
Oracle Insurance Claims Analytics for Health - Configuration Guide

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1 Part I Getting Started

1.1 Overview of Configuring Oracle Insurance Claims Analytics for Health

1.1.1 High-Level Overview of Configuring Oracle Insurance Claims Analytics for Health

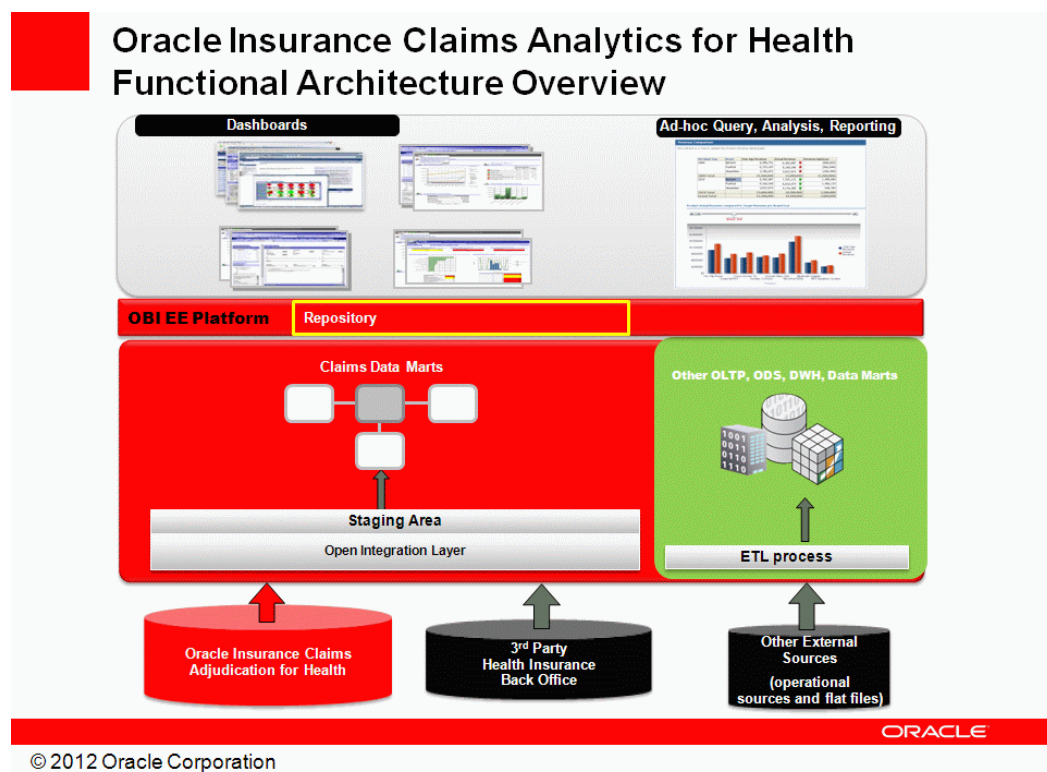
This section provides a high-level overview of the tasks you must complete to configure Oracle Insurance Claims Analytics for Health.



Note: Before you perform the tasks described in this section, you must install and set up Oracle Insurance Claims Analytics for Health according to the instructions in *Oracle Insurance Claims Analytics for Health Installation Guide*.

High-Level Configuration Tasks

Configuration tasks are divided over two major components of the application. The figure below is a functional architecture overview of the application:



[Part II](#) (page 4) of this document describes how to configure the ETL. In the figure above this is the connector from Oracle Insurance Claims Analytics for Health to the open integration point (red arrow) and the transformation of the Open Integration Point to the OHI BI Next Datamarts.

[Part III](#) (page 7) of this document describes how to configure the OBIEE applications. In the figure above this is the Oracle Insurance Claims Analytics Repository and the Oracle Insurance Claims Analytics Dashboards.

2 Part II Configuring ETL

2.1 Configuring Common ETL Areas

This section contains mandatory and additional configuration tasks that apply to Oracle Insurance Claims Analytics for Health deployed with any source system.

2.2 Configuring Connector - Oracle Insurance Claims Adjudication for Health

2.2.1 Map Oracle Insurance Claims Adjudication for Health Dynamic Fields

This paragraph describes how to add dynamic fields from Oracle Insurance Claims Adjudication for Health (OHI Claims) to Oracle Insurance Claims Analytics for Health (OHI Analytics).

Within OHI Claims it is possible to extend a number of tables with dynamic fields. The values of these fields are stored both horizontally, in case of single value non-time-valid fields or in separate DYR tables, in case of multi valued and/or time valid fields.

OHI Claims knows three dynamic field sub types: free fields, codes and records. A free field value is a character string, date or number. A code is a value from a predefined domain. Dynamic records are used to extend a table with a full blown detail table.

The free fields and codes can be mapped to the open interface tables and will subsequently be processed to the corresponding dimension or fact. Each open interface table contains a fixed number of 10 dynamic fields per table per datatype for the datatype CHAR, NUMBER and DATE. The mapping between OHI Claims and OHI Analytics is configured with a setup table NXT_SYS_DYNAMIC_FIELD_MAPPING.

The following restrictions are applicable:

- If a dynamic field may hold multiple values it can **not** be mapped; in this case it is impossible to determine which value to copy to BI.
- If a dynamic field is time valid (holds a start and end date) only the current value (valid on sysdate) will be copied to BI.
- If a dynamic field is a free field the column of the corresponding datatype (VALUE_CHAR, VALUE_NR or VALUE_DATE) is copied to BI.
- If a dynamic field is a flex field the value of COD_FLEX_CODES_B.VALUE_NR1, COD_FLEX_CODES_B.VALUE_DATE1 or COD_FLEX_CODES_TL.VALUE_CHAR1 (of the correct language) is copied to BI, depending on the datatype
- If a dynamic field refers to a Diagnosis, Provider or Procedure the CODE of that object will be copied to BI

The following open interface tables can contain dynamic fields:

Open interface table	Possible source table(s)
O_ADJUSTMENT_REASON	CLA_UNFINALIZE_REASONS_DYN
O_CLAIM	CTR_CLAIMS_DYN
O_CLAIM_LINE	CTR_CLAIM_LINES_DYN
O_CLAIMANT	REL_ADDRESSES_DYN REL_COUNTRY_DYN REL_COUNTRY_REGIONS_DYN
O_COVERAGE_LABEL	RCL_COVERAGE_LABEL_DYN
O_DIAGNOSIS	OHI_DIAGNOSES_SETTINGS_DYN

O_MEMBER	REL_ADDRESSES_DYN REL_COUNTRY_DYN
O_MESSAGE	OHI_MESSAGE_DYN
O_PRODUCT	PAS_PRODUCTS_DYN
O_PROVIDER	REL_PROVIDERS_DYN REL_ADDRESSES_DYN REL_COUNTRY_DYN
O_OPEN_CLAIM	CLA_CLAIMS_DYN

The mapping table NXT_SYS_DYNAMIC_FIELD_MAPPING contains the following columns:

Column name	Datatype	Null?	Description
interface_table_name	VARCHAR2(30 CHAR)	No	The open interface table name where the dynamic field will be stored in, e.g. 'O_MEMBER'.
interface_column_name	VARCHAR2(30 CHAR)	No	The column name of the open interface table the value of the dynamic field will be stored in, e.g. 'member_dyn_char_value_1'. Possible values are in range '<alias>_dyn_char_char_<n>', '<alias>_dyn_nr_value_<n>', '<alias>_dyn_date_value_<n>' with n in 1,2,3,4,5,6,7,8,9,0.
source_table_name	VARCHAR2(30 CHAR)	Yes	The table name of the OHI Claims table the Dynamic Field Usage refers to, e.g. 'REL_RELATIONS'.
dynamic_field_usage_name	VARCHAR2(30 CHAR)	Yes	Logical identifier of the dynamic field usage in the context of a base table, e.g. 'passportExpiryDate'

Upon installation this table will be seeded with 30 records per open interface table mentioned in the first table. During setup the columns BASE_TABLE_NAME and DYNAMIC_FIELD_USAGE_NAME can be updated with the desired value. Note: as part of the seeding Oracle can decide to use a number of the dynamic fields for country-specific columns.

Below is an example of how this table could appear after installation:

DWH_TABLE_NAME	DWH_COLUMN_NAME	SOURCE_TABLE_NAME	DYNAMIC_FIELD_USAGE_NAME
O_MEMBER	member_dyn_char_value_1	REL_RELATIONS	maidenName
O_MEMBER	member_dyn_NR_value_1	REL_RELATIONS	certificationNumber
O_MEMBER	member_dyn_NR_value_2	REL_RELATIONS	employeeNumber
O_MEMBER	member_dyn_date_value_1	REL_RELATIONS	passportExpiryDate

2.3 Database Configuration

2.3.1 Parallelism Best Practices

In this section we assume that the database has sufficient I/O, memory and CPU resources to execute in parallel. If this were not the case forcing parallel execution only creates unwanted overhead without delivering more throughput or performance.

2.3.1.1 Set Parallel Degree Policy to AUTO

The Oracle DB server `PARALLEL_DEGREE_POLICY` parameter should be set to `AUTO` and tables and indexes should be defined using the `PARALLEL` (degree default) attribute. Control the maximal degree of parallelism, ability to use parallel statement queuing and available resources for each resource consumer group through policies defined in the Oracle Database Resource Manager.

Motivation

Several enhancements have been introduced in Oracle 11gR2 that makes leveraging SQL parallelism much more straightforward than with previous versions. Starting with Oracle 11gR2, the cost-based optimizer has the ability to determine automatically the best *degree* of parallelism for a given query. Setting the `PARALLEL_DEGREE_POLICY` parameter to `AUTO` and setting the parallel attribute on tables to the default `PARALLEL` degree enables this feature.

Each user can be associated with one of multiple resource groups that are managed by the Oracle Database Resource Manager (DBRM). The DBRM can specify for each resource group the maximal DOP per query, query queuing and available resources such as CPU and I/O. This ability in conjunction with the `AUTO` degree of DOP allows the database to determine the optimal DOP of each operation based on table and index statistics that are used to estimate the operation runtime. Gathering proper statistics is very important to support this mechanism.

To configure parallelism run the script: `DatabaseModelOHICAH/enable_parallel_etl.sql`

To disable parallelism run the script: `DatabaseModelOHICAH/disable_parallel_etl.sql`

Please note that it may be required to increase the database parameter processes, depending on your instance parameter.

3 Part III Configuring Oracle Business Intelligence EE 11g

This chapter describes how to configure Oracle Business Intelligence Enterprise Edition 11g (OBI EE 11g). In the first part the configuration of the OBI EE repository (rpd) is described. Then the configuration of the OBI EE dashboards is described.

3.1 OBI EE Repository

3.1.1 Change Default Repository Password

This Paragraph describes how to change the default repository password.

This is a mandatory configuration and should be finished before making the repository available online. The OBI EE repository is delivered with a default password 'oracle123'. This password can be changed with the administration tool. Open the .rpd file in offline modus. Choose 'File' in the menu and select 'Change Password'. Change the default password and save the repository file. Now the repository can be moved to online modus.

3.1.2 Configure datasource

In the physical layer of the repository the datasource must be configured. Part of the physical layer is a connection pool. This connection pool is used to determine how the connection should be made to the database with the datamarts.

The connection pool is named 'OHI Claimed Analytics'. Configure the following attributes to the desired values:

Data source name: [database SID or complete tnsnames entry]

Username: [Database user with read access to the datamart objects]

Password: [Password of database user]

Other configuration option can be set to own preferred values, see OBI EE 11g documentation (Oracle® Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise).

3.1.3 Configure repository variables

- In OBI EE there are two types of variables: repository variables and session variables.
- A repository variable has a single value at any point in time. There are two types of repository variables: static and dynamic
- Session variables are created and assigned a value when each user logs on. There are two types of session variables: system and nonsystem.

Initialization blocks are used to initialize dynamic repository variables, system session variables, and nonsystem session variables.

The variable manager in the administration tool can be used to define variables. The following parameters in Oracle Insurance Claims Analytics for Health are available:

Required parameters to configure:

Variable name: URL_SOURCE

Description: Contains the deeplink URL to the claims source system to view a claim in the transaction system

Static or dynamic: Static

Optional parameters to configure:

Variable name: NO_RESULTS

Description: Contains the text that is shown in analysis to describe that users must make a selection with prompts before they will get results

Static or dynamic: Static

3.1.4 Multi Language

This chapter describes how to configure multi language in the OBI EE repository. All objects in the presentation layer can be translated. By default all items are in English (LANG_ID = 'en') . The items and the English translation are in seed data file import_translations_eng.sql. This script inserts all translations into the translation table w_localized_string_g, this is automatically done by the install script.

To limit the languages to be used in Oracle Insurance Claims Analytics for Health, set the AllowedLanguages parameter in instanceconfig.xml (e.g. <AllowedLanguages>en,nl</AllowedLanguages> as per documentation Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition, Localizing Oracle Business Intelligence). When no language has been chosen yet, the language defaults to the browser language. To adjust the language as per login, modify the url (eg http://Server_Name:port_number/analytics/saw.dll?Dashboard&Lang=nl). Once new translations are made available by modifying the table w_localized_string_g, the Oracle Business Intelligence server needs to be restarted.

Adding Custom Translations to the W_LOCALIZED_STRING_G Table

The following procedure describes how to add string translations for Oracle Business Intelligence metadata to the W_LOCALIZED_STRING_G table. This task occurs in any database administration tool, and in the Oracle BI Administration Tool.

To add string translations for Analytics metadata

1. Open a database administration tool and connect to your data warehouse database.
2. Query for the table named W_LOCALIZED_STRING_G and add a new record to the table. Obtain the Message Key from the Oracle BI Administration Tool as follows:
In the Oracle BI Administration Tool, right-click on the new Presentation layer metadata object and select Properties from the menu.
3. The Message key is displayed in the dialog box under Custom Display Name. The Message key is the part that starts with CN_.
For example, double-click the Pipeline catalog folder in the Presentation layer. The Custom Display name is Valueof(NQ_SESSION.CN_Pipeline). CN_Pipeline is the Message Key.

4. Enter your deployment language in the new record.
5. In the Message Text column, add the translation of the object.
6. Repeat Step 2 through Step 4 for each new metadata object string.
7. Exit the database administration tool, then restart the Oracle BI Server.

About Translating Presentation Services Strings

The translations for such Presentation Services objects as report and page names are stored in the captions.xml file. In multiple language deployment mode, if you add any additional Presentation Services objects, such as reports and new dashboard pages, you also need to add the appropriate translations. Add these translations using the Catalog Manager tool. For more information on using this utility, see Oracle Business Intelligence Presentation Services Administration Guide.

3.1.5 Configure KPI: In Time Classification

This paragraph describes how to configure the KPI: in time classification

This KPI provides information about how many of the open claims will be processed in time. There are four default categories defined in the OBI EE repository:

- Late
Claims already past the agreed upon due date and still need to be processed.
- Anticipated to be late
Claims still within the agreed upon due date, but are expected to be processed later than the agreed upon due date.
- Almost Late
Claims still within the agreed upon due date, and are expected to be processed within 3 days or less of the agreed upon due date.
- Anticipated in time
Claims anticipated to be processed within the agreed upon due date.

The logica for categorizing claims in the right classification is defined in the business model layer in the OBI EE repository. The definition can be changed if other rules for categorizing are desired.

To change the logica open the OBI EE repository. In the business model open the logical table source 'Open Claim' that is part of the 'In Time Classification' logical table. In the logical table source open the column mapping tab page. Edit the expression to the desired definition.

3.2 OBI EE Dashboards

3.2.1 Configure Security

See Oracle® Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition for documentation about setting up security in OBI EE 11g