODI repository DB is present in the remote server, and you are installing on a Linux or Unix machine), make sure the following are met:
 - Mount the (datapump) directory of the remote DB server to the installation server with appropriate read and write privileges.
 - Make sure that the remote directories are accessible after mounting from the installation server.

- The Linux user of the remote server, who executes the Oracle process, must have the privilege of 777 to the directory (datapump).
- If the repository DB exists on an Exadata machine, repository DB single node (the node which is being mounted) should be provided in input screen for ODI DB host server.
- Make sure that the System, HDWF, or Interface schema users do not display the expiry notification upon logging into the database. If an expiry notification is displayed, reset your password before running the installer.

Note: In the following sections, the text enclosed within <> indicate parameters. You need to provide the parameter values as per your system.

2.2 General Guidelines for the Installer

- This installer is for a fresh or upgrade installation of the OHADI or HLI (Health Language, Inc.) product.
- The installation scripts are coded in Linux OS. Make sure the installation server is compatible.
- As the installer is 64-bit, your installation server should also be a 64-bit OS.
- The Linux X-Windows should be used for the Linux Oracle Universal Installer (OUI) installation (Linux graphical user interface).
- Only one installer instance should be executed at a time. Oracle does not recommend running multiple instances of the installer.
- The installer exits when the script encounters an error. You must check for errors manually before restarting the installer.
- While entering installation details, do not leave any space before or after the input details in the test box.
- OUI throws an error on entering an invalid path in the installation server. Do not enter any space before path declaration, after the path configuration, or in between paths.
- Installation folder names should not have any spaces.
- Do not leave any text box blank in the OUI. The OUI throws an error and does not let you traverse through the OUI screen.
- If any install script fails, an installer status email is sent to the configured email address (specified during installation).
- The OUI installer can be re-executed multiple times but the installed script is skipped from re-execution.
- The OUI installer does not fix any issues automatically. If the installation fails, you must manually verify and fix the issues.
- If you click **Stop Installation** during installation, the OUI installer stops. However, the current script execution (if any), runs in the server, which needs to be stopped manually.

- The OUI installer does not validate the system space requirement of the installation server. Make sure that there is enough space in the installation directory and Oracle home directory.
- The installer must run on the system where ODI is installed.
- When you are re-executing the installer due to a failure, enter the same details in the question prompting phase at all times. Do not delete any objects in the installation folder.
- For re-installing the code on a different server path, rename all the files in `$ORACLE_BASE/oraInventory/ContentsXML/` directory, before executing the installer.

2.3 Preinstallation Steps for Upgrading from OHADI 3.0 to 3.1

- Interface tables must not be loaded during installation or data migration process.
- Make sure that existing interface data is processed to HDM (using OHADI 3.0).
- Complete the ETL execution cycle.

2.4 Installation Log Files

- During installation, the OUI generates the following log files:
 - `installActions<timestamp>.log` - This log file records the action of the installer and helps in diagnosing problems with the installation.
 - `oraInstall<timestamp>.out` - This output file records all the output of SQL scripts that are run by the installer.
 - `oraInstall<timestamp>.err` - This error file records all the errors from the scripts run by the installer. You must include the above log files while reporting any problems that occur during installation. The log files are time stamped and each installation session creates a new log file.

On a Linux installation, the log files are located at `$ORACLE_BASE/oraInventory/logs`.

For example, `/u01/app/oraInventory/logs`

- In the back end, the installer creates the following directories:

For OHADI:

- `ohadi_xmls` -- OHADI repository data
- `ohadi_sql` -- OHADI DB configuration scripts
- `ohadi_scripts` -- OHADI installation scripts
- `ohadi_logs` -- OHADI installation logs

For HLI:

- `hli_xmls` -- HLI repository data
- `hli_sql` -- HLI DB configuration scripts
- `hli_scripts` -- HLI installation scripts
- `hli_logs` -- HLI installation logs

These directories are created under the path:

OHADI path: <OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/

HLI path: <OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.hli/

- OHADI installation consists of multiple steps. The execution status of each file is captured in a summary log.

The following is an example:

OHADI

OHADI_ODI_DATABASE_SETUP - OHADI data model and seed data setup

OHADI_ODI_MASTER_WORK_CREATE - OHADI ODI master and work repository user creation

OHADI_ODI_DATADUMP_CREATE - OHADI ODI XML data directory updation

OHADI_ODI_MASTER_IMPORT - OHADI ETL dump import

OHADI_ODI_WORK_REP_UPDATE - OHADI work repository updation

OHADI_SCHEMA_ENC_PASWD - OHADI ODI schema password encryption

OHADI_ODI_UTIL_FILE_CREATE - OHADI ODI Utility file creation

OHADI_ODI_REPO_TOPOLOGY_UPDATE - OHADI relation connection updation in repository

OHADI_ODI_INSTALL_VERIFICATION - OHADI few ETL test for validation

HLI

HLI_ODI_DATABASE_SETUP - HLI data model and seed data setup

HLI_ODI_MASTER_WORK_CREATE - HLI ODI master and work repository user creation

HLI_ODI_MASTER_IMPORT - HLI ETL dump import

HLI_ODI_WORK_REP_UPDATE - HLI work repository updation

HLI_SCHEMA_ENC_PASWD - HLI ODI schema password encryption

HLI_ODI_UTIL_FILE_CREATE - HLI ODI Utility file creation

HLI_ODI_REPO_TOPOLOGY_UPDATE - HLI relation connection updation in repository

HLI_ODI_INSTALL_VERIFICATION - HLI few ETL test for validation

Each of the above steps may consist of separate log file indicating the other steps involved and their execution status.

For example:

OHADI_ODI_DATABASE_SETUP_SUMMARY.log will have all data model and seed data related execution status.

You should include the OUI generated log files and OHADI specific log files while reporting any problems that occur during installation.

Installing Oracle Healthcare Analytics Data Integration

This chapter describes how to install OHADI. It contains the following sections:

- Section 3.1, "Setting up the Installation Environment"
- Section 3.2, "Installing Oracle Healthcare Analytics Data Integration"
- Section 3.3, "Post Installation Steps"

3.1 Setting up the Installation Environment

To set up the installation environment, perform the following steps. This is common for both OHADI and HLI installation.

1. Download and unzip the media pack file into the Windows OS.
2. Create a directory in Linux installation server for copying OHADI 3.1 installation package files. For example, OHADI_INSTALL_DIR.
3. Locate and transfer the installer file OHADI_V31_ODI_Linux-x64.zip in the binary mode from Windows OS to the OHADI installation directory in the Linux server (for example, OHADI_INSTALL_DIR).
4. Convert the installer execution shell to *SH* shell as the installer script gets executed in *SH* shell of Linux or Unix OS.
5. Extract the contents of the OHADI_V31_ODI_Linux-x64.zip file in the <OHADI_INSTALL_DIR> directory using the following command:

```
unzip -a OHADI_V31_ODI_Linux-x64.zip
```

Note: No error message must be prompted upon execution of the unzip command.

6. Provide execute permission for all the scripts as per the following commands:

```
chmod 755 <OHADI_INSTALL_DIR>/Disk1/install/*
```
7. Create a directory *oui_home* in the path <OHADI_INSTALL_DIR>/ as per the following command:

```
cd <OHADI_INSTALL_DIR>/  
mkdir oui_home  
chmod 777 oui_home
```

8. Make sure that ORACLE_HOME environment variable is setup in installer execution session as shown below. Installer will require this for db credential validations else, the installer will display error.

```
export ORACLE_HOME=<path where oracle installed>
```

For example,

```
export ORACLE_HOME=/u01/app/oracle/product/112040
```

9. Copy the **oraInst.loc** file from ORACLE_HOME to the installation directory. Create a directory named **inventory** in the installation directory, and update the path of the inventory location (inventory_loc) in the oraInst.loc file.

Note: If the oraInst.loc file is not found in the ORACLE_HOME directory, you can create one in the <OHADI_INSTALL_DIR>.

For example,

```
inventory_loc=<OHADI_INSTALL_DIR>/inventory
```

```
inst_group=dba
```

10. Start the OUI from the path <OHADI_INSTALL_DIR>/Disk1/install/ by executing the command in Linux X-Windows prompt. Make sure that you have taken care of the Preinstallation checklist (see [Section 2.1](#)) before executing the installer.

```
cd <OHADI_INSTALL_DIR>/Disk1/install/
```

```
./runInstaller -invPtrLoc <OHADI_INSTALL_DIR>/oraInst.loc
```

11. The OUI Welcome screen is displayed on Linux X- windows console.

3.2 Installing Oracle Healthcare Analytics Data Integration

To install OHADI, perform the following steps:

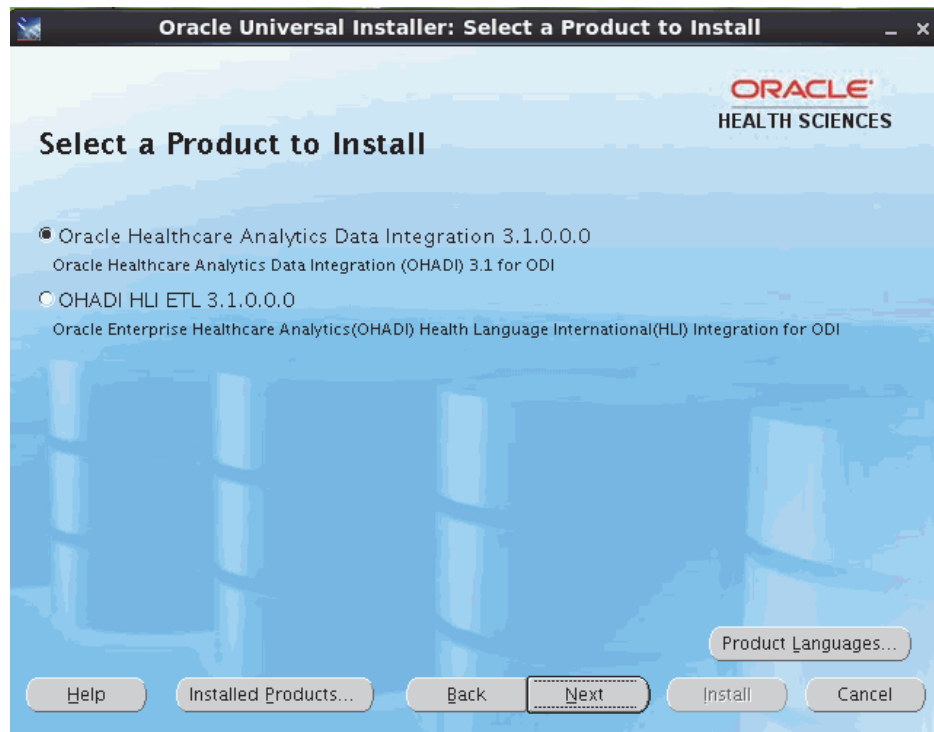
Note: Values in the following graphics are examples. You can change these values.

1. The OUI Welcome screen appears on running the installer on the supported platform.

Figure 3–1 The OUI Welcome Screen

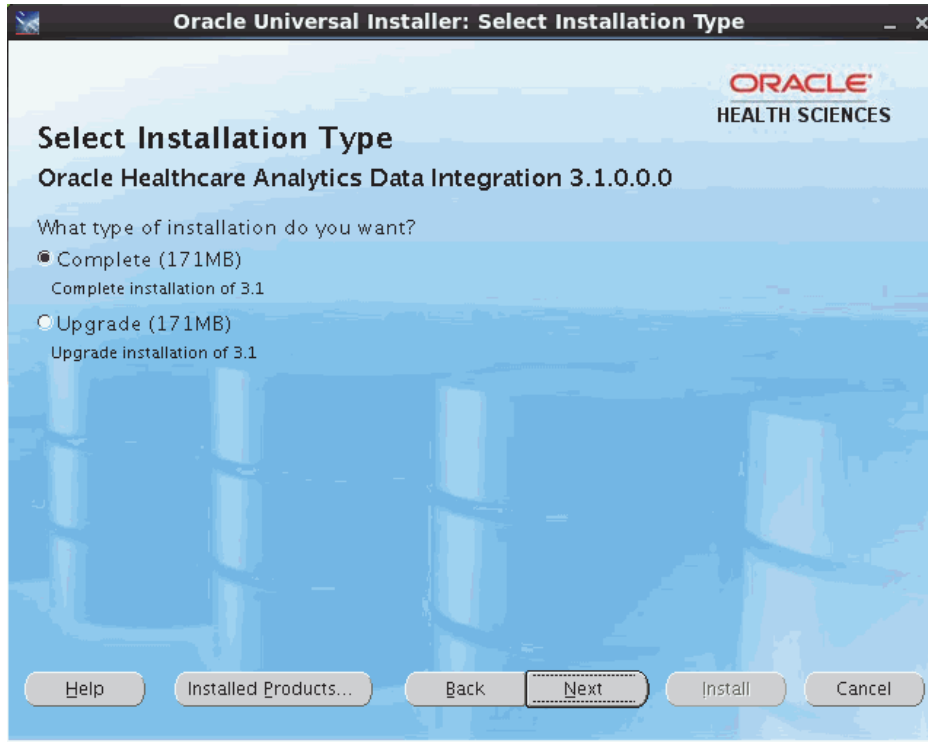
Click **Next** to continue the installation.

2. Select the product to install and click **Next**.

Figure 3–2 Select a Product to Install

3. Select the required installation type and click **Next**:
 - Complete - Install a fresh OHADI 3.1
 - Upgrade - Upgrade from OHADI 3.0 to OHADI 3.1

Figure 3–3 *Select the Installation Type*



4. Specify the following home details:
 - Name - Select **OUIHome1** from the drop-down list.
 - Path - Provide the complete path of oui_home. For example, <OHADI_INSTALL_DIR>/oui_home.

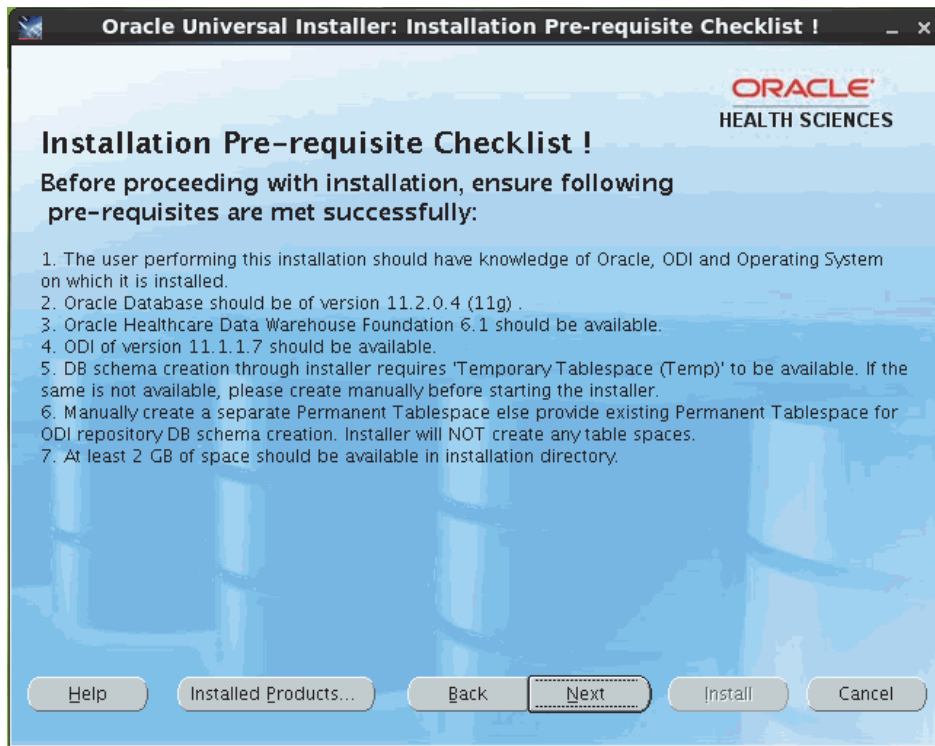
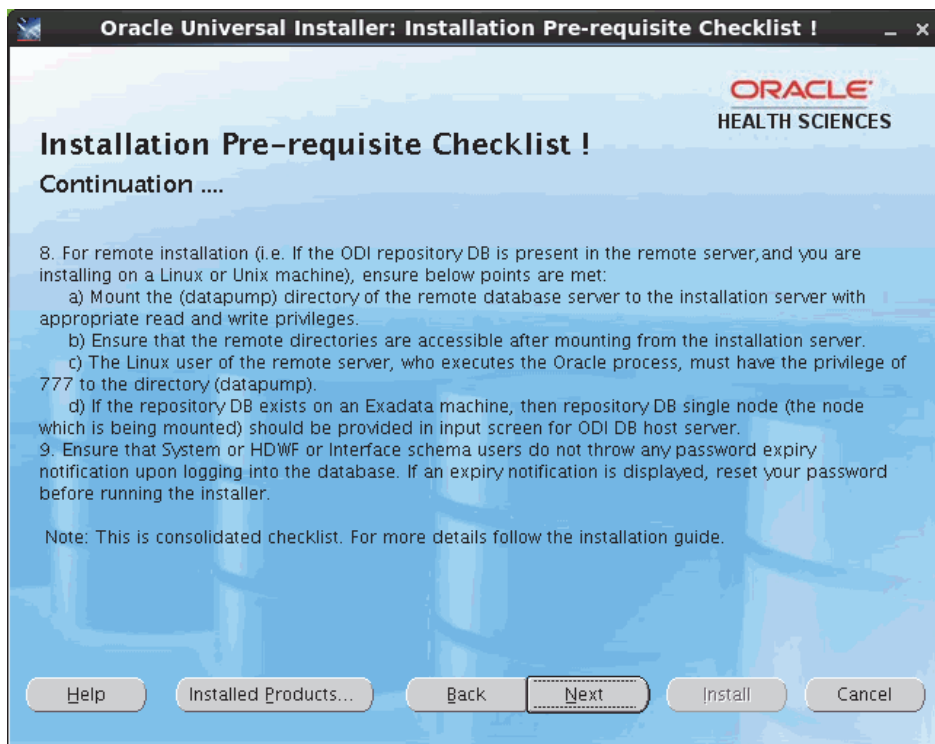
Figure 3-4 Specify Home Details



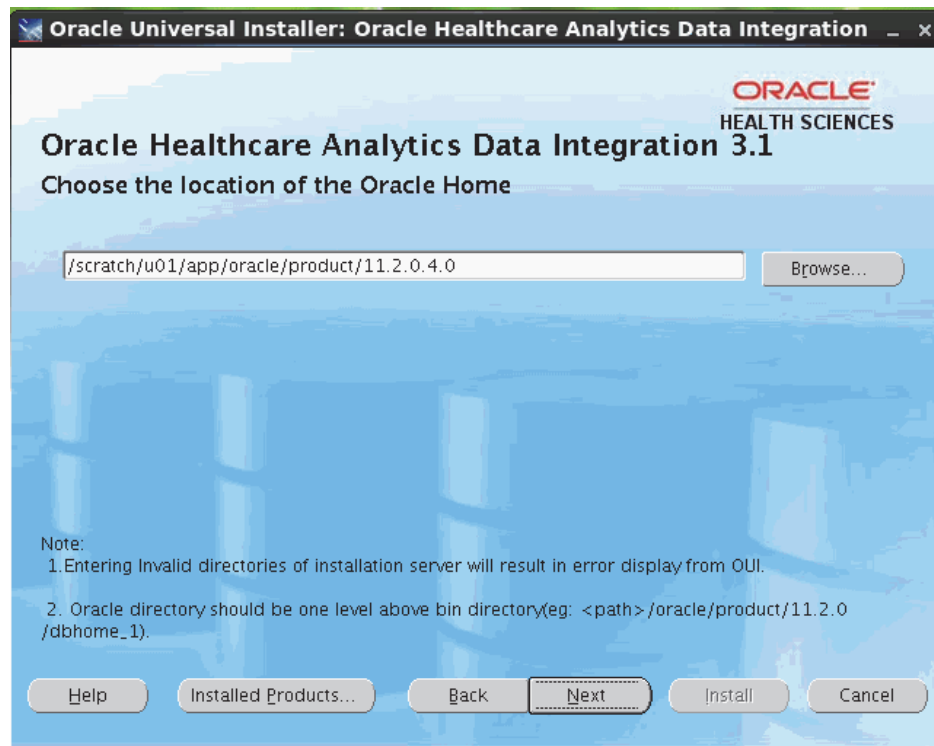
Note: Do not modify the value in the Name field. If you are restarting the installer for installation failures, select **OUIHome1** from the drop-down box.

Also, enter the same installation directory for the **Path** field.

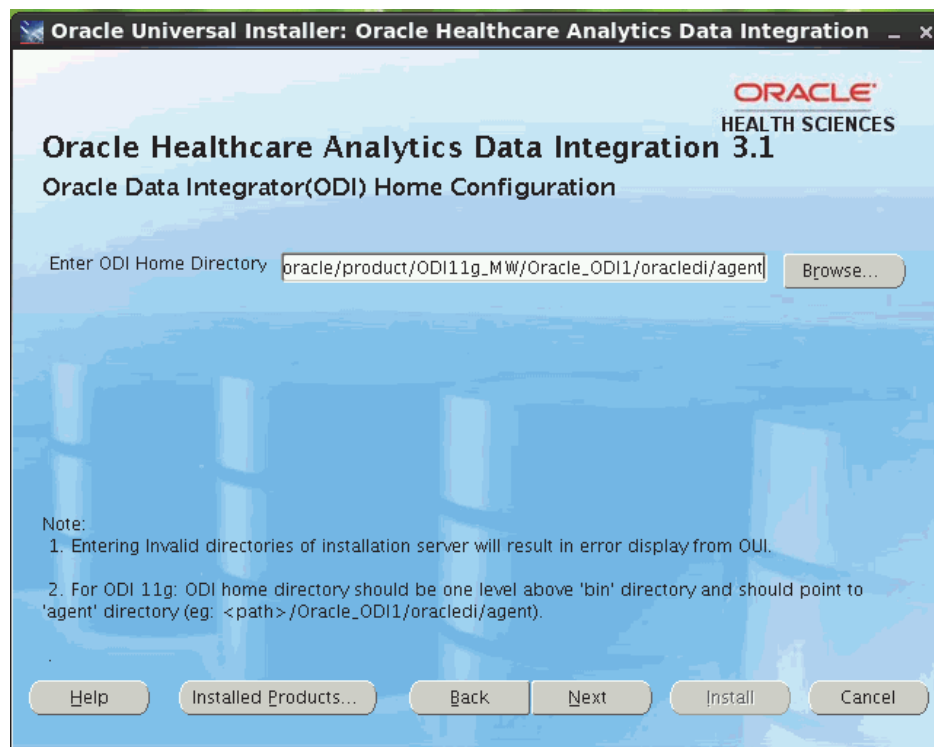
5. Click **Next**.
6. Before installing OHADI, make sure that the following prerequisites are met:

Figure 3–5 Installation Prerequisite Checklist**Figure 3–6 Installation Prerequisite Checklist Continued**

7. Select or specify the path where Oracle is installed on the installation server and click **Next**.

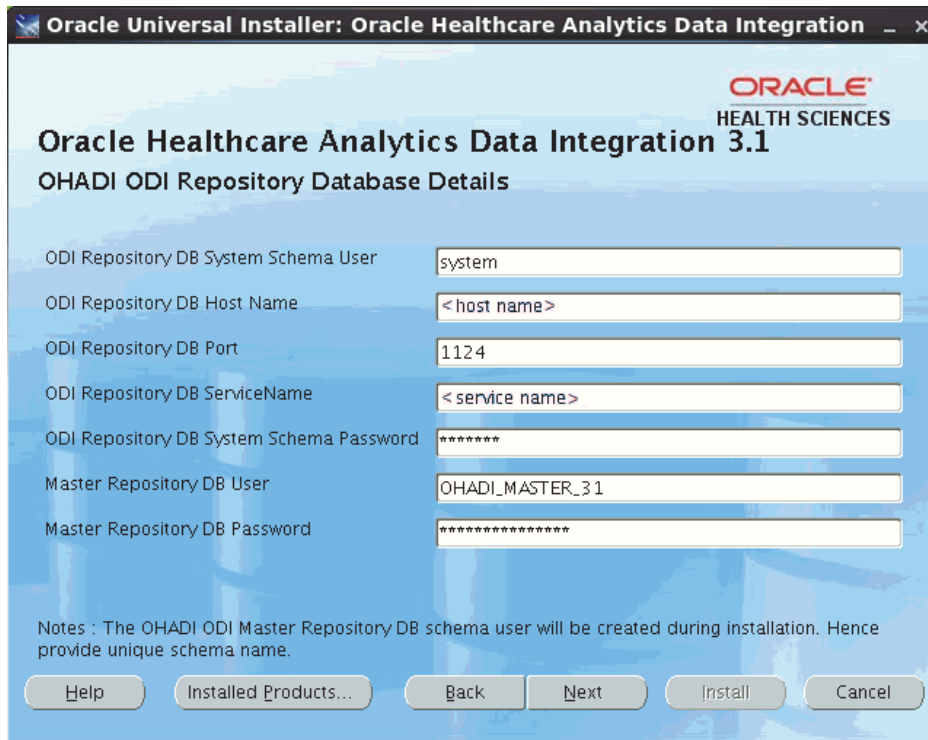
Figure 3–7 Select the Location of the Oracle Home

8. Select or specify the ODI Home Directory path where ODI is installed in the installation server. Read the notes at the bottom of the screen and provide input.

Figure 3–8 Select the ODI Home Directory

9. Enter the OHADI ODI repository database details where the OHADI Work and Master repository needs to be installed as shown in the [Figure 3-9](#) and [Figure 3-10](#).

Figure 3-9 Enter the OHADI ODI Repository Database Details



The screenshot shows the Oracle Universal Installer window for Oracle Healthcare Analytics Data Integration 3.1. The window title is "Oracle Universal Installer: Oracle Healthcare Analytics Data Integration". The Oracle Health Sciences logo is in the top right corner. The main heading is "Oracle Healthcare Analytics Data Integration 3.1" followed by "OHADI ODI Repository Database Details".

ODI Repository DB System Schema User	<input type="text" value="system"/>
ODI Repository DB Host Name	<input type="text" value="< host name >"/>
ODI Repository DB Port	<input type="text" value="1124"/>
ODI Repository DB ServiceName	<input type="text" value="< service name >"/>
ODI Repository DB System Schema Password	<input type="password" value="*****"/>
Master Repository DB User	<input type="text" value="OHADI_MASTER_31"/>
Master Repository DB Password	<input type="password" value="*****"/>

Notes : The OHADI ODI Master Repository DB schema user will be created during installation. Hence provide unique schema name.

Buttons: Help, Installed Products..., Back, Next, Install, Cancel

Note: When invalid user name or password is encountered, verify the host name, port, service name, user name, and password of the relevant user.

Figure 3–10 Enter the OHADI ODI Repository Database Details

Oracle Universal Installer: Oracle Healthcare Analytics Data Integration

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Oracle Healthcare Analytics Data Integration 3.1
OHADI ODI Repository Database Details

Work Repository DB User: OHADI_WORK_31

Work Repository DB Password: *****

Permanent Tablespace for ODI DB Schema: users

Notes : The OHADI ODI Work Repository DB schema user will be created during installation. Hence provide unique schema name.

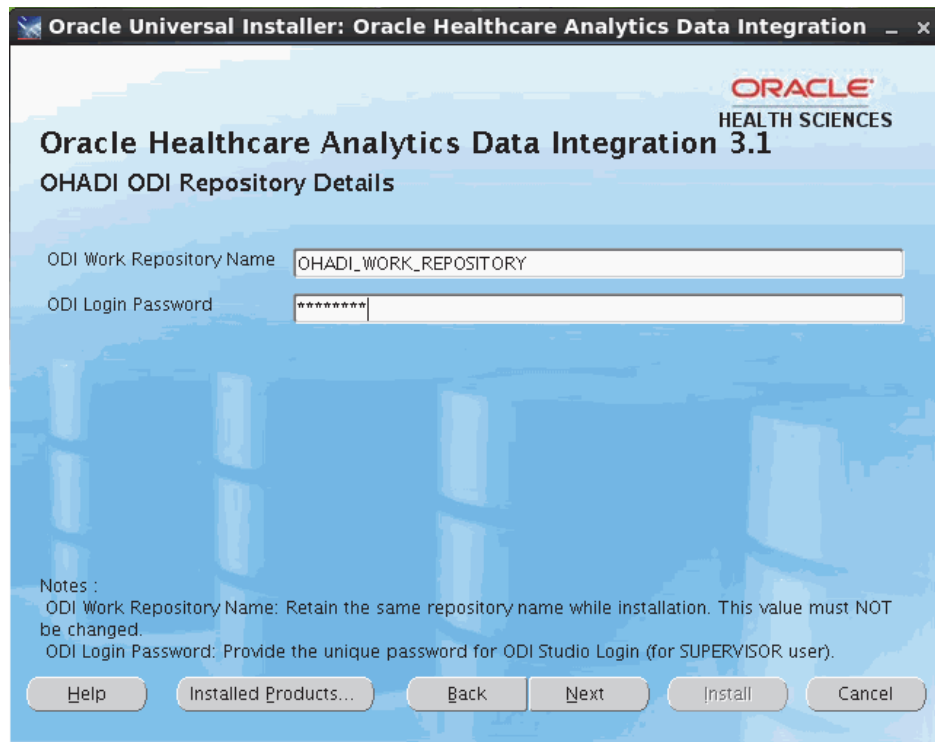
Buttons: Help, Installed Products..., Back, Next, Install, Cancel

Note:

- The DB schema passwords are case-sensitive. Make sure to enter the correct password. OUI validates the DB credentials, and upon entering incorrect password, it displays an error.
- The OHADI ODI master repository and work repository DB schema users are created during runtime execution. Hence, provide unique schema name for each repository. Do not use an existing OHADI master or work repository DB schema names.
- If the repository DB exists on Exadata machine, the repository DB single node (the node which is being mounted) should be provided as input for ODI Repository DB Host Name.
- Enter the DB permanent tablespace for schema creation of ODI repository (see [Section 2.2](#)), that is, master repository and work repository schemas.

10. Click **Next**. The following screen is displayed.

Figure 3–11 OHADI ODI Repository Details



11. Read the respective notes at the bottom of the screen and provide input. Click **Next**.
12. Enter the HDWF 6.1 (source and target) database configuration details in the following two screens and click **Next**.

Figure 3–12 Source and Target Database Configuration

The screenshot shows the Oracle Universal Installer window for Oracle Healthcare Analytics Data Integration 3.1. The window title is "Oracle Universal Installer: Oracle Healthcare Analytics Data Integration". The Oracle logo and "HEALTH SCIENCES" are in the top right. The main title is "Oracle Healthcare Analytics Data Integration 3.1" and the subtitle is "Source and Target Database Configuration". Below the subtitle, it says "Source: Interface (HDI) schema, Target: Healthcare (HDM) schema".

The configuration fields are as follows:

HDWF installed System Schema User	system
HDWF DB Host Name	< host name >
HDWF DB port	1124
HDWF DB ServiceName	< service name >
HDWF System Schema Password	*****
Interface schema user (HDI source)	HDI_WIL_11
Interface schema password (HDI source)	*****

At the bottom, there are buttons for "Help", "Installed Products...", "Back", "Next" (which is highlighted with a dashed border), "Install", and "Cancel".

Note: When invalid user name or password is encountered, verify the host name, port, service name, user name, and password of the relevant user.

Figure 3–13 Source and Target Database Configuration

Oracle Universal Installer: Oracle Healthcare Analytics Data Integration _ x

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Oracle Healthcare Analytics Data Integration 3.1

Source and Target Database Configuration

Source: Interface (HDI) schema, Target: Healthcare (HDM) schema

HDWF schema user (HDM target)

HDWF schema password (HDM target)

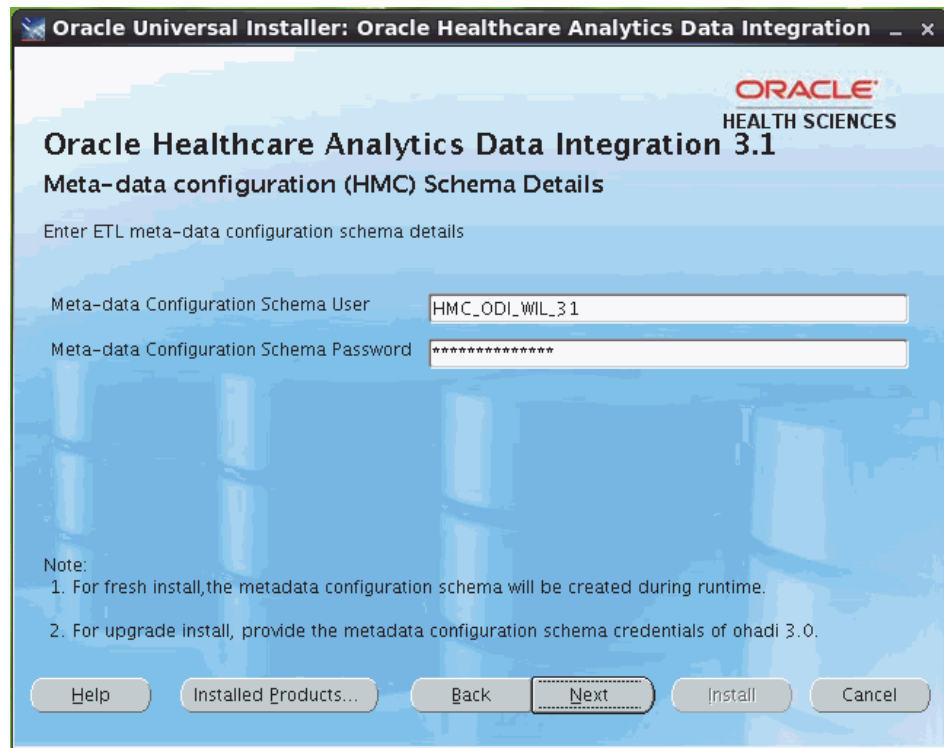
Permanent Tablespace of HDWF Repository DB Schema

Help Installed Products... Back **Next** Install Cancel

Note:

- The DB schema passwords are case-sensitive. Make sure to enter the correct password. OUI validates the DB credentials, and upon entering incorrect password, it displays an error.
 - You cannot leave any text box field blank. The installation displays an error and you will not be able to proceed with the installation.
-

13. Enter the ETL metadata configuration schema details.

Figure 3–14 Enter the ETL Metadata Configuration Schema Details

Note: The metadata configuration schema is created during runtime execution of fresh OHADI installation. This schema is created in the database where HDWF is installed.

For the upgrade option, make sure to use the metadata configuration details of the previous version.

14. Click Next.

Figure 3–15 and Figure 3–16 are prompted only for Upgrade option for configuring OHADI seed data in the Interface and HDWF schema. Select the required option. Oracle recommends you to select **No**. For fresh installation, the default option is **No**.

Figure 3–15 OHADI Seed Data Configuration (HDI)

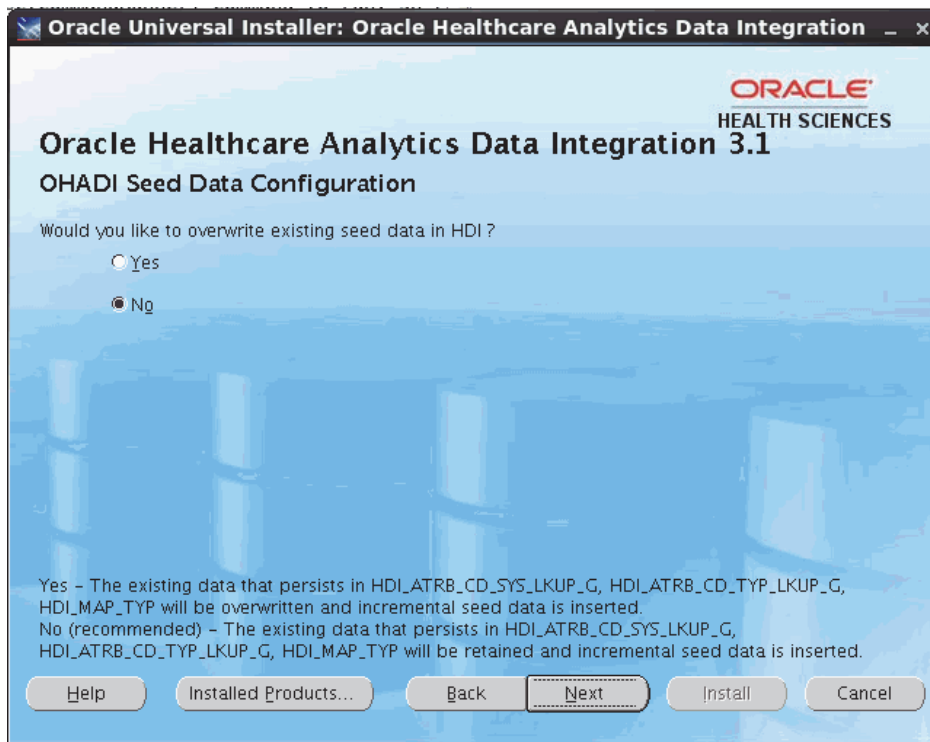
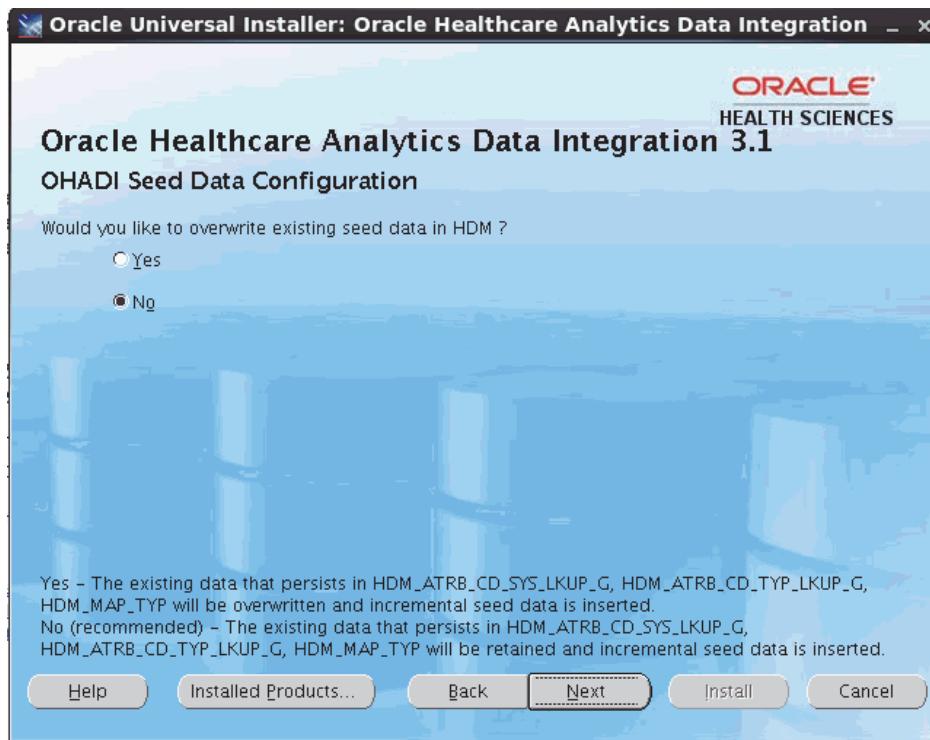
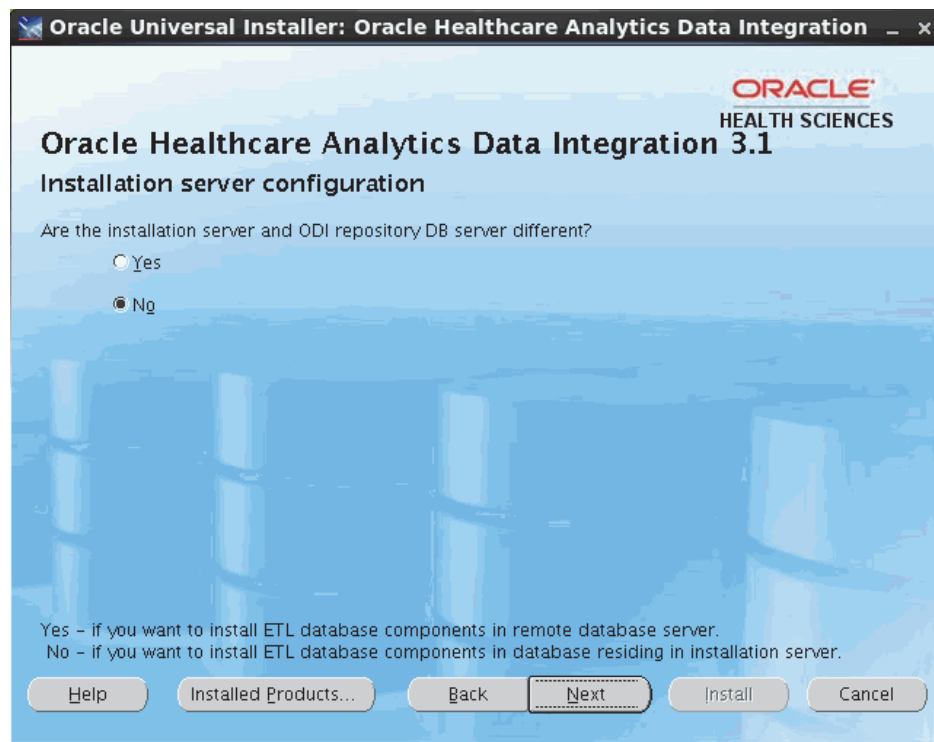


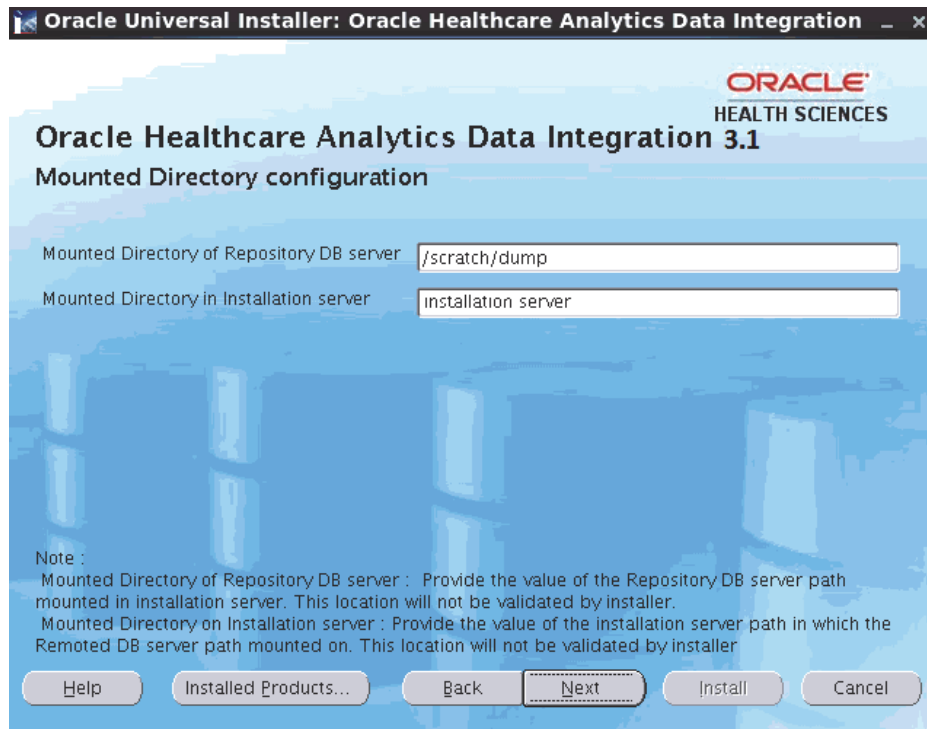
Figure 3–16 OHADI Seed Data Configuration (HDM)



15. Click **Next**. The Installation Server Configuration screen is displayed.

Figure 3–17 Installation Server Configuration

16. Click **Yes** if the installation server and ODI repository DB server are different else, click **No**.
17. Click **Next**. If you have selected **Yes** in step 18, the screen in step 20 is displayed. Else, the Installation Email Configuration screen (step 21) is displayed.
18. Enter the following mounted directory configuration details in which remote server directory is being mounted:
 - Mounted Directory of Repository DB server - Enter the remote server path.
 - Mounted Directory in Installation server - Enter the path in the installation server where mounting is done.

Figure 3–18 Mounted Directory Configuration

For example, you can obtain all storage drives available in the OHADI installation Linux machine by executing the `df -h` command. If the remote server directory is mounted on the installation server, the mounting is displayed as follows:

```
<Remote Server name>:<Remote server path>
      <total size> <used up space> < Available space> <use%>
<Path in installation server where mounting was done>
```

For example,

```
abc: /scratch/dump
      191G 138G 44G 76% /installation server
```

Note:

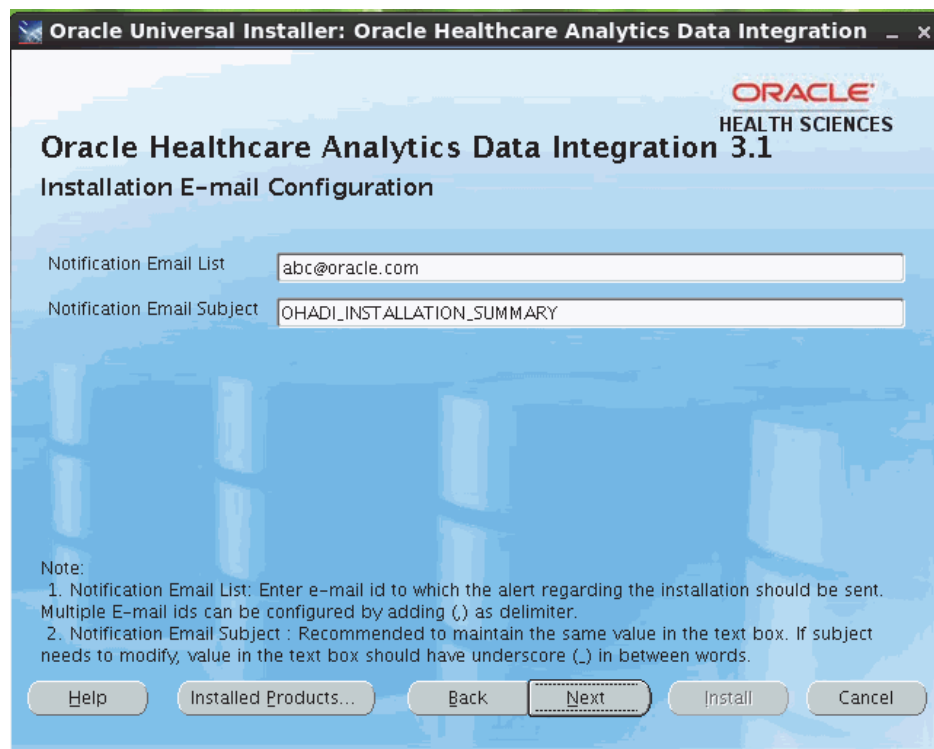
- The directory (datapump) of the remote database server should be mounted to the installation server with appropriate read and write privileges.
 - Make sure that the remote directories are accessible after mounting from the installation server.
 - If the remote server mounted path is displayed as `/`, provide the absolute mounted path of the remote server.
 - The remote server Linux user who executes the Oracle process, must have minimum privilege of `777` to the directory (datapump).
-
-

19. Click **Next**. The Installation Email Configuration screen is displayed.

20. Enter the following email notification configuration details for installation summary details:

- Notification Email List - Provide the email list for the installation notification.
- Notification Email Subject - Retain the value as is.

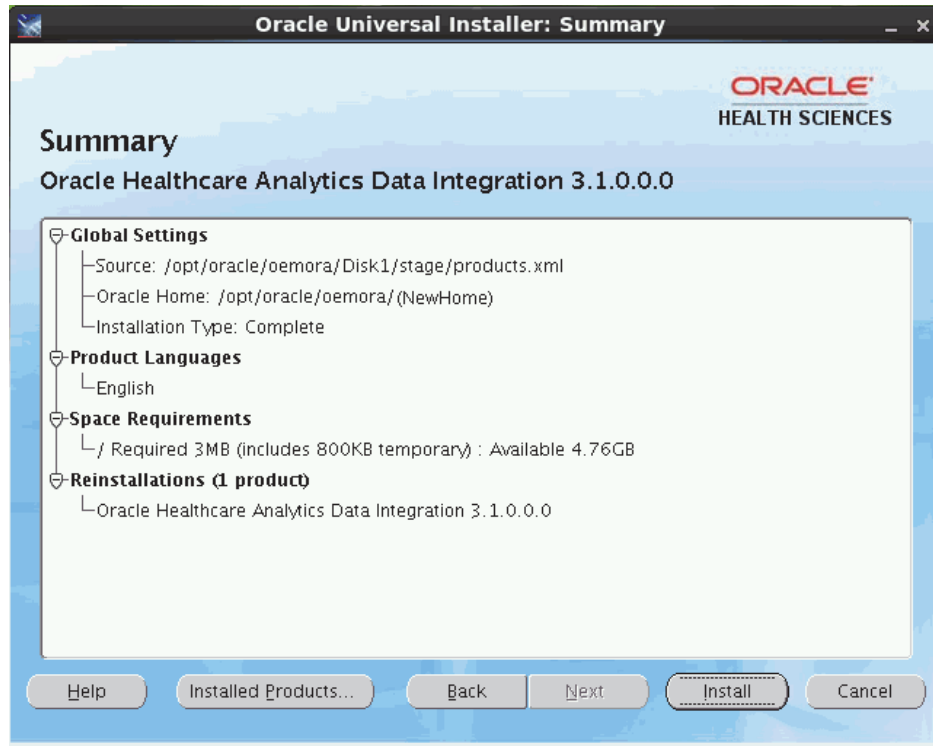
Figure 3–19 Installation Email Configuration



21. Click **Next**.
22. The next screen displays the data entered during the installation question phase. Verify these values. If there are any incorrect values, click **Back** to make the changes.
23. Click **Next**.

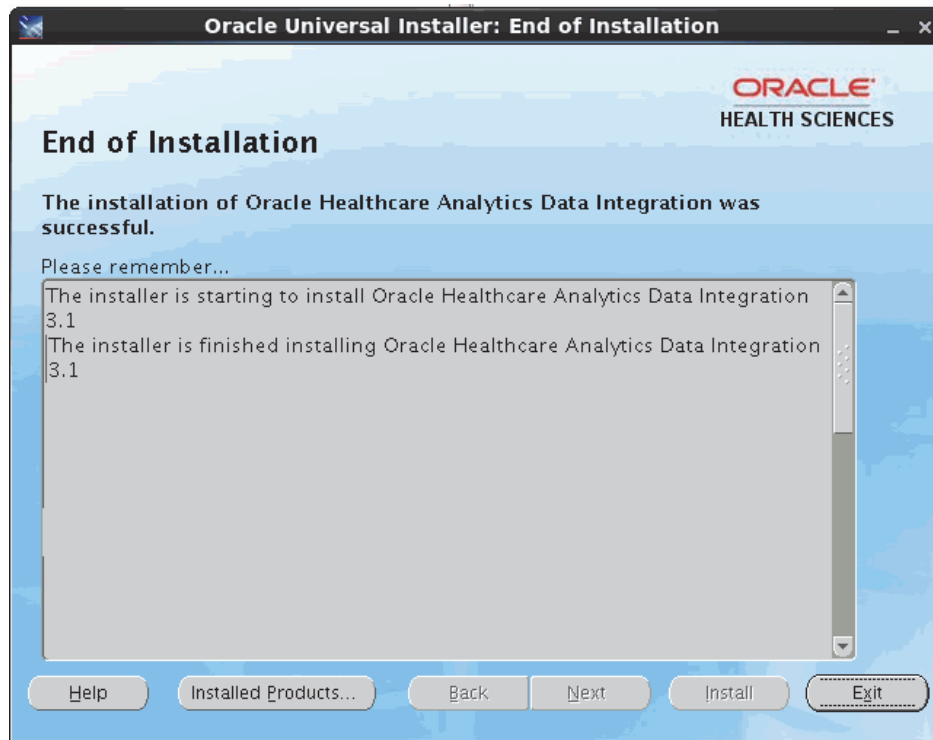
If the configuration is successful, the Summary screen is displayed, with all installation details.

Figure 3–20 Summary



24. Click **Install** to install OHADI product.
25. Once the installation is completed, the End of Installation screen is displayed.

Figure 3–21 End of Installation



26. Click **Exit** to exit the installer.
27. For the Exadata server DB, before executing the ETL, update the multi-node Exadata server name in the ODI Repository Connection and Topology connections manually, which is created during installation.

3.3 Post Installation Steps

Perform the following steps:

- *Applicable for fresh installation only* - After successfully installing OHADI:
 - a. Navigate to the `ohadi_sql` directory under OHADI installation folder.
 - b. Run the `OHADI_HDWF_PERF_INDEX_CREATE_DDL.sql` file in the HDWF schema (HDM).
- *Applicable for remote installation only* - Unmount the mounted directory for remote installation. If you are installing HLI, perform this step after the HLI installation is complete.

Installing Health Language, Inc.

This chapter describes how to install Health Language, Inc. (HLI).

4.1 Installing HLI when Oracle Healthcare Analytics Data Integration is Installed

The HLI product has a dependency on the metadata configuration schema of OHADI. Hence, OHADI 3.1 must be available in the system for the HLI 3.1 installation.

To install HLI, perform the following steps:

Note: Values in the following graphics are examples. You can change these values.

1. The OUI Welcome screen appears on running the installer.

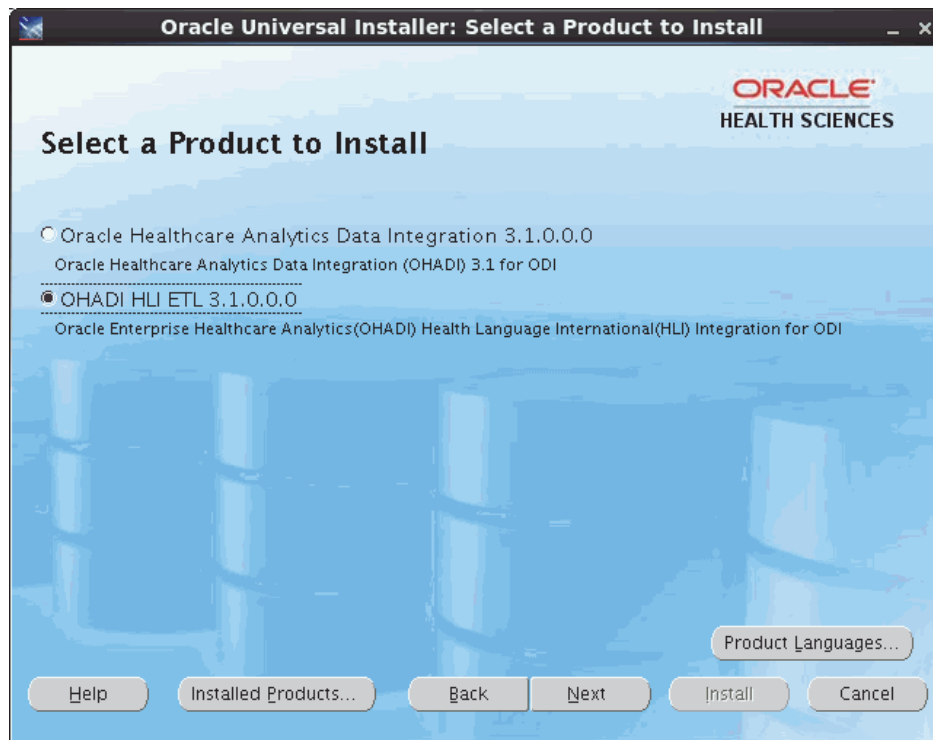
Figure 4-1 The OUI Welcome Screen



Click **Next** to continue the installation.

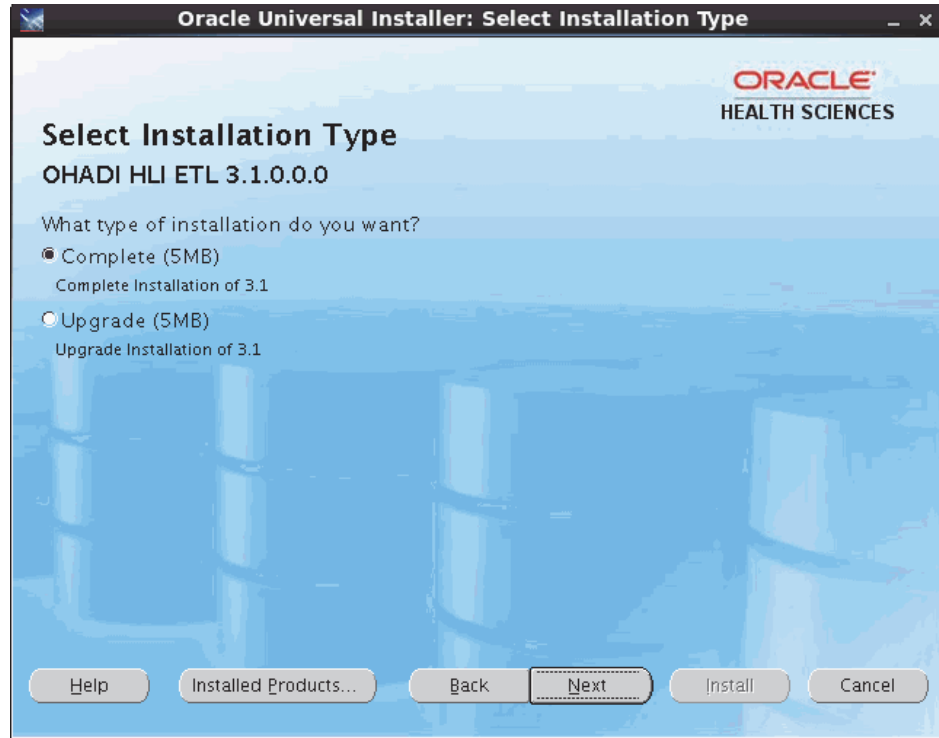
2. Select the product to install and click **Next**.

Figure 4-2 Select a Product to Install



3. Select the required installation type and click **Next**:
 - Complete - Install a fresh HLI 3.1
 - Upgrade - Upgrades installation from HLI 3.0 to HLI 3.1

Figure 4–3 Select the Installation Type



4. Specify the following home details and click **Next**:
 - Name - Select **OUIHome1** from the drop-down list.
 - Path - Provide the complete path of oui_home. For example, <OHADI_INSTALL_DIR>/oui_home.

Figure 4–4 Specify Home Details

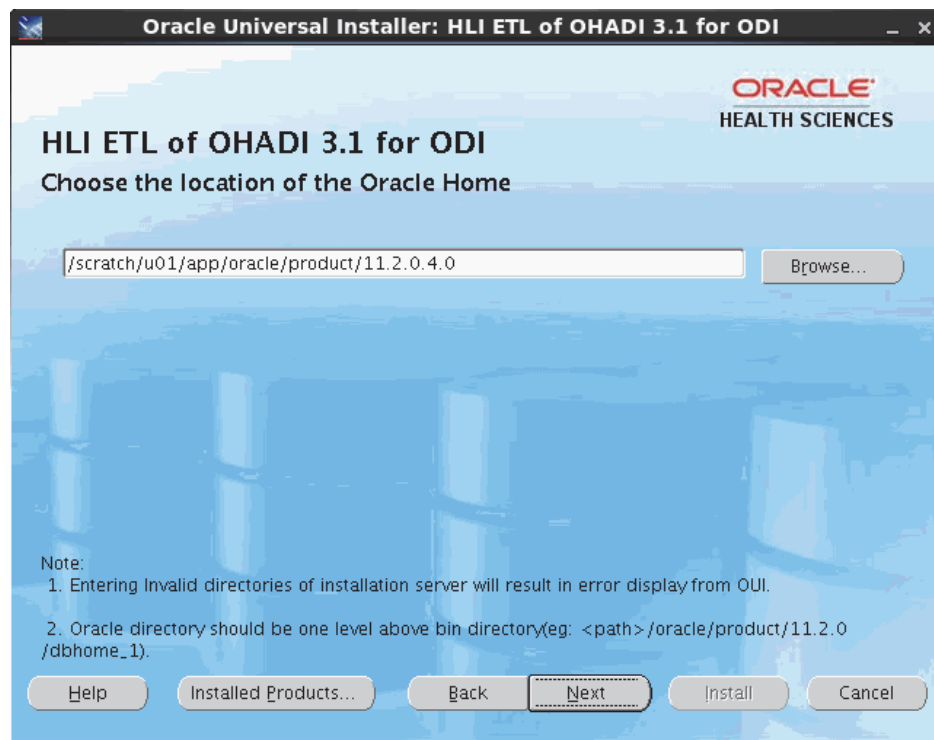


Note: Do not modify the value in the Name field. If you are restarting the installer for installation failures, select **OUIHome1** from the drop-down box. Also, enter the same installation directory in the **Path** field.

5. Click **Next**.
6. Before proceeding with the HLI installation, make sure that the following prerequisites are met:

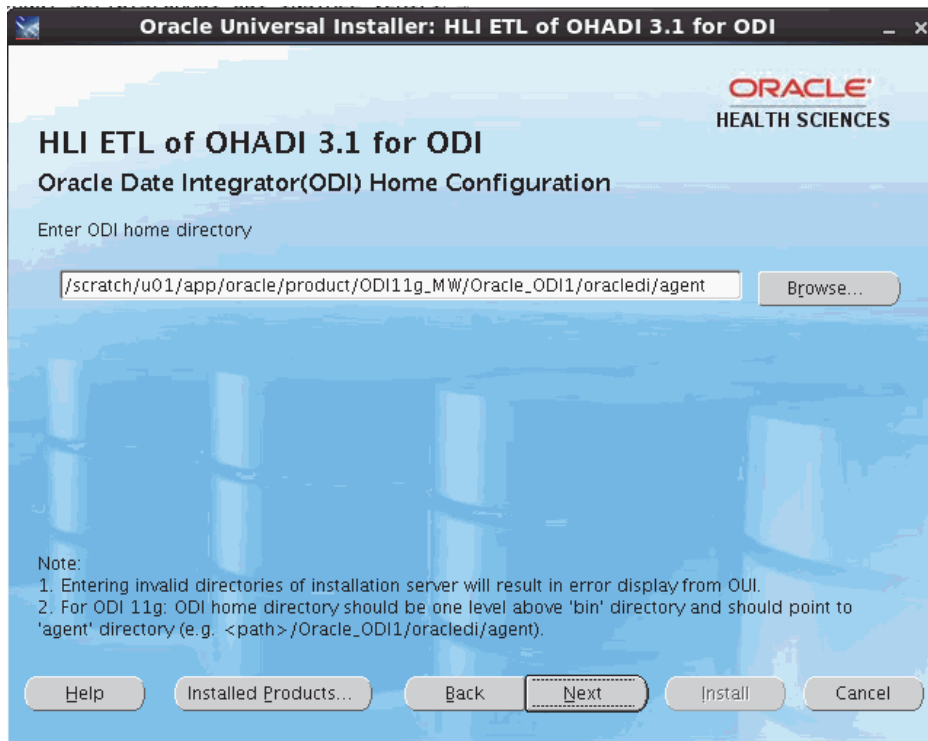
Figure 4-5 Installation Prerequisite Checklist

7. Select or specify the path where Oracle is installed on the installation server and click Next.

Figure 4-6 Select the Location of the Oracle Home

8. Select or specify the ODI Home Directory path where ODI is installed in the installation server. Read the notes at the bottom of the screen and provide input.

Figure 4–7 Select the ODI Home Directory



9. Enter the HLI ODI repository database details where the HLI work and master repository needs to be installed as shown in [Figure 4–8](#) and [Figure 4–9](#).

Figure 4–8 Enter the HLI ODI Repository Database Details

Oracle Universal Installer: HLI ETL of OHADI 3.1 for ODI

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HLI ETL of OHADI 3.1 for ODI
HLI ODI Repository Database Details

ODI Repository DB System Schema User

ODI Repository DB Host Name

ODI Repository DB Port

ODI Repository DB Service Name

ODI Repository DB System Schema Password

Master Repository DB User

Master Repository DB Password

Notes: The HLI ODI Master Repository DB schema user will be created during installation. Hence provide unique schema name.

Help Installed Products... Back **Next** Install Cancel

Note: When invalid user name or password is encountered, verify the host name, port, service name, user name, and password of the relevant user.

Figure 4–9 Enter the HLI ODI Repository Database Details

Note:

- The DB schema passwords are case-sensitive. Make sure to enter the correct password.
 - OUI validates the DB credentials, and upon entering incorrect password, it displays an error.
 - The HLI ODI master repository and work repository DB schema users are created during runtime execution. Hence, provide unique schema name for each repository. Do not use existing schema names.
 - If the repository DB exists on Exadata machine, the repository DB single node (the node which is being mounted) should be provided as input for ODI Repository DB Host Name.
 - Enter the DB permanent tablespace for schema creation of ODI repository (see [Section 2.2](#)), that is, master repository and work repository schemas.
-

10. Click **Next**. The following screen is displayed.

Figure 4–10 HLI ODI Repository Detail

Oracle Universal Installer: HLI ETL of OHADI 3.1 for ODI

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HLI ETL of OHADI 3.1 for ODI

HLI ODI Repository Detail

ODI Work Repository Name:

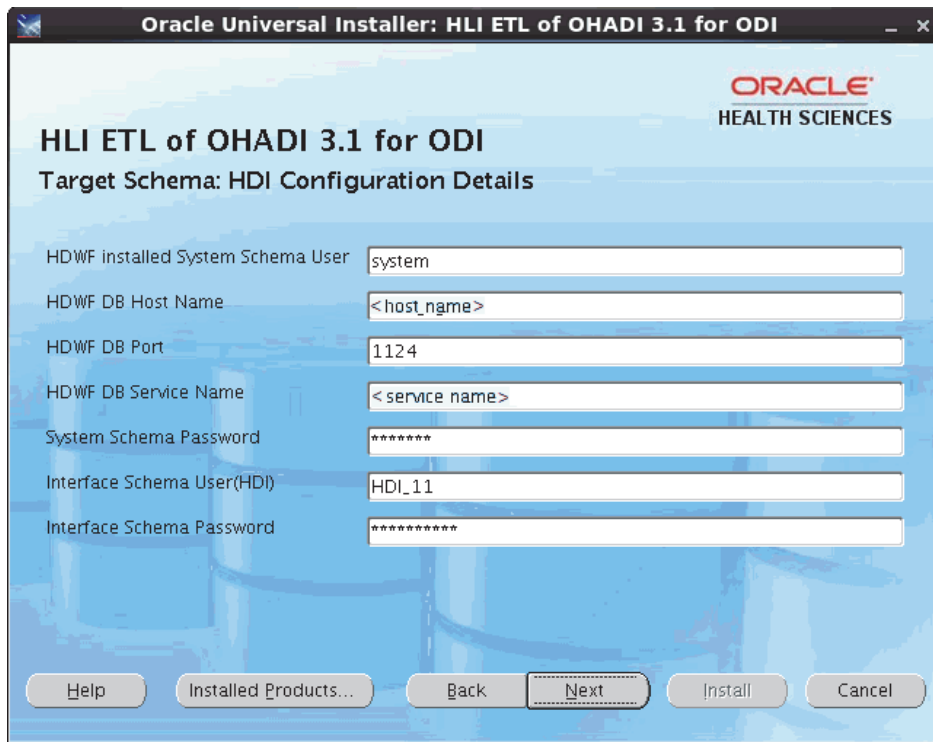
ODI Login Password:

Notes:
ODI Work Repository Name: Retain the same repository name while installation. This value must NOT be changed.
ODI Login Password: Provide the unique password for ODI Studio Login (for SUPERVISOR User).

Help Installed Products... Back **Next** Install Cancel

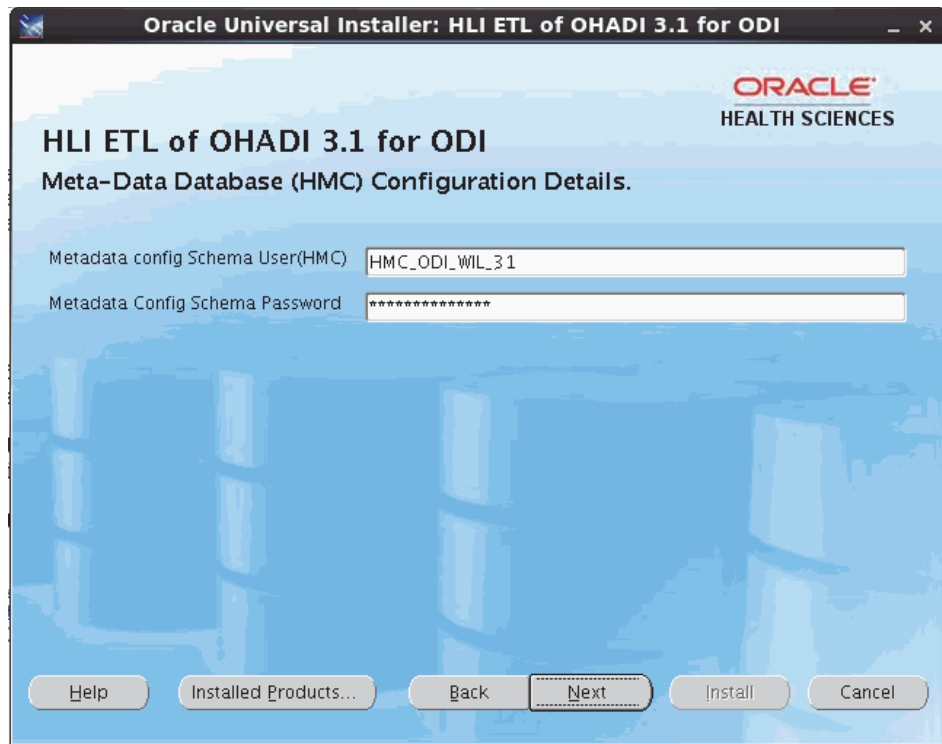
11. Read the respective notes at the bottom of the screen and provide input. Click **Next**.
12. Enter the HDWF 6.1 (target and metadata) database configuration details in [Figure 4–11](#) and [Figure 4–12](#) and click **Next**.

Figure 4–11 Target Schema: HDI Configuration Details



Note:

- When invalid user name or password is encountered, verify the host name, port, service name, user name, and password of the relevant user.
 - (Mandatory) For the interface schema user, you must make sure to prefix or suffix the HDI schema name. For example, HDI_11 or CUST_HDI.
-
-

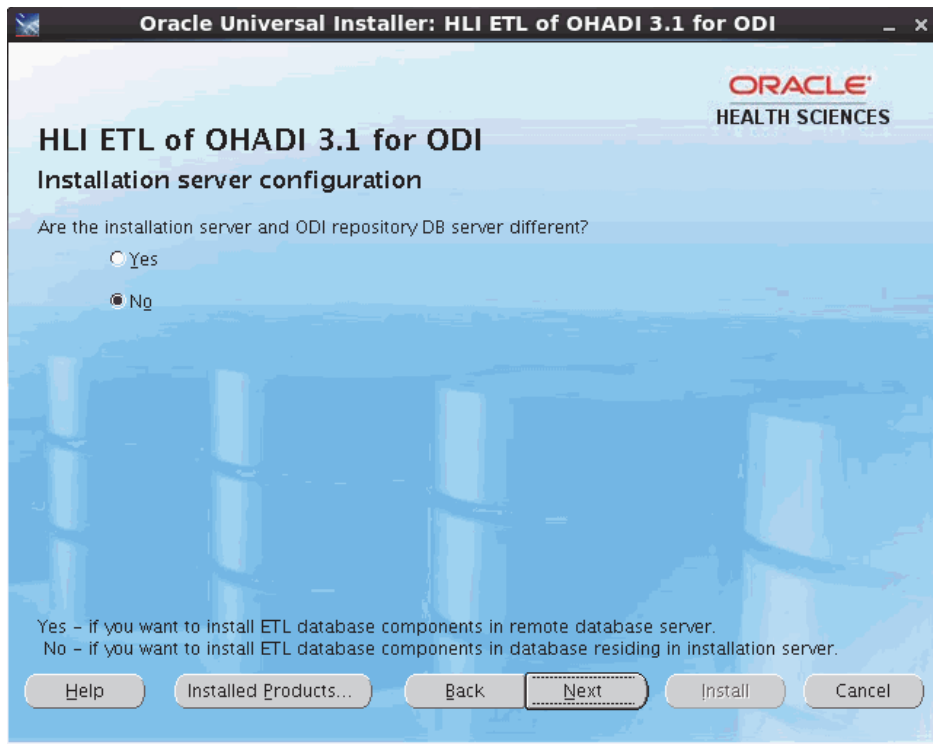
Figure 4–12 Metadata Database (HMC) Configuration Details

Note:

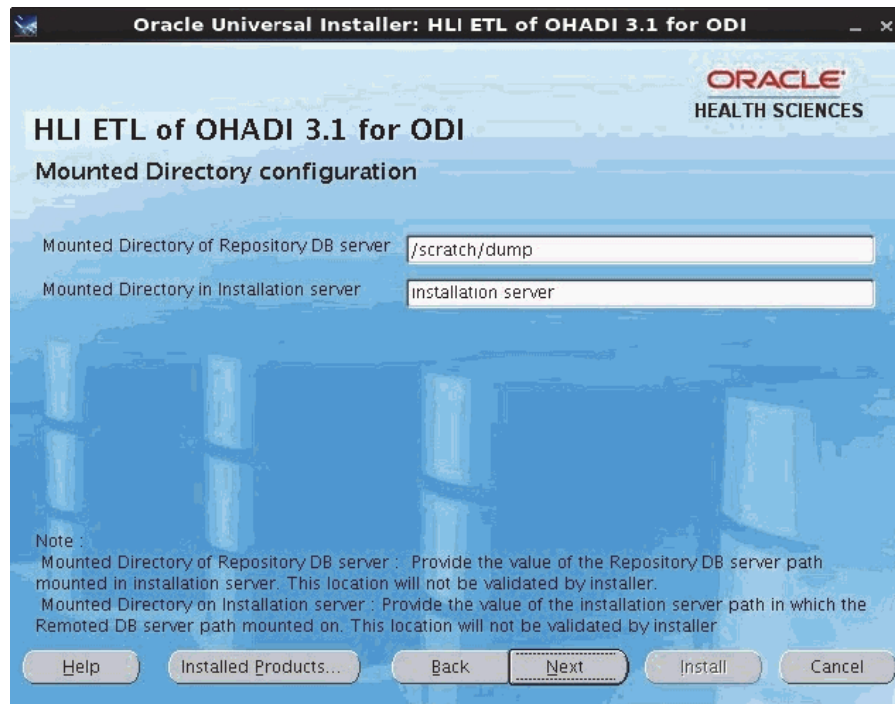
- The DB schema passwords are case-sensitive. Make sure to enter the correct password. OUI validates the DB credentials, and upon entering incorrect password, it displays an error.
 - You cannot leave any text box field blank. The installation displays an error and you will not be able to proceed with the installation.
-

13. Click **Next**. The Installation Server Configuration screen is displayed.

Figure 4–13 Installation Server Configuration



14. Click **Yes** if the installation server and ODI repository DB server are different else, click **No**.
15. Click **Next**. If you have selected **Yes** in step 16, [Figure 4–14](#) is displayed.
16. For **Linux**, [Figure 4–14](#) is displayed. Else, the Installation Email Configuration screen is displayed (step 21).
17. Enter the following mounted directory configuration details in which remote server directory is being mounted:
 - Mounted Directory of Repository DB server - Enter the remote server path.
 - Mounted Directory in Installation server - Enter the path in the installation server where mounting is done.

Figure 4–14 Mounted Directory Configuration

For example, you can obtain all storage drives available in the OHADI installation Linux machine by executing the `df -h` command. If the remote server directory is mounted on the installation server, the mounting is displayed as follows:

```
<Remote Server name>:<Remote server path>
      <total size> <used up space> < Available space> <use%>
<Path in installation server where mounting was done>
```

For example,

```
abc: /scratch/dump
      191G 138G  44G  76% /installation server
```

Note:

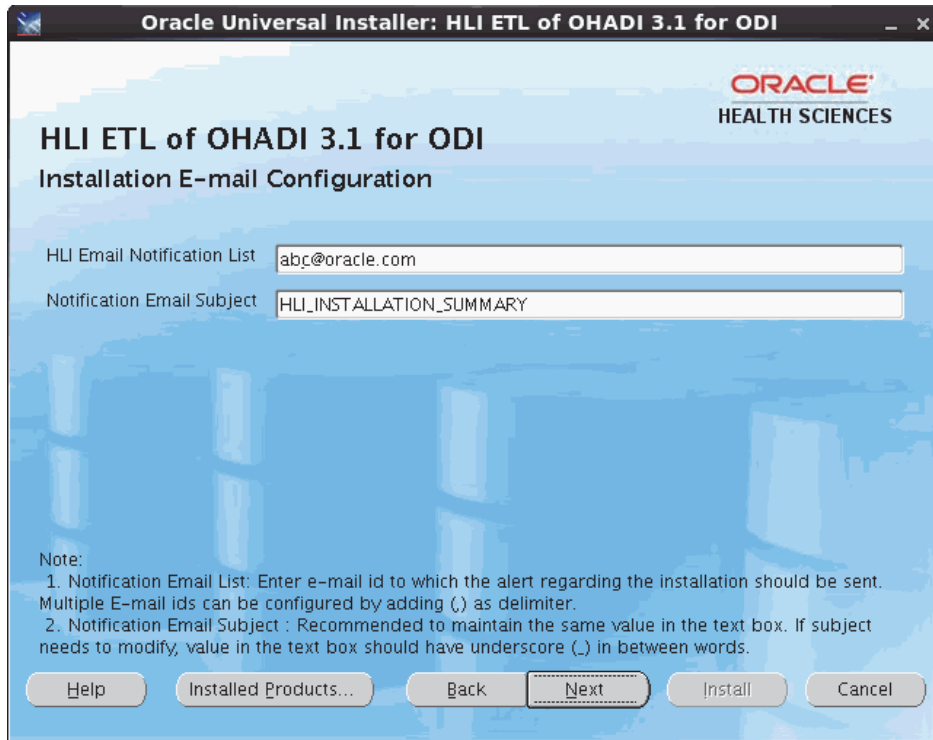
- The directory (datapump) of the remote database server should be mounted to the installation server with appropriate read and write privileges.
 - Make sure that the remote directories are accessible after mounting from the installation server.
 - If the remote server mounted path is displayed as `/`, provide the absolute mounted path of the remote server.
 - The remote server Linux user who executes the Oracle process, must have minimum privilege of `777` to the directory (datapump).
-
-

18. Click **Next**. The Installation Email Configuration screen is displayed.

19. Enter the following email notification configuration details for installation summary details.

- HLI Email Notification List - Provide the email list for the installation notification.
- Notification Email Subject - Retain the value as is.

Figure 4–15 Installation Email Configuration



20. Click **Next**.

21. The next screen displays the data entered during the installation question phase. Verify these values. If there are any incorrect values, click **Back** to make the changes.

22. Click **Next**.

If the configuration is successful, the Summary screen is displayed with all installation details.

Figure 4–16 Summary

23. Click **Install** to install HLI product.

24. Once the installation is completed, the End of Installation screen is displayed.

Figure 4–17 End of Installation

25. Click **Exit** to exit the installer.

- 26.** For the Exadata server DB, before executing the ETL, update the multi-node Exadata server name in the ODI Repository Connection and Topology connections manually, which is created during installation. See [Section 5-3](#).
- 27.** For remote installation, unmount the mounted directory.

Creating a New Oracle Data Integrator Repository Login

This chapter contains the following sections:

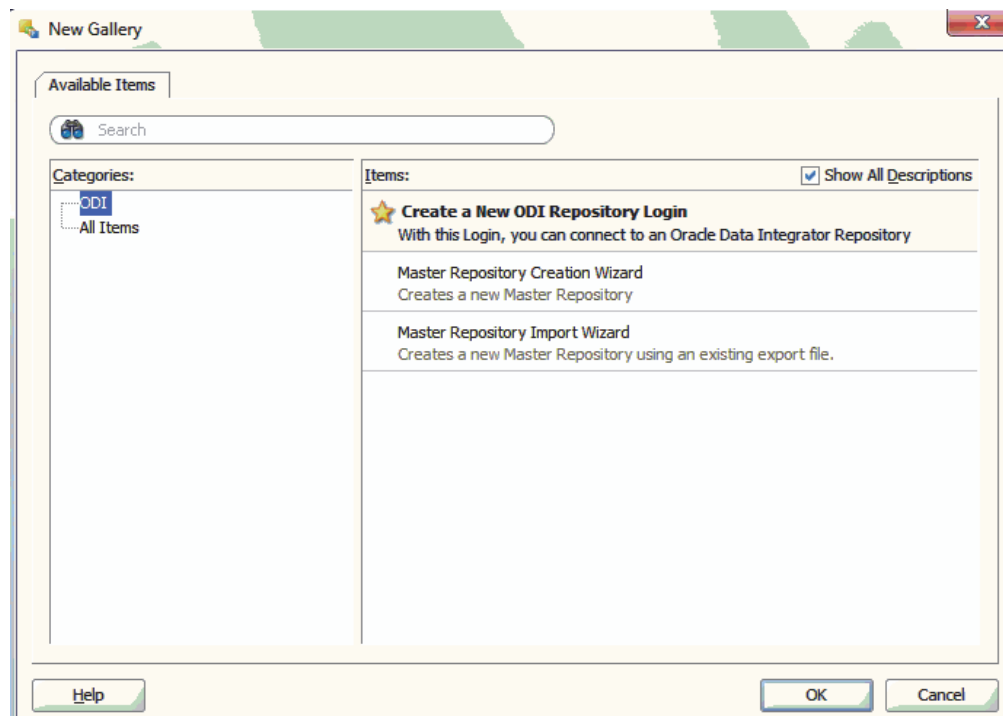
- Section 5.1, "Creating a New OHADI ODI Repository Login"
- Section 5.2, "Creating a New HLI ODI Repository Login"
- Section 5.3, "Updating Topology for HLI"
- Section 5.4, "Configuring File Physical Schema"

5.1 Creating a New OHADI ODI Repository Login

Perform the following steps to create a new OHADI ODI repository login:

1. Navigate to **ODI > File > New > Create a New ODI Repository Login**.

Figure 5–1 Create a New ODI Repository Login

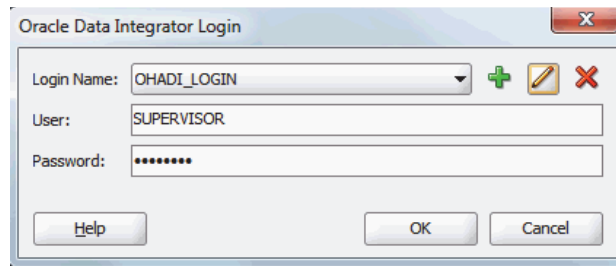


2. Click **OK**. The Repository Connection Information screen is displayed.

3. Enter the following values:
 - Login Name: For example, OHADI_LOGIN
 - User: SUPERVISOR
 - Password: Provide the ODI Login password which was entered during installation (Figure 3-11)
 - User: <database schema created for the master repository>
 - Password: <database schema password created for the master repository>
 - Driver List: Select **Oracle JDBC Driver** from the drop-down list.
 - Driver Name: oracle.jdbc.OracleDriver
 - Url: Set appropriate values based on your database details
 - Work Repository - Select the **Work Repository** option, browse and select **OHADI_WORK_REPOSITORY** from the Work Repositories List, and click **OK**.

Figure 5-2 Repository Connection Information

4. Click **OK**. The login name is created with the name specified in step 3.
5. Navigate to **ODI > Connect > ODI Studio**.
6. Enter the following details:
 - Login Name: Select **OHADI_LOGIN**
 - User: Supervisor
 - Password: Provide the ODI Login password which was entered during installation (Figure 3-11)

Figure 5-3 Oracle Data Integrator Login for OHADI

5.2 Creating a New HLI ODI Repository Login

Perform the following steps to create a new HLI ODI repository login:

1. Navigate to **ODI > File > New > Create a New ODI Repository Login**.
2. Click **OK**. The Repository Connection Information screen is displayed.
3. Enter the following values:
 - Login Name: For example, HLI_LOGIN
 - User: SUPERVISOR
 - Password: Provide the ODI Login password which was entered during installation (Figure 4-8 and Figure 4-9)
 - User: <database schema created for the master repository>
 - Password: <database schema password created for the master repository>
 - Driver List: Select **Oracle JDBC Driver** from the drop-down list.
 - Driver Name: oracle.jdbc.oracledriver
 - Url: Set appropriate values based on your database details
 - Work Repository - Select the **Work Repository** option, browse and select **EHA_HLI_WORK_REPOSITORY** from the Work Repositories List, and click **OK**.

Figure 5–4 Repository Connection Information

4. Click **OK**. The login name is created with the name specified in step 3.
5. Navigate to **ODI > Connect > ODI Studio**.
6. Enter the following details:
 - Login Name: Select **HLI_LOGIN**
 - User: Supervisor
 - Password: Provide the ODI Login password which was entered during installation (Figure 4–8 and Figure 4–9)

Figure 5–5 Oracle Data Integrator Login for HLI

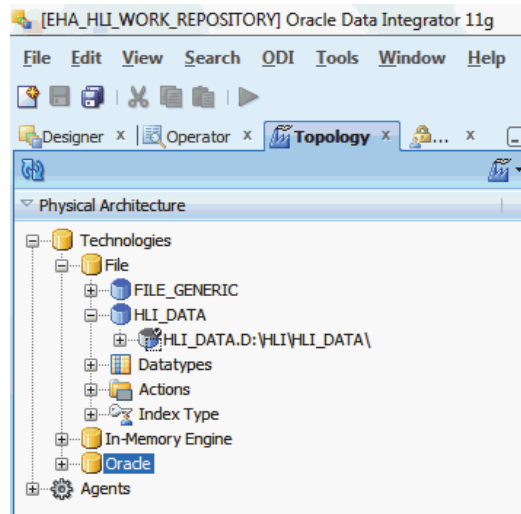
5.3 Updating Topology for HLI

To override the path updated during installation for the source file, perform the following steps:

1. Open **ODI studio** and click **Connect to Repository**.
2. Select the HLI login (created in Section 5.2 and click **OK**).

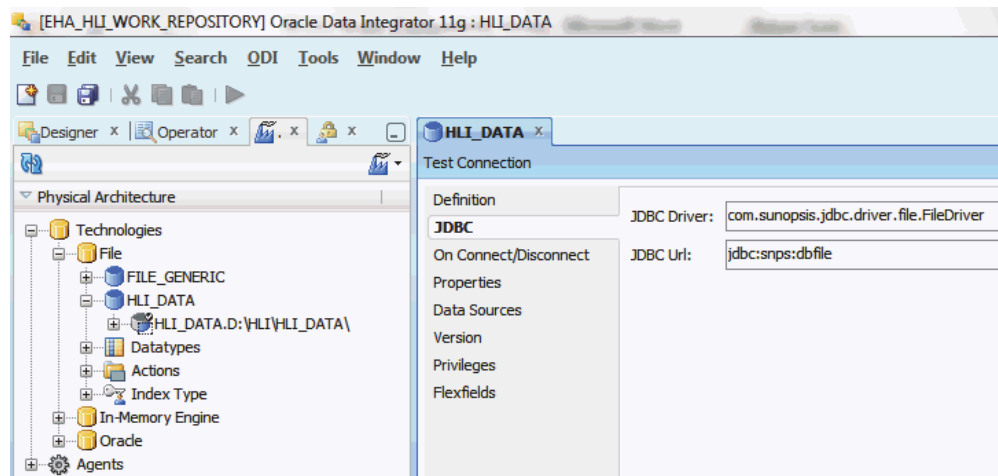
3. Navigate to **Topology > Physical Architecture > Technologies > File**. Double-click **HLI_DATA**.

Figure 5–6 HLI_DATA File Data Server



4. In the **JDBC** tab, update the following values:
 - JDBC Driver: `com.sunopsis.jdbc.driver.file.FileDriver`
 - JDBC URL: `jdbc:snps:dbfile`

Figure 5–7 Update JDBC Values

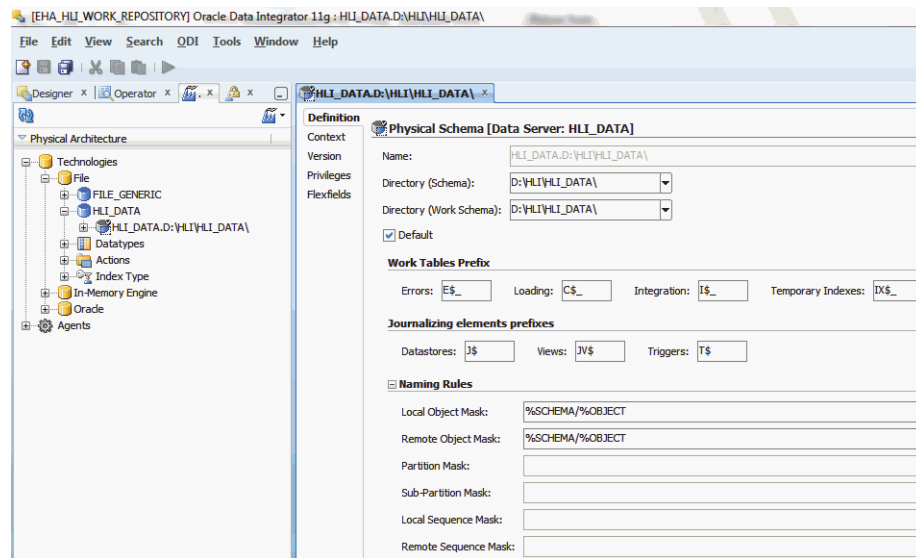


5.4 Configuring File Physical Schema

To update the existing physical schema for HLI_DATA, perform the following steps:

1. Navigate to **Topology > Physical Architecture > Technologies > File > HLI_DATA**.
2. Double-click physical schema.
3. In the **Definition** tab, specify the actual physical folder location of the HLI Data Files for the properties **Directory (Schema)** and **Directory (Work Schema)**.

Figure 5–8 Update the Physical Schema for HLI_Data



4. Click **Save** from the menu bar. The existing physical schema is saved.

Note: For references on Topology configuration, see *Oracle Data Integrator* documentation.

Troubleshooting

- When the installation script completes, a zero byte file is created in the log directory.
 - When the script executes successfully, a done file is created for every script. The file is created as: <script_name>.done

LINUX X-windows:

```
cd <OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/ohadi_logs/  
ls -lrt *.done  
ls -lrt OHADI_ODI_DATABASE_SETUP.done
```

- If the script is not executed successfully, an error file is created as : <script_name>.error

LINUX X-windows:

```
cd <OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/ohadi_logs/  
ls -lrt *.error  
ls -lrt OHADI_ODI_DATABASE_SETUP.error
```

- When installer is re-executed, the presence of *.done file skips the corresponding script execution and absence of *.done file executes the corresponding script.
- To re-execute a particular step, remove the corresponding <script_name>.done and create <script_name>.error (optional) file in the log directory before executing the installer.
- To skip a particular step, create a zero byte done file in the log directory (<OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/ohadi_logs/)

LINUX X-windows:

For example,

```
touch <OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/ohadi_  
logs/OHADI_ODI_DATABASE_SETUP.done
```

- For other script failures, the installer displays an error and exits. You must manually check for the error in the log directory <OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/ohadi_logs/ and fix the error (remove or create the .error files accordingly based on install scripts) before restarting the installer.

- If the installation fails in OHADI_ODI_MASTER_IMPORT.sh or OHADI_ODI_ETL_IMPORT.sh for incorrect configuration of remote server path, delete the done file (<OHADI_INSTALL_DIR>/ohadi_oui/oracle.hsgbu.ohadi/ohadi_logs/OHADI_ODI_DATADUMP_CREATE.done) before restarting the installer.
- The e-mail notification for the installation status is as follows:

For example,

OHADI Email Summary

```
***** OHADI INSTALLATION START TIME : 02-10-15 11:37:54 *****
OHADI_ODI_DATABASE_SETUP.sh (OHADI DATAMODEL & SEED DATA SETUP) : SUCCESS
OHADI_ODI_MASTER_WORK_CREATE.sh (OHADI ODI MASTER & WORK REPOSITORY USER
CREATION) : SUCCESS
OHADI_ODI_DATADUMP_CREATE.sh ( OHADI ODI XML DATA DIRECTORY UPDATION) :
SUCCESS
OHADI_ODI_MASTER_IMPORT.sh (OHADI ETL DUMP IMPORT) : SUCCESS
OHADI_ODI_WORK_REP_UPDATE.sh (OHADI WORK REPOSITORY UPDATION) : SUCCESS
OHADI_SCHEMA_ENC_PASWD.sh (OHADI ODI SCHEMA PASSWORD ENCRYPTION) : SUCCESS
OHADI_ODI_UTIL_FILE_CREATE.sh (OHADI_ODI_UTILTIY_FILE_CREATION_FOR_11G :
SUCCESS
OHADI_ODI_REPO_TOPOLOGY_UPDATE.sh (OHADI RELATION CONNECTION UPDATION IN
REPOSITORY) : SUCCESS
OHADI_ODI_INSTALL_VERIFICATION.sh (OHADI FEW ETL TEST FOR VALIDATION) :
SUCCESS
***** OHADI INSTALL END TIME : 02-10-15 11:40:43 *****
```

HLI Email Summary

```
HLI INSTALL START TIME : 02-12-15 10:45:14
HLI_ODI_DATABASE_SETUP.sh (HLI DATAMODEL & SEED DATA SETUP) : SUCCESS
HLI_ODI_MASTER_WORK_CREATE.sh (HLI ODI MASTER & WORK REPOSITORY USER CREATION)
: SUCCESS
HLI_ODI_MASTER_IMPORT.sh (HLI ETL DUMP IMPORT) : SUCCESS
HLI_ODI_WORK_REP_UPDATE.sh (HLI WORK REPOSITORY UPDATION) : SUCCESS
HLI_SCHEMA_ENC_PASWD.sh (HLI ODI SCHEMA PASSWORD ENCRYPTION) : SUCCESS
HLI_ODI_UTIL_FILE_CREATE.sh (HLI_ODI_UTILTIY_FILE_CREATION_FOR_11G : SUCCESS
HLI_ODI_REPO_TOPOLOGY_UPDATE.sh (HLI RELATION CONNECTION UPDATION IN
REPOSITORY) : SUCCESS
HLI_ODI_INSTALL_VERIFICATION.sh (HLI FEW ETL TEST FOR VALIDATION) : SUCCESS
HLI INSTALL END TIME : 02-12-15 10:47:09
```

- To reinstall the code with a different server path, rename all the files in the directory <\$ORACLE_BASE>/oraInventory/ContentsXML/ before the executing the installer.

For example, /u01/app/oraInventory/ContentsXML/.

Note: This is applicable when the product has to be reinstalled for a different installation requirement on the same installation server. This is not applicable for failure restart.
