

Oracle Insurance Data Foundation Application Pack

Data Protection Implementation Guide

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ORACLE[®]
Financial Services

Oracle Insurance Data Foundation Data Protection Implementation Guide

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1 Preface

This Preface provides supporting information for the Oracle Financial Services Insurance Data Foundation Data Protection Implementation and includes the following topics:

- [Purpose of This Document](#)
- [Audience](#)
- [Related Documents](#)

1.1 Purpose of this Document

This document contains information about data protection implementation by Insurance Data Foundation of Oracle Financial Services Analytical Applications.

1.2 Audience

This document is intended to be used by Oracle Financial Services Analytical Applications Insurance Data Foundation System Administrator.

1.3 Related Documents

This section identifies additional documents related to ODF Application 8.0.8.0.0. You can access Oracle documentation online from the Documentation Library ([OHC](#)).

- [Oracle Insurance Data Foundation Application Pack Installation Guide Release 8.0.8.0.0](#)
- [OFS Analytical Applications Infrastructure Administration Guide Release 8.0.8.0.0](#)
- [OFS Analytical Applications Infrastructure User Guide Release 8.0.8.0.0](#)

2 **Overview of Data Protection Implementation in OFSAA Insurance Data Foundation**

This document consists of chapters about Data Protection implementation in OFSAA Insurance Data Foundation.

They are:

- [Data Redaction](#)
- [Right to be Forgotten](#)
- [Data Portability](#)
- [Pseudonymization](#)
- [Notice and Consent](#)
- [Data Archival](#)

3 Data Redaction

3.1 Overview of Data Redaction in OFSAA

Data Redaction is one of the features of Data Security that provides protection of data against unauthorized access and data theft.

In OFSAA, these tables are required for Data Redaction.

- AAI_DRF_FUNCTION_MASTER

This table holds the Redaction function definitions. Generic logical functions can be address, email, card number, phone number etc.

- AAI_DRF_FUNCTION_COLUMN_MAP

This table holds the Function- Column mappings Redaction. The PII columns will be redacted according to the Function mapping. Following is AAI_DRF_FUNCTION_COLUMN_MAP for Dim_Party.

V_FUNCTION_CD	V_TABLE_NAME	V_COLUMN_NAME	V_COLUMN_DATATYPE	V_COLUMN_DESC
53 ADDRESS	Dim_Party	v_ADDRESS_city	VARCHAR2(255)	Current / Residence ADDRESS...
54 ADDRESS	Dim_Party	v_ADDRESS_country	VARCHAR2(255)	Current / Residence ADDRESS...
55 ADDRESS	Dim_Party	v_ADDRESS_district	VARCHAR2(255)	Current / Residence ADDRESS...
56 ADDRESS	Dim_Party	v_ADDRESS_line_1	VARCHAR2(255)	Current / Residence ADDRESS...
57 ADDRESS	Dim_Party	v_ADDRESS_line_2	VARCHAR2(255)	Current / Residence ADDRESS...
58 ADDRESS	Dim_Party	v_ADDRESS_line_3	VARCHAR2(255)	Current / Residence ADDRESS...
59 ADDRESS	Dim_Party	v_ADDRESS_off_city	VARCHAR2(255)	Office ADDRESS City
60 ADDRESS	Dim_Party	v_ADDRESS_off_country	VARCHAR2(255)	Office ADDRESS Country
61 ADDRESS	Dim_Party	v_ADDRESS_off_district	VARCHAR2(255)	Office ADDRESS District
62 ADDRESS	Dim_Party	v_ADDRESS_off_line_1	VARCHAR2(255)	Office ADDRESS Line 1
63 ADDRESS	Dim_Party	v_ADDRESS_off_line_2	VARCHAR2(255)	Office ADDRESS Line 2
64 ADDRESS	Dim_Party	v_ADDRESS_off_line_3	VARCHAR2(255)	Office ADDRESS Line 3
65 ADDRESS	Dim_Party	v_ADDRESS_off_state	VARCHAR2(255)	Office ADDRESS State

- AAI_DRF_TABLE_ACCESS_CD_MAP

This table holds the mapping of tables having columns marked for redaction to the Access codes. These access codes are SMS function codes and are expected to be mapped to the role DATASECURITY. The policy expression will be created based on this role and evaluated to access non-redacted data.

NOTE

The latest list of ODF PII, on which Data Redaction is applied, is available at [My Oracle Support](#).

3.2 Accessing PII Table and PII Datasheet

AAI_DRF_FUNCTION_COLUMN_MAP is the PII table.

The latest version of ODF PII Datasheet can be accessed from [My Oracle Support](#).

3.3 Data Redaction Batch

Execute the Data Redaction seeded Batch ##INFODOM##_DATA_REDACTION to execute the Data Redaction Utility if it is available as part of application common metadata. If the Batch is not available, you must create a new Batch as mentioned in the *Creating Batch for Executing Data Redaction Utility* section in the [OFS Analytical Applications Infrastructure Administration Guide](#)

The task in the Batch ##INFODOM##_DATA_REDACTION consists of three important parameters. They are:

- dataredaction.sh
- true/false
- OFSAA User ID (USER that must be mapped to DATACONTROLLER and FSADMIN groups)

Task Definition

▼Task Definition

Task ID: Description:

Components:

▼Dynamic Parameters List

Property	Value
Dastore Type	EDW
Dastore Name	OIDFINFO
Primary IP For Runtime Processes	10.184.149.43
Executable	dataredaction.sh,false,OFSAD
Wait	N
Batch Parameter	Y
Optional Parameters	null

▼Audit Panel

Created By: OFSAD Creation Date: 28 may 2018 20:22:15
 Last modified by: OFSAD Last Modification Date: 28 may 2018 20:22:15

For more information, see *Data Redaction Utility* section in the [OFS Analytical Applications Infrastructure Administration Guide](#).

3.4 Mapping Roles to User Groups for Data Redaction

- Data Controller Group is mapped to DATASEcurityADMIN role
 - Group Code: DATACONTROLLER
 - Group Name: Data Controller Group

- Group Description: Data Controller Group
- Role code: DATASEcurityADMIN
- Role Name: Data Security Admin
- Role Description: Data security admin role for executing redaction policies
- Mapping from individual applications to DATASEcurity role
 - Role code: DATASEcurity
 - Role Name: Data Security Viewer
 - Role Description: Data Security Viewer role for viewing original (non-redacted) data.
 - i. DATASEcurity role must be mapped to those application User groups which have the privilege to view the data in its originality (un-redacted). Therefore, applications must identify the functions which must be mapped to the DATASEcurity role. These mappings must come as seeded data.
 - ii. And then, map DATASEcurity role to the respective User groups. This mapping must be done manually from individual applications to the DATASEcurity role.

3.5 Enabling, Rerunning, and Disabling Data Redaction

3.5.1 Enabling Data Redaction

To enable Data Redaction:

1. Modify the `OFS_OIDF_SCHEMA_IN.xml` file. For the `DATA_REDACT` tag, set the value to `TRUE`. For more information, see the section *Configuring OFS_OIDF_SCHEMA_IN.XML File* in [Oracle Insurance Data Foundation Application Pack Installation Guide Release 8.0.8.0.0](#).

When upgrading, `IS_DATA_REDACTION_ENABLED` parameter must be updated to `Y` in the `CONFIGURATION` table of the `CONFIG` schema.

2. Map OFSAA user with the Data Redaction roles. OFSAA user who executes the Data Redaction batch requires these privileges:
 - a. User must be mapped to the `DATACONTROLLER` group.
 - b. User group must be mapped to the `DATASEcurityADMIN` role.
3. As `SYSADMIN`:
 - a. Modify the Data Redaction batch `##INFODOM##_DATA_REDACTION` to `dataredaction.sh, false, <USER that is mapped to DATACONTROLLER and FSADMIN groups>`
 - b. Provide access to the OFSAA user mentioned in the step 2.
4. To redact data in the columns, execute the Data Redaction batch `##INFODOM##_DATA_REDACTION`.
5. Validate `AAI_DRF_FUNCTION_COLUMN_MAP` table, and verify if all redacted columns and policies are created in the table.

3.5.2 Rerunning Data Redaction

To rerun the Data Redaction batch:

1. Update the `IS_DATA_REDACTION_ENABLED` parameter to `N` in the `CONFIGURATION` table of the `CONFIG` schema.
2. Rerun the Data Redaction batch `##INFODOM##_DATA_REDACTION`.
3. Perform steps mentioned in the section [Enabling Data Redaction](#).

3.5.3 Disabling Data Redaction

To disable Data Redaction:

1. Update the `IS_DATA_REDACTION_ENABLED` parameter to `N` in the `CONFIGURATION` table of the `CONFIG` schema.
2. Rerun the Data Redaction batch `##INFODOM##_DATA_REDACTION`.

3.6 Data Redaction Batch Execution Sample

Data before executing Data Redaction Batch:

Row 1	Fields
▶ N_ACCT_SKEY	6
V_ACCOUNT_NUMBER	BC1007 ...
V_ACCOUNT_DESC	data redaction desc ...
V_ACCOUNT_MANAGER_CODE	drmc1 ...
V_ORIGINAL_ACCOUNT_NUMBER	data redaction original account numb ...

Data after executing Data Redaction Batch:

Row 1	Fields
▶ N_ACCT_SKEY	6
V_ACCOUNT_NUMBER	BC1007 ...
V_ACCOUNT_DESC	...
V_ACCOUNT_MANAGER_CODE	...
V_ORIGINAL_ACCOUNT_NUMBER	...

4 Right to be Forgotten

4.1 Introduction to Right to be Forgotten

Right to be Forgotten is the task of dropping PII (Personally Identifiable Information) of a Data Subject for the given Party. The financial institution can drop PII for those Data Subjects who have exercised Right to be Forgotten functionality.

The Data Subjects may have made significant financial transactions, and/or financial information may be required for regulatory or compliance reporting. Deleting the complete record that consists of PII may lead to issues in data reconciliation. In OFSAA, the PII data will be replaced with randomized values and therefore, the complete Data Subject record is retained. As a result, financial information is retained; however, the associated Party PII is removed permanently.

4.2 Implementation of Right to be Forgotten by OFSAA

To implement Right to be Forgotten:

1. Use the FSI_PARTY_RIGHT_TO_FORGET table to collect the input list of Party IDs for which PII must be removed from the system. The financial institution must source this Party ID list into the FSI_PARTY_RIGHT_TO_FORGET table, and then invoke the batch (`<<INFODOM>>_RightToForget`) or schedule it.

NOTE

For sample query, see [Sample Query for the FSI_PARTY_RIGHT_TO_FORGET table](#) in *Appendix A*.

2. Use the AAI table AAI_DRF_FUNCTION_COLUMN_MAP to store the PII attribute list. During the Right to Forget batch execution, AAI_DRF_FUNCTION_COLUMN_MAP table is referred to randomize the PII values. See the *Data Redaction* section in [OFS Analytical Applications Infrastructure Administration Guide Release 8.0.8.0.0](#).
3. Use the AAI table AAI_DRF_QUERY_METADATA to store the query metadata, which is used during the `<<INFODOM>>_RightToForget` batch execution. This is the query metadata table that can lead to two types of queries:
 - a. When the table consists of Party Identifier as an attribute, a simple record is required in the metadata query table.

For example:

```
Select v_party_id from Dim_Party where v_party_id='10'
```

- b. When the table does not consist of Party Identifier as an attribute, an interrelated set of records are required in the metadata query table AAI_DRF_QUERY_METADATA. Compose these set of records in a systematic way such that, for the selected Party Identifier, the table join procedure can be performed and traversed to reach the required PII attribute.

ID	V_TABLE_NAME	V_COLUMN_NAME	V_CHILD_TABLE_NAME	V_CHILD_COLUMN_NAME	F_QUERY_FLAG	V_COLUMN_DATA_TYPE	V_TARGET_COLUMN_NAME	V_QUERY_NAME
1	Dim_Cards_Master	n_card_number_skey	Fct_Card_Acct_Mapping	n_card_number_skey	Y	number	v_d_cust_ref_code	Update_card_number
2	Fct_Card_Acct_Mapping	n_acct_skey	Fct_Cards_Summary	n_acct_skey	N	(null)	(null)	Update_card_number
3	Fct_Cards_Summary	n_cust_skey	Dim_Customer	n_cust_skey	N	(null)	(null)	Update_card_number
4	Dim_Email	n_email_skey	Fct_Party_Email_Map	n_email_skey	Y	varchar	v_party_id	Update_dim_email
5	Fct_Party_Email_Map	n_party_skey	Dim_Party	n_party_skey	N	(null)	(null)	Update_dim_email
6	Dim_Employee	(null)	(null)	(null)	(null)	varchar	v_employee_id	Update_dim_employee
7	Dim_Employee_Mls	(null)	(null)	(null)	(null)	varchar	v_employee_id	Update_dim_employee_ml
8	Dim_Phone	n_phone_skey	Fct_Party_Phone_Map	n_phone_skey	Y	varchar	v_party_id	Update_dim_phone
9	Fct_Party_Phone_Map	n_party_skey	Dim_Party	n_party_skey	N	(null)	(null)	Update_dim_phone

To see detailed information about the table in the above image, see [Table Definition for AAI_DRF_QUERY_METADATA](#) in *Appendix A*.

For example:

Dim_Cards_Master table does not consist of n_cust_skey (n_cust_skey is the required Primary Key for the PII Attribute n_card_number_skey). Therefore, perform the table join procedure similar to the following query:

```
Select Dim_Cards_Master.n_card_number_skey from Dim_Cards_Master
Dim_Cards_Master, Fct_Card_Acct_Mapping Fct_Card_Acct_Mapping,
Fct_Cards_Summary Fct_Cards_Summary, Dim_Customer Dim_Customer where
Dim_Cards_Master.n_card_number_skey=Fct_Card_Acct_Mapping.n_card_num
ber_skey and
Fct_Card_Acct_Mapping.n_acct_skey=Fct_Cards_Summary.n_acct_skey and
Fct_Cards_Summary.n_cust_skey=Dim_Customer.n_cust_skey and
v_d_cust_ref_code='GDPR'
```

Where Dim_Customer.n_cust_skey is a Number Datatype.

NOTE

To arrive at the above-mentioned query, see [Steps to Perform the Table Join Procedure](#) section in *Appendix A*.

For pictorial representation of the above query, see [Pictorial Representation of the Query Formed from AAI_DRF_QUERY_METADATA table](#) in *Appendix A*.

For more sample queries generated using the query metadata table, see Sample Queries using the AAI_DRF_QUERY_METADATA Metadata Table in *Appendix A*.

- c. You must arrive at the key or equivalent column in the table, which consists of the required PII attributes. Then the <<INFODOM>>_RightToForget batch uses this key to filter records (For example: Dim_Cards_Master) and randomize all the PII's listed in the AAI_DRF_FUNCTION_COLUMN_MAP for that table.
4. Now, PII attributes can be queried and the values are randomized.

5 Data Portability

5.1 Overview of Data Portability in OFSAA

According to the Data Protection guidelines, a scenario may occur with a customer in which a Data Subject requests the financial institution to share the PII of that Data Subject stored in the application. To cater to such a scenario, the customer may use T2F (Table to File) functionality provided by AAI. This T2F functionality enables the customer to query the data warehouse and save the attributes to a file.

5.2 Data Portability Scenario

A sample scenario to apply Data Portability:

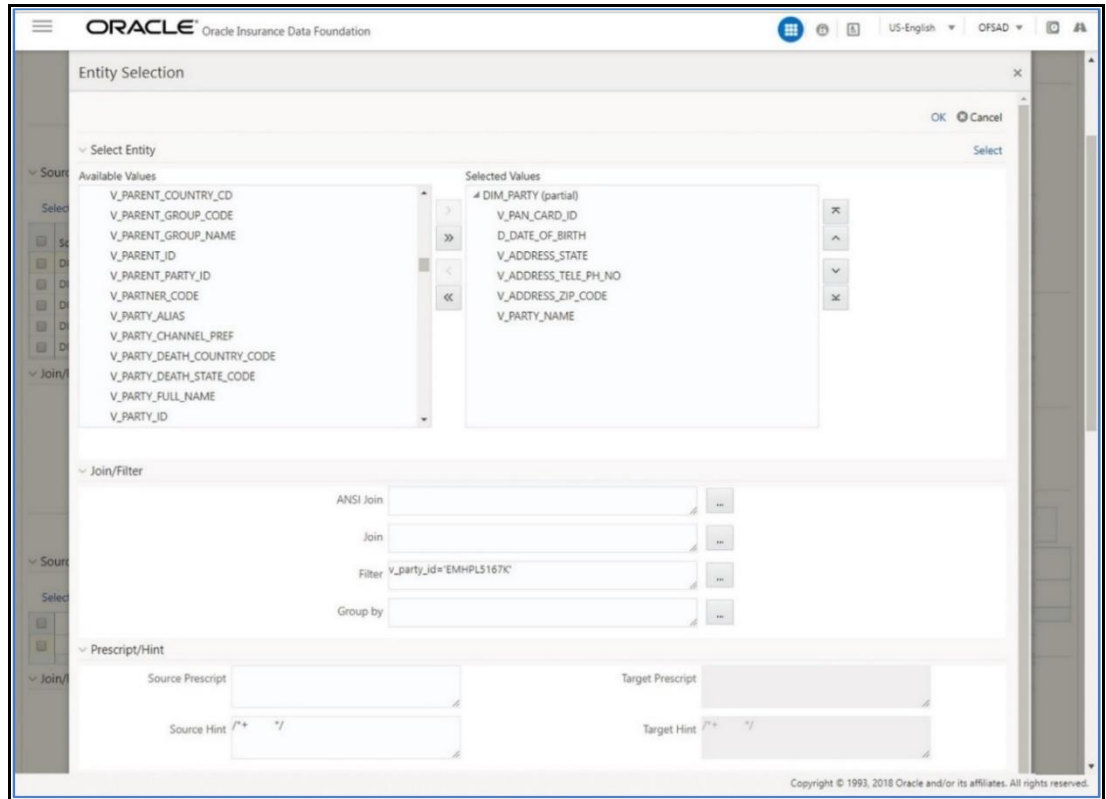
1. The DIM_PARTY table consists of a set of PII for multiple Data Subjects.

V_PARTY_NAME	V_PAN_CARD_ID	D_DATE_OF_BIRTH	D_DATE_OF_BIRTH_1	V_ADDRESS_TELE_PH_NO	V_ADDRESS_STATE	V_ADDRESS_STATE_1
1 Aditya Sharma	HSWNJ8291T	09-JAN-93	09-JAN-93	8801283098	Himachal Pradesh	Himachal Pradesh
2 Maria Victor	PCLDS7413N	15-SEP-84	15-SEP-84	9024372784	Karnataka	Karnataka
3 Abdul Mohammed	AHJNS8384F	04-DEC-73	04-DEC-73	9852198762	Orissa	Orissa
4 Vibha Rao	RQSAA7190L	13-MAY-78	13-MAY-78	8962735610	Maharashtra	Maharashtra
5 Sharanya Gupta	EMHPL5167K	29-JAN-90	29-JAN-90	9901838919	Punjab	Punjab

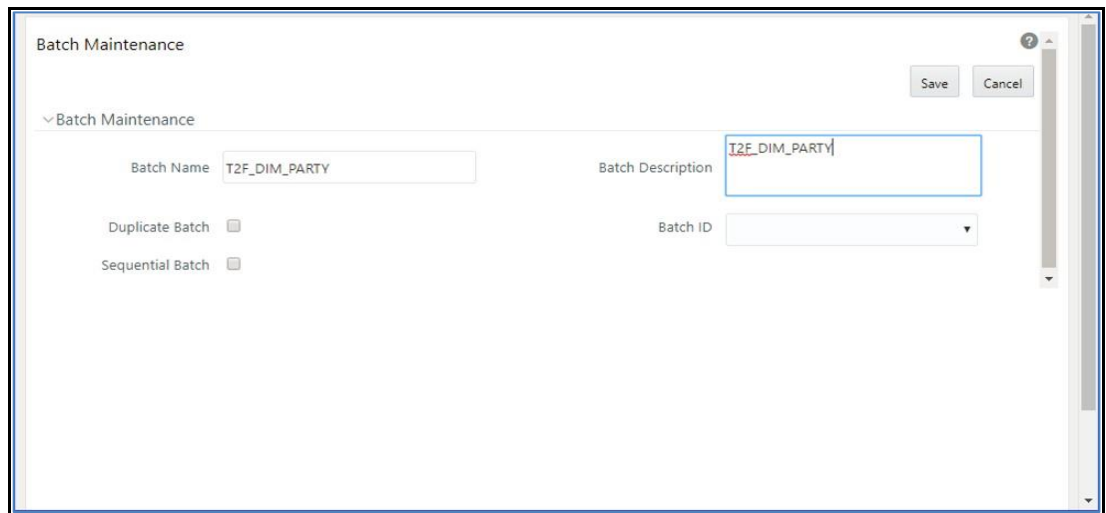
A Data Subject requests the bank to share a copy of the PII data of that Data Subject stored by the bank. For illustration, the Data Subject with V_PAN_CARD_ID EMHPL5167K is used.

2. To make a file copy of the PII requested by the Data Subject, the User (bank) must perform T2F data mapping. Follow the Data Mapping procedure. See the *Defining Data Mapping to File (T2F, H2F)* section in the *Data Mapping* part in the [OFS AAI Application Pack Minor Release 8.0.8.0.0 User Guide](#) to:

- a. Create a T2F definition for the scenario mentioned in step 1. Map V_PAN_CARD_ID to V_PARTY_ID in the DIM_PARTY table.



- b. Create a Batch to run the T2F.



c. Create a Task for the Batch.

Task Definition

Task ID: Task1 Description: T2F dim_party

Components: EXTRACT DATA

Property	Value
Datastore Type	EDW
Datastore Name	OIDFINFO
Primary IP For Runtime Processes	10.184.157.123
Source Name	INF.OIDFINFO
Extract Name	T2F_DIM_PARTY
Default Value	\$RUNSK=1

Audit Panel

Created By: Creation Date

Last modified by: Last Modification Date

d. Execute the Batch. Verify the progress of batch execution in Batch Monitor.

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Batch Details

Batch ID	Batch Description
OIDFINFO_BATCH1_Test_loan_commitment	Test_loan_commitment
OIDFINFO_DATA_FOUNDATION_SCD	Data Foundation SCD for Loading Dimension Tables
OIDFINFO_DATA_FOUNDATION_SCD_MLS	Data Foundation SCD for Multi Language Support Dimensions
OIDFINFO_DIM_ACCOUNT_SCD	SCD for DIM_ACCOUNT
OIDFINFO_POP_KEY_DIMENSION_SCD	SCD for Key Dimension Hierarchies of DRM Loader
OIDFINFO_T2F_DIM_PARTY	T2F_DIM_PARTY

Page 1 of 1 (1-6 of 6 items) Records Per Page 15

Batch Run ID: OIDFINFO_T2F_DIM_PARTY_20180504_1

Batch Status

Batch Run ID	Batch Status
OIDFINFO_T2F_DIM_PARTY_20180504_1	Successful

Task Details

Task ID	Task Description	Metadata Value	Component ID	Task Status	Task Log
Task1	T2F dim_party	T2F_DIM_PARTY	EXTRACT DATA	[13314] Successful	View Log

Page 1 of 1 (1-1 of 1 items) Records Per Page 15

Event Log Export

Message ID	Description	Severity	Time
------------	-------------	----------	------

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3. The output file path is:

/scratch/ofsaapp1/ftshare/OIDFINFO/dmt/def/<T2F_name>/<Batch_name>/<batch_run_id>/<information_date>/<T2Fname>.dat

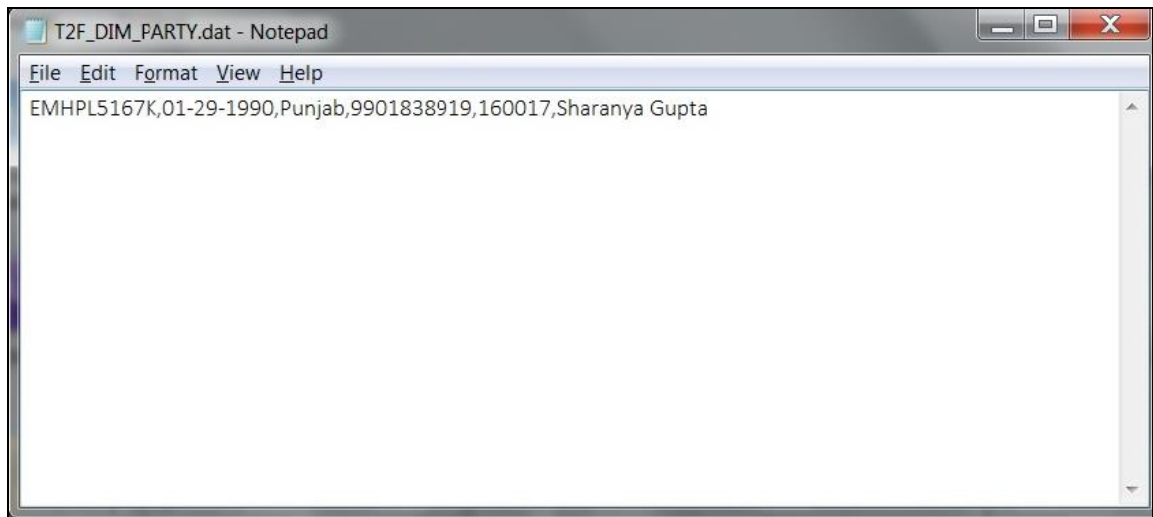
For example:

`/scratch/ofsaapp1/ftpshare/OIDFINFO/dmt/def/T2F_DIM_PARTY/OIDFINFO_T2F_DIM_PART
Y_20180504_1_Task1/20180504/ T2F_DIM_PARTY.dat`

NOTE

This extracted file consists of PII of a Data Subject that must be encrypted. See the *Data Mapping* section in *Data Management Tools* chapter in the [OFS Analytical Applications Infrastructure User Guide Release 8.0.8.0.0](#).

4. T2F output file with the PII details requested by the Data Subject.



6 Pseudonymization

6.1 Overview of Pseudonymization

Pseudonymization is a process by which PII fields of a record are replaced by one or more artificial identifiers, or pseudonyms. There can be a single pseudonym for a collection of replaced fields or one pseudonym for each replaced field. Therefore, Pseudonymization is a method to substitute PII data with a reversible and consistent value. This decreases the linking ability of a data set with the original identity of a data subject and acts as a Data Security mechanism.

The mapping of pseudonyms to those PII fields that are required for lookups, to retrieve the data subject information, must be stored away from the data warehouse in a secure location. This involves highly restricted access controls and security mechanisms that are defined at the customer environment to suit customer data security needs.

6.2 Implementation of Pseudonymization by OFSAA

OIDF data model enables its customers to implement Pseudonymization process such that the PII data is separated from transaction data, and this PII data is referenced only by pseudonym. For a wide range of analytical processes, the access to PII data is not necessary.

1. Customers can employ Pseudonymization and load the Pseudonymized data into OIDF application.
2. When analytical or modeling condition requires the availability of PII data, then care must be taken by the customer to load PII data into those columns that consist of additional data security controls such as Redaction. When the requisite attributes are not part of the seeded PII list, then the customer must:
 - Extend the PII list
 - Verify the completeness of the extensions
 - Verify that Redaction is enabled on the extended PII fields prior to loading sensitive data attributes

To know more about Data Redaction, see [OFS Analytical Applications Infrastructure Administration Guide Release 8.0.8.0.0](#).

NOTE

It is recommended that the PII values must not be added in the account dimension, party dimension, and customer dimension columns where redaction is not applied. For example, PII values must not be added in the v_account_number, v_party_id, and v_cust_id columns. Instead, they must be loaded in the v_original_account_number, v_orig_party_id and v_orig_cust_ref_code columns respectively, where redaction is applied.

7 Notice and Consent

7.1 Introduction to Notice and Consent

According to the Data Protection guidelines, a clear, legal based and accessible Notice must be provided to the Party regarding the Personally Identifiable Information (PII), which is collected from the Party during the onboarding process or during any stage of the workflow where PII of the Data Subject is captured.

After providing a Notice, a clear Consent must be obtained from the Party regarding the usage and handling of PII by the financial institutions. This Consent must be given by the Party, and must be presented to them as their choice with the option of withdrawal from providing Consent at any time. After the Party gives their Consent, their PII can be used in the workflow.

7.2 Populating Consent Purpose Dimension Party Consent and Fact Party Consent

OFSAA is a back office product, and does not have direct interaction with the end user of the bank. Therefore, Notice, and Consent User Interfaces are not applicable. However, Data Model of Insurance Data Foundation is enhanced to hold Notice and Consent information as a download from source systems. The insurance company may further use this feature for the task of processing or reporting.

7.2.1 Procedure to Populate Consent Purpose Dimension and Fact Party Consent

This section provides information about Consent Purpose Dimension Population and Party Consent Population processes in the Oracle Insurance Data Foundation application.

7.2.1.1 Overview of Consent Purpose Dimension Population and Fact Party Consent Population

7.2.1.1.1 Overview of Consent Purpose Dimension Population

In the Consent Purpose Dimension table (DIM_CONSENT_PURPOSE), Consent content is stored. This table can be populated from Stage Consent Purpose Master Entity (STG_CONSENT_PURPOSE_MASTER) using the SCD-468 packaged in OIDF.

7.2.1.1.2 Overview of Fact Party Consent Population

Fact Party Consent is the table where Consent of the Party is stored. Table to Table seeded definitions are provided for loading data into the target table Fact Party Consent (FCT_PARTY_CONSENT):

Table 1: Table to Table Seeded Definitions

Source Table Name	Target Table Name	T2T Definition Name
STG_PARTY_CONSENT	FCT_PARTY_CONSENT	T2T_FCT_PARTY_CONSENT

7.2.1.2 Executing Consent Purpose Dimension Population and Fact Party Consent Population T2T

7.2.1.2.1 Executing through Batch

From Consent Party Master, Consent Purpose Dimension SCD can be executed by executing task present in the SCD batch <infodom>_DATA_FOUNDATION_SCD.

Fact Party Consent T2T can be executed by executing task present in the T2T batch OIDF_SOURCED_RUN.

Follow these steps to execute the batch:

1. Navigate to the **Batch Execution** screen.
2. Select the seeded batch:
 - <infodom>_DATA_FOUNDATION_SCD for Consent Purpose Dimension
 - OIDF_SOURCED_RUN for Fact Party Consent
3. Select the AS_OF_DATE for which source customer information is required to be loaded into the table.
4. Click **Execute Batch**.
5. Monitor the status of the batch in the **Batch Monitor** screen of OFSAAL.

7.2.1.2.2 Execution of T2T Batch through Run Management

T2T_FCT_PARTY_CONSENT is part of *Oracle Insurance Data Foundation Sourced Run*. The process can be executed through the Seeded Run *Oracle Insurance Data Foundation Execution Run*.

7.2.1.3 Error Messages

In the log file present in the:

ftpshare/logs/<Run_Date>/<infodom>/RUN EXECUTABLE folder for DIM_CONSENT_PURPOSE

ftpshare/logs/<Run_Date>/<infodom>/LOAD DATA folder for T2T_FCT_PARTY_CONSENT

This is the most common error message:

- **Unique Constraint Violation:** This occurs when attempting re-load or loading existing records for the already executed AS_OF_DATE.

7.2.1.4 Checking the Execution Status for Fact Party Consent T2T

The status of execution can be monitored using the **Batch Monitor** screen.

NOTE

For a more comprehensive coverage of configuration and execution of a batch, see [Oracle Financial Services Analytical Applications Infrastructure Release 8.0.8.0.0 User Guide](#).

This is the error log table in atomic schema:

FCT_PARTY_CONSENT\$ for T2T_FCT_PARTY_CONSENT

7.2.1.5 Fact Party Consent T2T

T2T definition can be retrieved as an excel document for reference from the metadata browser of the Unified Metadata Manager (UMM) component of OFSAAL.

8 Data Archival

8.1 Synopsis for Data Archival

The OFSAA data model, along with the active data stores Personally Identifiable Information (PII) of Data Subjects who are no longer actively using the financial services, which is a liability.

8.2 Implementation of Data Archival by OFSAA

To implement this invisibility of data at row level, Oracle Database 12c has introduced a new feature called Row Archival.

- The Row Archival feature is simple and effective to use as opposed to the traditional approach, which requires storage and maintenance of historical tables.
- This feature enables to archive records based on a given criteria within the account table. The criteria can be, for example, the Account Close Date of the Data Subject.
- This archived data can be viewed or made hidden by setting a session parameter.

8.2.1 A Criteria for Data Archival

To archive Party records, which are closed for more than seven years:

1. To enable Row Archival on the DIM_PARTY table, run this command:

```
ALTER TABLE DIM_PARTY ROW ARCHIVAL
```

2. Run the Row Archival Update statement periodically, to search for the account Party records which are closed for more than seven years. Run this command:

```
UPDATE DIM_PARTY SET ora_archive_state='1' where  
trunc(months_between(SYSDATE, d_closed_date)/12)>7
```

In the above query:

- `ora_archive_state` is a hidden column which is created after the ROW ARCHIVAL is set on the table.
- `SET ora_archive_state='1'` This part of the query archives the records which meets the criteria of seven years of account closure.
- Hidden rows are available for `Select/Update` queries only after `ora_archive_state` is disabled.

8.2.1.1 Viewing Archived Rows

1. To make hidden rows visible for a session, run this command:

```
ALTER SESSION SET ROW ARCHIVAL VISIBILITY=ALL;
```

2. To make the rows invisible, run this command:

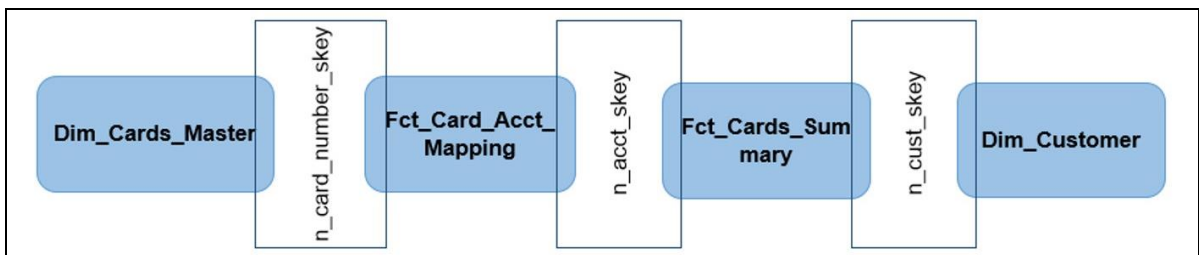
```
ALTER SESSION SET ROW ARCHIVAL VISIBILITY=ACTIVE;
```

9 Additional Information for Right to be Forgotten

9.1 Table Definition for AAI_DRF_QUERY_METADATA

Column Name	Column Type	Description
ID	Number	This is the Primary Key field. You must enter a numerical value.
V_TABLE_NAME	Varchar	This is the source table name.
V_COLUMN_NAME	Varchar	This is the source column name.
V_CHILD_TABLE_NAME	Varchar	This is the table name, which must be linked to the V_TABLE_NAME. If the same table name is repeated with the same column name V_COLUMN_NAME, then the AND condition is formed with V_CHILD_TABLE_NAME. V_CHILD_TABLE_NAME
V_CHILD_COLUMN_NAME	Varchar	This the column name, which must be linked to the V_COLUMN_NAME.
F_QUERY_FLAG	Varchar	Enter Y or N, which is case sensitive. If the value is Y, then you must form a query from V_TABLE_NAME .V_COLUMN_NAME
V_COLUMN_DATA_TYPE	Varchar	Mention the Data Type of the V_COLUMN_NAME. This is required only if F_QUERY_FLAG = Y.
V_TARGET_COLUMN_NAME	Varchar	Mention the PARTY_ID column name, which is required only if F_QUERY_FLAG = Y.
V_QUERY_NAME	Varchar	Mention the same query for a set of joining tables and columns. The set of tables and columns under join query are grouped together using the same query name.

9.2 Pictorial representation of query formed from AAI_DRF_QUERY_METADATA table



9.3 Steps to Perform the Table Join Procedure

For illustration, the required table Dim_Cards_Master does not consist of Party Identifier. Therefore, perform the table join procedure using the AND condition at the table level.

To perform the table join procedure, follow these steps:

1. Search for a table, which consists of the Party Identifier field. In this query, we have searched for the table Dim_Customer with unique identifier n_cust_skey field. This table must be joined with the required table Dim_Cards_Master.
2. However, the tables Dim_Cards_Master and Dim_Customer do not consist of any common column name to perform the table join operation. Therefore, search for one more table Fct_Card_Acct_Mapping. This table (Fct_Card_Acct_Mapping) consists of common column name (n_card_number_skey) between Dim_Cards_Master table and itself.
3. Join the Fct_Card_Acct_Mapping table, which consists of common column name (n_acct_skey) with another table Fct_Cards_Summary.
4. Join the Fct_Cards_Summary table, which consists of common column name (n_cust_skey) with the final table Dim_Customer.
5. Now, the Dim_Cards_Master table is joined with the Dim_Customer table.

9.4 Sample Queries using the AAI_DRF_QUERY_METADATA Metadata table

These are the sample queries generated using the AAI_DRF_QUERY_METADATA table:

Example 1:

```
select DIM_MANAGEMENT.n_manager_skey from DIM_MANAGEMENT DIM_MANAGEMENT,
FCT_CUSTOMER FCT_CUSTOMER, DIM_CUSTOMER DIM_CUSTOMER where
DIM_MANAGEMENT.n_manager_skey=FCT_CUSTOMER.n_manager_skey and
FCT_CUSTOMER.n_cust_skey=DIM_CUSTOMER.n_cust_skey and
DIM_CUSTOMER.v_d_cust_ref_code in(?,?)
```

Example 2:

```
select DIM_EMAIL.n_email_skey from DIM_EMAIL DIM_EMAIL, FCT_PARTY_EMAIL_MAP
FCT_PARTY_EMAIL_MAP, DIM_PARTY DIM_PARTY where
DIM_EMAIL.n_email_skey=FCT_PARTY_EMAIL_MAP.n_email_skey and
FCT_PARTY_EMAIL_MAP.n_party_skey=DIM_PARTY.n_party_skey and
DIM_PARTY.v_party_id in(?,?)
```

Example 3:

```
select STG_CLAIM_DETAILS.v_claim_id from STG_CLAIM_DETAILS
STG_CLAIM_DETAILS, STG_CLAIM_CLAIMANT STG_CLAIM_CLAIMANT where
STG_CLAIM_DETAILS.v_claim_id=STG_CLAIM_CLAIMANT.v_claim_id and
STG_CLAIM_CLAIMANT.v_cust_ref_code in(?,?)
```

Example 4:

```
select STG_CONTACT_MASTER.v_contact_id from STG_CONTACT_MASTER
STG_CONTACT_MASTER, DIM_CONTACT DIM_CONTACT where
STG_CONTACT_MASTER.v_contact_id=DIM_CONTACT.v_contact_id and
DIM_CONTACT.v_customer_id in(?,?)
```


9.5 **Sample Query for the FSI_PARTY_RIGHT_TO_FORGET table**

This is the sample entry for the FSI_PARTY_RIGHT_TO_FORGET table:

```
Insert into FSI_PARTY_RIGHT_TO_FORGET values (SYSDATE,  
<<PARTY_ID_FROM_UR_ENV>>, 'Testing Right2Forget');
```

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