# Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System

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Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System Data Mapping Guide E49012-07

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# **Preface**

This guide provides the data mapping information from the Oracle Utilities Network Management System source system to the Oracle Utilities Extractors and Schema target product.

# **Audience**

The guide is intended for all implementers of Oracle Utilities Extractors and Schema for Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System.

# **Related Documents**

For more information, see the following documents:

- Oracle Utilities Analytics Getting Started Guide
- Oracle Utilities Analytics Release Notes
- Oracle Utilities Analytics Quick Install Guide
- Oracle Utilities Analytics Installation Guide
- Oracle Utilities Analytics Administration Guide
- Oracle Utilities Analytics Developer's Guide

#### See Also:

Oracle Utilities Network Management System Documentation Library

## **Conventions**

The following notational conventions are used in this document:

| Notation  | Indicates  |
|-----------|--|
| boldface  | Graphical user interface elements associated with an action, terms defined in text, or terms defines in the glossary |
| italic    | Book titles, emphasis, or placeholder variables for which you supply particular values                               |
| monospace | Commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter         |

# **Chapter 1**

# **Overview**

This guide provides the data mapping information from the Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System source system to the Oracle Utilities Extractors and Schema target product. The guide describes the data mapping between the source system and the target, and the rules of data transformation for Oracle Utilities Extractors and Schema for Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System.

# **Terminologies**

The following terminologies are used for the data maps included in this document.

#### <Table Name>

The Table Name indicates the name of the fact or the dimension in a star schema in the data warehouse.

#### **Properties**

The Properties table lists properties of the table independent of each field. The following properties are listed in the table:

| Property                      | Value  |  |
|-------------------------------|--|--|
| Target Table                  | Name of the table in the target schema (BI data warehouse) into which data is loaded   |  |
| Table Type                    | Fact or dimension  |  |
| SCD Type                      | The nature of the dimension on how it handles changes made in the source system.   |  |
|                               | Type 1 - Existing records are updated directly.  |  |
|                               | Type 2 - Existing records are inactivated by putting the current date as the effective end date and new records are inserted with an effective start date as today's date. The new record will have the end date as a high date. |  |
| Fact Type                     | Whether this is a snapshot or accumulation fact table  |  |
| Source System Driver<br>Table | Name of the table in source database from which data is extracted  |  |

| Property          | Value  |
|-------------------|--|
| Stage Table       | Name of the table in the staging schema (data warehouse) that can<br>be used to query the data records generated by the ETL logic  |
| ODI Package       | Name of the ODI package that needs be executed to extract data from the source application and populate a specific target table in the data warehouse                                      |
| ETL View          | Name of the view in the data warehouse that has the logic for retrieval and transformation of the source data  |
| Materialized View | Names of the materialized views delivered with the product for a specific fact table.  |
|                   | These materialized views are designed to support all of the OBIEE answers delivered with the product. Refreshing these materialized views will be taken care as part of the ETL processes. |

The Fields table lists the individual properties of each field in the Presentation Table or the Database Table. The following fields are listed in the tables:

| Property     | Value  |
|--------------|--|
| Source Field | Name of the field from the source application which is used to load the target field either directly or after transformation.          |
| Target Field | Name of the column in the fact or dimension table present in the data warehouse. This is where the extracted data will be loaded into. |
| OBIEE Field  | Name of the field in the OBIEE Presentation folder. If blank, the field is not available by default in OBIEE.                          |

# **Chapter 2**

# Data Maps for Oracle Utilities Network Management System

This section contains data maps for the following Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System data:

- Dimension Tables
- Fact Tables
- User Defined Dimension Tables

# **Dimension Tables**

### **Account Dimension**

The Account dimension extracts account data from the Oracle Utilities Network Management system with all related attributes.

# **Properties**

| Property                   | Value                |
|----------------------------|----------------------|
| Target Table               | CD_ACCT              |
| Table Type                 | Dimension            |
| SCD Type                   | Type 2               |
| Source System Driver Table | CU_SERVICE_LOCATIONS |
| Stage Table                | STG_CD_ACCT          |
| ODI Package                | B1_PKG_CD_ACCT       |
| ETL View                   | B1_D_ACCT_VW         |

| Target Field | OBIEE Field                         | Source Field                                     | Transformation / Calculation Logic  |
|--------------|-------------------------------------|--|---|
| ACCT_KEY     | Account Dimension<br>Surrogate Key  |  | Transformation Logic: This field is populated with the sequence from SPL_ACCT_SEQ.NEXT VAL. |
| SRC_ACCT_ID  | Account ID                          | CU_SERVICE_LOCAT<br>IONS.SERV_ACCOUN<br>T_NUMBER |   |
| ACCT_INFO    | Account Information                 | CU_SERVICE_LOCAT<br>IONS.SERV_LOC_ID             |   |
| UDF1_CD      | Revenue Class Code                  | CU_SERVICE_LOCAT<br>IONS.SERV_REVENU<br>E_CLASS  |   |
| UDF1_DESCR   | Revenue Class<br>Description        | CU_SERVICE_LOCAT<br>IONS.SERV_REVENU<br>E_CLASS  |   |
| UDF2_CD      | User Defined Field 2<br>Code        |  |   |
| UDF2_DESCR   | User Defined Field 2<br>Description |  |   |
| UDF3_CD      | User Defined Field 3<br>Code        |  |   |

| Target Field | OBIEE Field                          | Source Field | Transformation / Calculation Logic |
|--------------|--------------------------------------|--------------|------------------------------------|
| UDF3_DESCR   | User Defined Field 3<br>Description  |              |                                    |
| UDF4_CD      | User Defined Field 4<br>Code         |              |                                    |
| UDF4_DESCR   | User Defined Field 4<br>Description  |              |                                    |
| UDF5_CD      | User Defined Field 5<br>Code         |              |                                    |
| UDF5_DESCR   | User Defined Field 5<br>Description  |              |                                    |
| UDF6_CD      | User Defined Field 6<br>Code         |              |                                    |
| UDF6_DESCR   | User Defined Field 6<br>Description  |              |                                    |
| UDF7_CD      | User Defined Field 7<br>Code         |              |                                    |
| UDF7_DESCR   | User Defined Field 7<br>Description  |              |                                    |
| UDF8_CD      | User Defined Field 8<br>Code         |              |                                    |
| UDF8_DESCR   | User Defined Field 8<br>Description  |              |                                    |
| UDF9_CD      | User Defined Field 9<br>Code         |              |                                    |
| UDF9_DESCR   | User Defined Field 9<br>Description  |              |                                    |
| UDF10_CD     | User Defined Field 10<br>Code        |              |                                    |
| UDF10_DESCR  | User Defined Field 10<br>Description |              |                                    |
| UDF11_CD     | User Defined Field 11<br>Code        |              |                                    |
| UDF11_DESCR  | User Defined Field 11<br>Description |              |                                    |
| UDF12_CD     | User Defined Field 12<br>Code        |              |                                    |
| UDF12_DESCR  | User Defined Field 12<br>Description |              |                                    |
| UDF13_CD     | User Defined Field 13<br>Code        |              |                                    |

| Target Field    | OBIEE Field                          | Source Field             | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|--------------------------|---|
| UDF13_DESCR     | User Defined Field 13<br>Description |                          |   |
| UDF14_CD        | User Defined Field 14<br>Code        |                          |   |
| UDF14_DESCR     | User Defined Field 14<br>Description |                          |   |
| UDF15_CD        | User Defined Field 15<br>Code        |                          |   |
| UDF15_DESCR     | User Defined Field 15<br>Description |                          |   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                          | Transformation Logic: This field is populated with the load timestamp value.  |
| EFF_START_DTTM  | Effective Start Date/<br>Time        |                          |   |
| EFF_END_DT*TM   | Effective End Date/<br>Time          |                          |   |
| JOB_NBR         | Job Number                           |                          | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Address Dimension**

The Address dimension extracts address information from the CU\_SERVICE\_LOCATIONS table in Oracle Utilities Network Management System.

# **Properties**

| Property                   | Value                |
|----------------------------|----------------------|
| Target Table               | CD_ADDR              |
| Table Type                 | Dimension            |
| SCD Type                   | Type 2               |
| Source System Driver Table | CU_SERVICE_LOCATIONS |
| Stage Table                | STG_CD_ADDR          |
| ODI Package                | B1_PKG_CD_ADDR       |
| ETL View                   | B1_D_ADDR_VW         |

| Target Field | OBIEE Field                        | Source Field  | Transformation / Calculation Logic  |
|--------------|------------------------------------|---|---|
| ADDR_KEY     | Address Dimension<br>Surrogate Key |   | Transformation Logic: This field is populated with the sequence from SPL_ADDR_SEQ.NEX TVAL. |
| SRC_ADDR_ID  | Premise ID                         | CU_SERVICE_LOCAT<br>IONS.SERV_LOC_ID  |   |
| ADDR_INFO    | Address                            | CU_SERVICE_LOCAT IONS.SERV_ADDR_1   ','   SERV_CITY   ','   SERV_STATE    ','   SERV_POSTCODE_1 |   |
| ADDR_LINE1   | Address Line 1                     | CU_SERVICE_LOCAT<br>IONS.SERV_ADDR_1  |   |
| ADDR_LINE2   | Address Line 2                     | CU_SERVICE_LOCAT<br>IONS.SERV_ADDR_2  |   |
| ADDR_LINE3   | Address Line 3                     | CU_SERVICE_LOCAT<br>IONS.SERV_ADDR_3  |   |
| ADDR_LINE4   | Address Line 4                     | CU_SERVICE_LOCAT<br>IONS.SERV_ADDR_4  |   |
| CITY         | City                               | CU_SERVICE_LOCAT<br>IONS.SERV_CITY  |   |
| COUNTY       | County                             |   |   |

| Target Field  | OBIEE Field                         | Source Field                                 | Transformation / Calculation Logic |
|---------------|-------------------------------------|--|------------------------------------|
| POSTAL        | Postal Code                         | CU_SERVICE_LOCAT<br>IONS.SERV_POSTCO<br>DE_1 |                                    |
| STATE_CD      | State Code                          | CU_SERVICE_LOCAT<br>IONS.SERV_STATE          |                                    |
| STATE_DESCR   | State                               | CU_SERVICE_LOCAT<br>IONS.SERV_STATE          |                                    |
| COUNTRY_CD    | Country Code                        |  |                                    |
| COUNTRY_DESCR | Country                             |  |                                    |
| GEO_CODE      | Geographical Code                   |  |                                    |
| CROSS_STREET  | Cross Street                        |  |                                    |
| SUBURB        | Suburb                              |  |                                    |
| UDF1_CD       | City Code                           | CU_SERVICE_LOCAT<br>IONS.SERV_CITY           |                                    |
| UDF1_DESCR    | City                                | CU_SERVICE_LOCAT<br>IONS.SERV_CITY           |                                    |
| UDF2_CD       | County Code                         |  |                                    |
| UDF2_DESCR    | County                              |  |                                    |
| UDF3_CD       | Postal Code                         | CU_SERVICE_LOCAT<br>IONS.SERV_POSTCO<br>DE_1 |                                    |
| UDF3_DESCR    | Postal Code                         | CU_SERVICE_LOCAT<br>IONS.SERV_POSTCO<br>DE_1 |                                    |
| UDF4_CD       | State Code                          | CU_SERVICE_LOCAT<br>IONS.SERV_STATE          |                                    |
| UDF4_DESCR    | State                               | CU_SERVICE_LOCAT<br>IONS.SERV_STATE          |                                    |
| UDF5_CD       | User Defined Field 5<br>Code        |  |                                    |
| UDF5_DESCR    | User Defined Field 5<br>Description |  |                                    |
| UDF6_CD       | User Defined Field 6<br>Code        |  |                                    |
| UDF6_DESCR    | User Defined Field 6<br>Description |  |                                    |
| UDF7_CD       | User Defined Field 7<br>Code        |  |                                    |

| Target Field | OBIEE Field                          | Source Field | Transformation / Calculation Logic |
|--------------|--------------------------------------|--------------|------------------------------------|
| UDF7_DESCR   | User Defined Field 7<br>Description  |              |                                    |
| UDF8_CD      | User Defined Field 8<br>Code         |              |                                    |
| UDF8_DESCR   | User Defined Field 8<br>Description  |              |                                    |
| UDF9_CD      | User Defined Field 9<br>Code         |              |                                    |
| UDF9_DESCR   | User Defined Field 9<br>Description  |              |                                    |
| UDF10_CD     | User Defined Field 10<br>Code        |              |                                    |
| UDF10_DESCR  | User Defined Field 10<br>Description |              |                                    |
| UDF11_CD     | User Defined Field 11<br>Code        |              |                                    |
| UDF11_DESCR  | User Defined Field 11<br>Description |              |                                    |
| UDF12_CD     | User Defined Field 12<br>Code        |              |                                    |
| UDF12_DESCR  | User Defined Field 12<br>Description |              |                                    |
| UDF13_CD     | User Defined Field 13<br>Code        |              |                                    |
| UDF13_DESCR  | User Defined Field 13<br>Description |              |                                    |
| UDF14_CD     | User Defined Field 14<br>Code        |              |                                    |
| UDF14_DESCR  | User Defined Field 14<br>Description |              |                                    |
| UDF15_CD     | User Defined Field 15<br>Code        |              |                                    |
| UDF15_DESCR  | User Defined Field 15<br>Description |              |                                    |
| UDF16_CD     | User Defined Field 16<br>Code        |              |                                    |
| UDF16_DESCR  | User Defined Field 16<br>Description |              |                                    |

| Target Field    | OBIEE Field                   | Source Field             | Transformation / Calculation Logic  |
|-----------------|-------------------------------|--------------------------|---|
| DATA_SOURCE_IND | Data Source Indicator         | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time           |                          | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.   |
| EFF_START_DTTM  | Effective Start Date/<br>Time |                          |   |
| EFF_END_DTTM    | Effective End Date/<br>Time   |                          |   |
| JOB_NBR         | Job Number                    |                          | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Call Info Dimension**

The Call Info dimension extracts the call details (along with the caller information) created in the Oracle Utilities Network Management System Web Call Entry application.

| Property                   | Value               |
|----------------------------|---------------------|
| Target Table               | CD_CALL_INFO        |
| Table Type                 | Dimension           |
| SCD Type                   | Type 1              |
| Source System Driver Table | INCIDENTS           |
| Stage Table                | STG_CD_CALL_INFO    |
| ODI Package                | B1_PKG_CD_CALL_INFO |
| ETL View                   | B1_D_CALL_INFO_VW   |

| Target Field    | OBIEE Field                          | Source Field                 | Transformation /<br>Calculation Logic  |
|-----------------|--------------------------------------|------------------------------|--|
| CALL_INFO_KEY   | Call Info Dimension<br>Surrogate Key |                              | Transformation Logic: This field is populated with the sequence from SPL_CALL_INFO_SEQ |
| CALLER_NAME     | Caller Name                          | INCIDENTS.CUSTOM<br>ER_NAME  |  |
| PHONE_NBR       | Phone Number                         | INCIDENTS.CUSTOM<br>ER_PHONE |  |
| COMPLAINT       | Complaint Description                | INCIDENTS.COMPLA<br>INT      |  |
| COMMENTS        | Call Comments                        | INCIDENTS.OP_COM<br>MENT     |  |
| SRC_INCIDENT_ID | Call Number                          | INCIDENTS.NUMB               |  |
| UDF1_CD         | User Defined Field 1<br>Code         | INCIDENTS.ACTIVE             |  |
| UDF1_DESCR      | User Defined Field 1<br>Description  | INCIDENTS.ACTIVE             |  |
| UDF2_CD         | User Defined Field 2<br>Code         | INCIDENTS.COMPLE<br>TE       |  |
| UDF2_DESCR      | User Defined Field 2<br>Description  | INCIDENTS.COMPLE<br>TE       |  |
| UDF3_CD         | User Defined Field 3<br>Code         | INCIDENTS.COMPLA<br>INT      |  |
| UDF3_DESCR      | User Defined Field 3<br>Description  | INCIDENTS.SHORT_<br>DESC     |  |
| UDF4_CD         | User Defined Field 4<br>Code         |                              |  |
| UDF4_DESCR      | User Defined Field 4<br>Description  |                              |  |
| UDF5_CD         | User Defined Field 5<br>Code         |                              |  |
| UDF5_DESCR      | User Defined Field 5<br>Description  |                              |  |
| UDF6_CD         | User Defined Field 6<br>Code         |                              |  |
| UDF6_DESCR      | User Defined Field 6<br>Description  |                              |  |
| UDF7_CD         | User Defined Field 7<br>Code         |                              |  |

| Target Field    | OBIEE Field                          | Source Field                   | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|--------------------------------|---|
| UDF7_DESCR      | User Defined Field 7<br>Description  |                                |   |
| UDF8_CD         | User Defined Field 8<br>Code         |                                |   |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                                |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                                |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                                |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                                |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                                |   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE. DSI          | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                                | Transformation Logic: This field is populated with the load timestamp value.  |
| UPDATE_DTTM     | Update Date/Time                     | INCIDENTS.LAST_UP<br>DATE_TIME | Transformation Logic:<br>This field is populated<br>with the updated<br>timestamp value.  |
| DELETE_IND      |                                      | INCIDENTS.JRN_FLA<br>G         | Transformation Logic:<br>This field is populated<br>with "1" for deleted<br>records, and "0" for<br>new/modified records.   |
| JOB_NBR         | Job Number                           |                                | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **City Dimension**

The City dimension extracts distinct city information from the CU\_SERVICE\_LOCATIONS table. The columns that identify the distinct city records are SRC\_STATE, SRC\_COUNTRY, SRC\_CITY, and DATA\_SOURCE\_IND.

# **Properties**

| Property                   | Value                |
|----------------------------|----------------------|
| Target Table               | CD_CITY              |
| Table Type                 | Dimension            |
| SCD Type                   | Type 1               |
| Source System Driver Table | CU_SERVICE_LOCATIONS |
| Stage Table                | STG_CD_CITY          |
| ODI Package                | B1_PKG_CD_CITY       |
| ETL View                   | B1_D_CITY_VW         |

| Target Field | OBIEE Field                         | Source Field                                  | Transformation / Calculation Logic  |
|--------------|-------------------------------------|---|---|
| CITY_KEY     | City Dimension<br>Surrogate Key     |   | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_CITY_SEQ.NEXT<br>VAL. |
| SRC_STATE    | State                               | CU_SERVICE_LOCAT<br>IONS.SERV_STATE           |   |
| SRC_CITY     | City                                | CU_SERVICE_LOCAT<br>IONS.SERV_CITY            |   |
| SRC_COUNTRY  | Country                             | CU_SERVICE_LOCAT<br>IONS.SERV_COUNTR<br>Y     |   |
| UDF1_CD      | User Defined Field 1<br>Code        |   |   |
| UDF1_DESCR   | User Defined Field 1<br>Description |   |   |
| UDF2_CD      | User Defined Field 2<br>Code        |   |   |
| UDF2_DESCR   | User Defined Field 2<br>Description |   |   |
| UPDATE_DTTM  | Update Date/Time                    | CU_SERVICE_LOCAT<br>IONS.LAST_UPDATE_<br>TIME | Transformation Logic:<br>This field is populated<br>with the updated<br>timestamp value.                |

| Target Field    | OBIEE Field           | Source Field                      | Transformation / Calculation Logic  |
|-----------------|-----------------------|-----------------------------------|---|
| DATA_SOURCE_IND | Data Source Indicator | B1_PROD_INSTANCE. DATA_SOURCE_IND | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time   |                                   | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.   |
| JOB_NBR         | Job Number            |                                   | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Control Zone Dimension**

The Control Zone dimension extracts the control zone records and their hierarchical relationships from the Network Management System source database tables CONTROL\_ZONES and CONTROL\_ZONE\_STRUCTURES.

| Property                   | Value   |
|----------------------------|---|
| Target Table               | CD_CTRL_ZONE  |
| Table Type                 | Dimension   |
| SCD Type                   | Type 2  |
| Source System Driver Table | CONTROL_ZONE_STRUCTURES CONTROL_ZONES CONTROL_ZONE_STRUCTURES A CONTROL_ZONES B CONTROL_ZONES C |
| Stage Table                | STG_CD_CTRL_ZONE  |
| ODI Package                | B1_PKG_CD_CTRL_ZONE   |
| ETL View                   | B1_D_CTRL_ZONE_VW   |
| ·                          |   |

# Fields (

| Target Field   | OBIEE Field                             | Source Field                                  | Transformation / Calculation Logic  |
|----------------|---|---|---|
| CTRL_ZONE_KEY  | Control Zone Dimension<br>Surrogate Key |   | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_CTRL_ZONE_SE<br>Q.NEXT VAL. |
| SRC_NCG_ID     |   | CONTROL_ZONES.N<br>CG_ID                      |   |
|                |   | CONTROL_ZONE_ST<br>RUCTURES.CHILD_N<br>CG_ID  |   |
| HIERARCHY_TYPE |   |   |   |
| CTRL_ZONE_NAME |   | CONTROL_ZONES.N<br>AME                        |   |
| UDF1_CD        | User Defined Field 1<br>Code            | CONTROL_ZONES.N<br>CG_ID                      |   |
|                |   | CONTROL_ZONE_ST<br>RUCTURES.PARENT_<br>NCG_ID |   |
| UDF1_DESCR     | User Defined Field 1<br>Description     | CONTROL_ZONES.N<br>AME                        |   |
| UDF2_CD        | User Defined Field 2<br>Code            | CONTROL_ZONES.N<br>CG_ID                      |   |
| UDF2_DESCR     | User Defined Field 2<br>Description     | CONTROL_ZONES.N<br>AME                        |   |
| UDF3_CD        | User Defined Field 3<br>Code            | CONTROL_ZONES.N<br>CG_ID                      |   |
| UDF3_DESCR     | User Defined Field 3<br>Description     | CONTROL_ZONES.N<br>AME                        |   |
| UDF4_CD        | User Defined Field 4<br>Code            | CONTROL_ZONES.N<br>CG_ID                      |   |
| UDF4_DESCR     | User Defined Field 4<br>Description     | CONTROL_ZONES.N<br>AME                        |   |
| UDF5_CD        | User Defined Field 5<br>Code            | CONTROL_ZONES.N<br>CG_ID                      |   |
| UDF5_DESCR     | User Defined Field 5<br>Description     |   |   |
| UDF6_CD        | User Defined Field 6<br>Code            |   |   |
| UDF6_DESCR     | User Defined Field 6<br>Description     |   |   |

| Target Field    | OBIEE Field                          | Source Field                      | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|-----------------------------------|---|
| UDF7_CD         | User Defined Field 7<br>Code         |                                   |   |
| UDF7_DESCR      | User Defined Field 7<br>Description  |                                   |   |
| UDF8_CD         | User Defined Field 8<br>Code         |                                   |   |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                                   |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                                   |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                                   |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                                   |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                                   |   |
| EFF_START_DTTM  | Effective Start Date/<br>Time        |                                   |   |
| EFF_END_DTTM    | Effective End Date/<br>Time          |                                   |   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE. DATA_SOURCE_IND | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                                   | Transformation Logic: This field is populated with the load timestamp value.  |
| JOB_NBR         | Job Number                           |                                   | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Crew Dimension**

The Crew dimension extracts crew records from the Network Management System source database tables CREWS and CREW\_TYPES.

# **Properties**

| Property                   | Value          |
|----------------------------|----------------|
| Target Table               | CD_CREW        |
| Table Type                 | Dimension      |
| SCD Type                   | Type 2         |
| Source System Driver Table | CREWS          |
| Stage Table                | STG_CD_CREW    |
| ODI Package                | B1_PKG_CD_CREW |
| ETL View                   | B1_D_CREW_VW   |

| Target Field    | OBIEE Field                        | Source Field             | Transformation / Calculation Logic   |
|-----------------|------------------------------------|--------------------------|--|
| CREW_KEY        | Crew Dimension<br>Surrogate Key    |                          | Transformation Logic: This field is populated with the sequence from SPL_CREW_SEQ.NEX T VAL. |
| CREW_CD         | Crew Code                          | CREWS.CREW_KEY           |  |
| CREW_DESCR      | Crew Description                   | CREW_TYPES.CREW_<br>NAME |  |
| SRC_CREW_ID     | Crew ID                            | CREWS.CREW_ID            |  |
| CREW_TYPE_CD    | Crew Type Code                     | CREWS.CREW_TYPE          |  |
| CREW_TYPE_DESCR | Crew Type Description              | CREW_TYPES.CREW_<br>TYPE |  |
| ORG_UNIT1_CD    | Organization Unit 1<br>Code        |                          |  |
| ORG_UNIT1_DESCR | Organization Unit 1<br>Description |                          |  |
| ORG_UNIT2_CD    | Organization Unit 2<br>Code        |                          |  |
| ORG_UNIT2_DESCR | Organization Unit 2<br>Description |                          |  |
| ORG_UNIT3_CD    | Organization Unit 3<br>Code        |                          |  |

| Target Field    | OBIEE Field                         | Source Field             | Transformation /<br>Calculation Logic |
|-----------------|-------------------------------------|--------------------------|---------------------------------------|
| ORG_UNIT3_DESCR | Organization Unit 3<br>Description  |                          |                                       |
| UDF1_CD         | User Defined Field 1<br>Code        | CREWS.CREW_TYPE          |                                       |
| UDF1_DESCR      | User Defined Field 1<br>Description | CREW_TYPES.CREW_<br>TYPE |                                       |
| UDF2_CD         | User Defined Field 2<br>Code        |                          |                                       |
| UDF2_DESCR      | User Defined Field 2<br>Description |                          |                                       |
| UDF3_CD         | User Defined Field 3<br>Code        |                          |                                       |
| UDF3_DESCR      | User Defined Field 3<br>Description |                          |                                       |
| UDF4_CD         | User Defined Field 4<br>Code        |                          |                                       |
| UDF4_DESCR      | User Defined Field 4<br>Description |                          |                                       |
| UDF5_CD         | User Defined Field 5<br>Code        |                          |                                       |
| UDF5_DESCR      | User Defined Field 5<br>Description |                          |                                       |
| UDF6_CD         | User Defined Field 6<br>Code        |                          |                                       |
| UDF6_DESCR      | User Defined Field 6<br>Description |                          |                                       |
| UDF7_CD         | User Defined Field 7<br>Code        |                          |                                       |
| UDF7_DESCR      | User Defined Field 7<br>Description |                          |                                       |
| UDF8_CD         | User Defined Field 8<br>Code        |                          |                                       |
| UDF8_DESCR      | User Defined Field 8<br>Description |                          |                                       |
| UDF9_CD         | User Defined Field 9<br>Code        |                          |                                       |
| UDF9_DESCR      | User Defined Field 9<br>Description |                          |                                       |
| UDF10_CD        | User Defined Field 10<br>Code       |                          |                                       |

| Target Field    | OBIEE Field                          | Source Field                      | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|-----------------------------------|---|
| UDF10_DESCR     | User Defined Field 10<br>Description |                                   |   |
| EFF_START_DTTM  | Effective Start Date/<br>Time        |                                   |   |
| EFF_END_DTTM    | Effective End Date/<br>Time          | CREWS.DEATH                       |   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE. DATA_SOURCE_IND | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                                   | Transformation Logic: This field is populated with the load timestamp value.  |
| JOB_NBR         | Job Number                           |                                   | Transformation Logic: This field is populated with the ODI job execution session number.  |

## **Device Dimension**

The Device dimension extracts device records from the Network Management System source database table NETWORK\_COMPONENTS.

| Value              |
|--------------------|
| CD_DEVICE          |
| Dimension          |
| Type 2             |
| NETWORK_COMPONENTS |
| STG_CD_DEVICE      |
| B1_PKG_CD_DEVICE   |
| B1_D_DEVICE_VW     |
|                    |

| Target Field           | OBIEE Field                         | Source Field                 | Transformation / Calculation Logic   |
|------------------------|-------------------------------------|------------------------------|--|
| DEVICE_KEY             | Device Dimension<br>Surrogate Key   |                              | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_DEVICE_SEQ.NE<br>XT VAL. |
| SRC_DEVICE_CLS         | Device Class                        | NETWORK_COMPON<br>ENTS.H_CLS |  |
| SRC_DEVICE_IDX         | Device Index                        | NETWORK_COMPON<br>ENTS.H_IDX |  |
| DEVICE_NAME            | Device Name                         | NETWORK_COMPON<br>ENTS.NAME  |  |
| DEVICE_TYPE_CD         | Device Type Code                    | CLASSES.C_TYPE               | Transformation Logic: If null, this field is populated with "-".   |
| DEVICE_TYPE_DESC<br>R  | Device Type Description             | CLASSES.C_TYPE               | Transformation Logic: If null, this field is populated with "-".   |
| DEVICE_CLASS_CD        | Device Class Code                   | CLASSES.C_NAME               | Transformation Logic: If null, this field is populated with "-".   |
| DEVICE_CLASS_DES<br>CR | Device Class Description            | CLASSES.C_DESC               | Transformation Logic: If null, this field is populated with "-".   |
| UDF1_CD                | User Defined Field 1<br>Code        |                              |  |
| UDF1_DESCR             | User Defined Field 1<br>Description |                              |  |
| UDF2_CD                | User Defined Field 2<br>Code        |                              |  |
| UDF2_DESCR             | User Defined Field 2<br>Description |                              |  |
| UDF3_CD                | User Defined Field 3<br>Code        |                              |  |
| UDF3_DESCR             | User Defined Field 3<br>Description |                              |  |
| UDF4_CD                | User Defined Field 4<br>Code        |                              |  |
| UDF4_DESCR             | User Defined Field 4<br>Description |                              |  |
| UDF5_CD                | User Defined Field 5<br>Code        |                              |  |

| Target Field    | OBIEE Field                          | Source Field                 | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|------------------------------|---|
| UDF5_DESCR      | User Defined Field 5<br>Description  |                              |   |
| UDF6_CD         | User Defined Field 6<br>Code         |                              |   |
| UDF6_DESCR      | User Defined Field 6<br>Description  |                              |   |
| UDF7_CD         | User Defined Field 7<br>Code         |                              |   |
| UDF7_DESCR      | User Defined Field 7<br>Description  |                              |   |
| UDF8_CD         | User Defined Field 8<br>Code         |                              |   |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                              |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                              |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                              |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                              |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                              |   |
| EFF_START_DTTM  | Effective Start Date/<br>Time        |                              |   |
| EFF_END_DTTM    | Effective End Date/<br>Time          | NETWORK_COMPON<br>ENTS.DEATH |   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE. DSI        | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                              | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.   |

| Target Field | OBIEE Field | Source Field | Transformation /<br>Calculation Logic  |
|--------------|-------------|--------------|--|
| JOB_NBR      | Job Number  |              | Transformation Logic: This field is populated with the ODI job execution session number. |

# **Duration Deviation Dimension**

The Duration Deviation dimension extracts the estimated versus actual duration bucket information.

# **Properties**

| Property                   | Value                        |
|----------------------------|------------------------------|
| Target Table               | CD_DURATION_DEVIATION        |
| Table Type                 | Dimension                    |
| SCD Type                   | Type 1                       |
| Source System Driver Table | B1_RANGE_LOOKUP              |
| Stage Table                | STG_CD_DURATION_DEVIATION    |
| ODI Package                | B1_PKG_CD_DURATION_DEVIATION |
| ETL View                   | B1_D_DURATION_DEVIATION_VW   |

| Target Field                 | OBIEE Field  | Source Field                    | Transformation /<br>Calculation Logic  |
|------------------------------|--|---------------------------------|--|
| DURATION_DEVIATI<br>ON_KEY   | Estimated VS Actual<br>Duration Dimension<br>Surrogate Key |                                 | Transformation Logic: This field is populated with the sequence from B1_DURATION_DEVI ATION_SEQ.NEXT_V AL. |
| DURATION_DEVIATI<br>ON_DESCR | Estimated VS Actual<br>Duration Description                | B1_RANGE_LOOKUP.<br>DESCR       |  |
| RANGE_START                  | Start Range  | B1_RANGE_LOOKUP.<br>START_RANGE |  |
| RANGE_END                    | End Range  | B1_RANGE_LOOKUP.<br>END_RANGE   |  |
| UDF1_CD                      | User Defined Field 1<br>Code                               |                                 |  |
| UDF1_DESCR                   | User Defined Field 1<br>Description                        |                                 |  |

| Target Field | OBIEE Field                          | Source Field | Transformation / Calculation Logic |
|--------------|--------------------------------------|--------------|------------------------------------|
| UDF2_CD      | User Defined Field 2<br>Code         |              |                                    |
| UDF2_DESCR   | User Defined Field 2<br>Description  |              |                                    |
| UDF3_CD      | User Defined Field 3<br>Code         |              |                                    |
| UDF3_DESCR   | User Defined Field 3<br>Description  |              |                                    |
| UDF4_CD      | User Defined Field 4<br>Code         |              |                                    |
| UDF4_DESCR   | User Defined Field 4<br>Description  |              |                                    |
| UDF5_CD      | User Defined Field 5<br>Code         |              |                                    |
| UDF5_DESCR   | User Defined Field 5<br>Description  |              |                                    |
| UDF6_CD      | User Defined Field 6<br>Code         |              |                                    |
| UDF6_DESCR   | User Defined Field 6<br>Description  |              |                                    |
| UDF7_CD      | User Defined Field 7<br>Code         |              |                                    |
| UDF7_DESCR   | User Defined Field 7<br>Description  |              |                                    |
| UDF8_CD      | User Defined Field 8<br>Code         |              |                                    |
| UDF8_DESCR   | User Defined Field 8<br>Description  |              |                                    |
| UDF9_CD      | User Defined Field 9<br>Code         |              |                                    |
| UDF9_DESCR   | User Defined Field 9<br>Description  |              |                                    |
| UDF10_CD     | User Defined Field 10<br>Code        |              |                                    |
| UDF10_DESCR  | User Defined Field 10<br>Description |              |                                    |
| UPDATE_DTTM  | Update Date/Time                     |              |                                    |

| Target Field    | OBIEE Field           | Source Field             | Transformation / Calculation Logic  |
|-----------------|-----------------------|--------------------------|---|
| DATA_SOURCE_IND | Data Source Indicator | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time   |                          | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.   |
| JOB_NBR         | Job Number            |                          | Transformation Logic: This field is populated with the ODI job execution session number.  |

## **Estimated Restoration Duration Dimension**

The Estimated Restoration Duration dimension extracts the estimated restoration duration age bucket information.

| Property                   | Value                 |
|----------------------------|-----------------------|
| Target Table               | CD_EST_RST_DUR        |
| Table Type                 | Dimension             |
| SCD Type                   | Type 1                |
| Source System Driver Table | B1_RANGE_LOOKUP       |
| Stage Table                | STG_CD_EST_RST_DUR    |
| ODI Package                | B1_PKG_CD_EST_RST_DUR |
| ETL View                   | B1_D_EST_RST_DUR_VW   |

| Target Field          | OBIEE Field  | Source Field                    | Transformation / Calculation Logic   |
|-----------------------|--|---------------------------------|--|
| EST_RST_DUR_KEY       | Estimated Restoration<br>Duration Dimension<br>Surrogate Key |                                 | Transformation Logic: This field is populated with the sequence from B1_EST_RST_DUR_SE Q.NEXT_VAL. |
| EST_RST_DUR_DESC<br>R | Estimated Restoration<br>Duration Description                | B1_RANGE_LOOKUP.<br>DESCR       |  |
| RANGE_START           | Start Range  | B1_RANGE_LOOKUP.<br>Start_range |  |
| RANGE_END             | End Range  | B1_RANGE_LOOKUP.<br>END_RANGE   |  |
| UDF1_CD               | User Defined Field 1<br>Code                                 |                                 |  |
| UDF1_DESCR            | User Defined Field 1<br>Description                          |                                 |  |
| UDF2_CD               | User Defined Field 2<br>Code                                 |                                 |  |
| UDF2_DESCR            | User Defined Field 2<br>Description                          |                                 |  |
| UDF3_CD               | User Defined Field 3<br>Code                                 |                                 |  |
| UDF3_DESCR            | User Defined Field 3<br>Description                          |                                 |  |
| UDF4_CD               | User Defined Field 4<br>Code                                 |                                 |  |
| UDF4_DESCR            | User Defined Field 4<br>Description                          |                                 |  |
| UDF5_CD               | User Defined Field 5<br>Code                                 |                                 |  |
| UDF5_DESCR            | User Defined Field 5<br>Description                          |                                 |  |
| UDF6_CD               | User Defined Field 6<br>Code                                 |                                 |  |
| UDF6_DESCR            | User Defined Field 6<br>Description                          |                                 |  |
| UDF7_CD               | User Defined Field 7<br>Code                                 |                                 |  |
| UDF7_DESCR            | User Defined Field 7<br>Description                          |                                 |  |

| Target Field    | OBIEE Field                          | Source Field             | Transformation /<br>Calculation Logic   |
|-----------------|--------------------------------------|--------------------------|---|
| UDF8_CD         | User Defined Field 8<br>Code         |                          |   |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                          |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                          |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                          |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                          |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                          |   |
| UPDATE_DTTM     | Update Date/Time                     |                          |   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                          | Transformation Logic: This field is populated with the load timestamp value.  |
| JOB_NBR         | Job Number                           |                          | Transformation Logic: This field is populated with the ODI job execution session number.  |

## **Event Dimension**

The Event dimension extracts event information from the Network Management System applications using the source database table JOBS.

| Property     | Value    |
|--------------|----------|
| Target Table | CD_EVENT |

| Table Type                 | Dimension       |
|----------------------------|-----------------|
| SCD Type                   | Type 1          |
| Source System Driver Table | JOBS            |
| Stage Table                | STG_CD_EVENT    |
| ODI Package                | B1_PKG_CD_EVENT |
| ETL View                   | B1_D_EVENT_VW   |

| Target Field          | OBIEE Field                      | Source Field   | Transformation / Calculation Logic  |
|-----------------------|----------------------------------|--|---|
| EVENT_KEY             | Event Dimension<br>Surrogate Key |  | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_EVENT_SEQ.NE<br>XT_VAL. |
| SRC_NBR               | Number (Natural Key)             | JOBS.NUMB  |   |
| EVENT_NBR             | Event Number                     | JOBS.EVENT_IDX   |   |
| DELETE_IND            | Delete Indicator                 |  |   |
| EXCLUDE_REASON        | Exclude Reason                   | PICKLIST_INFO_UPD<br>_TR.DTR_TEXT                              |   |
| OPERATOR_COMME<br>NT  | Operator Comment                 | JOBS.OPERATOR_CO<br>MMENT                                      |   |
| EVENT_STATE_CD        | Event Status Code                | JOBS.VALID_STATE_<br>KEY                                       |   |
| EVENT_STATE_DESC<br>R | Event Status Description         | If TE_VALID_STATES.D ESCRIPTION is null, then JOBS.ALARM_STATE |   |
| X_COORDINATE          | X Coordinate                     | JOBS.X_COORD   |   |
| Y_COORDINATE          | Y Coordinate                     | JOBS.Y_COORD   |   |
| FIRST_CALL_ADDR       | First Call Address               | JOBS.ADDR_STREET   |   |
|                       |                                  | JOBS.ADDR_CITY   |   |
| REMEDY_CD             | Remedy                           | PICKLIST_INFO_UPD<br>_TR.REMEDY_OM                             |   |
| TROUBLE_CD_LIST       | Trouble Code                     | JOBS.TROUBLE_COD<br>E  |   |
| UDF1_CD               | User Defined Field 1<br>Code     | PICKLIST_INFO_UPD<br>_TR.SCHEDULED_DE<br>V_OM                  |   |

| Target Field | OBIEE Field                  | Source Field                                   | Transformation /<br>Calculation Logic |
|--------------|------------------------------|--|---------------------------------------|
| UDF1_DESCR   | Scheduled                    | PICKLIST_INFO_UPD<br>_TR.SCHEDULED_DE<br>V_OM  |                                       |
| UDF2_CD      | User Defined Field 2<br>Code | PICKLIST_INFO_UPD<br>_TR.HUMAN_ELEM_<br>OM     |                                       |
| UDF2_DESCR   | Utility Error                | PICKLIST_INFO_UPD<br>_TR.HUMAN_ELEM_<br>OM     |                                       |
| UDF3_CD      | User Defined Field 3<br>Code | PICKLIST_INFO_UPD<br>_TR.OTHER_CAUSE_<br>OM    |                                       |
| UDF3_DESCR   | Other                        | PICKLIST_INFO_UPD<br>_TR.OTHER_CAUSE_<br>OM    |                                       |
| UDF4_CD      | User Defined Field 4<br>Code | PICKLIST_INFO_UPD<br>_TR.FOREIGN_INTE<br>RF_OM |                                       |
| UDF4_DESCR   | Foreign Interference         | PICKLIST_INFO_UPD<br>_TR.FOREIGN_INTE<br>RF_OM |                                       |
| UDF5_CD      | User Defined Field 5<br>Code | PICKLIST_INFO_UPD<br>_TR.VEGETATION_O<br>M     |                                       |
| UDF5_DESCR   | Vegetation                   | PICKLIST_INFO_UPD<br>_TR.VEGETATION_O<br>M     |                                       |
| UDF6_CD      | User Defined Field 6<br>Code | PICKLIST_INFO_UPD<br>_TR.DEF_EQUIP_OM          |                                       |
| UDF6_DESCR   | Defective Equipment          | PICKLIST_INFO_UPD<br>_TR.DEF_EQUIP_OM          |                                       |
| UDF7_CD      | User Defined Field 7<br>Code | PICKLIST_INFO_UPD<br>_TR.ADV_ENVIRON_<br>OM    |                                       |
| UDF7_DESCR   | Environment                  | PICKLIST_INFO_UPD<br>_TR.ADV_ENVIRON_<br>OM    |                                       |
| UDF8_CD      | User Defined Field 8<br>Code | PICKLIST_INFO_UPD<br>_TR.ADV_WEATHER_<br>OM    |                                       |
| UDF8_DESCR   | Weather                      | PICKLIST_INFO_UPD<br>_TR.ADV_WEATHER_<br>OM    |                                       |

| Target Field | OBIEE Field                                 | Source Field                                   | Transformation / Calculation Logic |
|--------------|---|--|------------------------------------|
|              | User Defined Field 9<br>Code                | PICKLIST_INFO_UPD<br>_TR.SCHEDULED_DE<br>V_OM  |                                    |
|              |   | PICKLIST_INFO_UPD<br>_TR.HUMAN_ELEM_<br>OM     |                                    |
|              |   | PICKLIST_INFO_UPD<br>_TR.OTHER_CAUSE_<br>OM    |                                    |
|              |   | PICKLIST_INFO_UPD<br>_TR.FOREIGN_INTE<br>RF_OM |                                    |
|              |   | PICKLIST_INFO_UPD<br>_TR.VEGETATION_O<br>M     |                                    |
|              |   | PICKLIST_INFO_UPD<br>_TR.DEF_EQUIP_OM          |                                    |
|              | PICKLIST_INFO_UPD<br>_TR.ADV_ENVIRON_<br>OM |  |                                    |
|              |   | PICKLIST_INFO_UPD<br>_TR.ADV_WEATHER_<br>OM    |                                    |

| Target Field | OBIEE Field  | Source Field                                   | Transformation / Calculation Logic |
|--------------|--------------|--|------------------------------------|
| UDF9_DESCR   | Outage Cause | PICKLIST_INFO_UPD<br>_TR.SCHEDULED_DE<br>V_OM  |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.HUMAN_ELEM_<br>OM     |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.OTHER_CAUSE_<br>OM    |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.FOREIGN_INTE<br>RF_OM |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.VEGETATION_O<br>M     |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.DEF_EQUIP_OM          |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.ADV_ENVIRON_<br>OM    |                                    |
|              |              | PICKLIST_INFO_UPD<br>_TR.ADV_WEATHER_<br>OM    |                                    |

| Target Field | OBIEE Field                   | Source Field                                   | Transformation / Calculation Logic |
|--------------|-------------------------------|--|------------------------------------|
| UDF10_CD     | User Defined Field 10<br>Code | PICKLIST_INFO_UPD<br>_TR.SCHEDULED_DE<br>V_OM  |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.HUMAN_ELEM_<br>OM     |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.OTHER_CAUSE_<br>OM    |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.FOREIGN_INTE<br>RF_OM |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.VEGETATION_O<br>M     |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.DEF_EQUIP_OM          |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.ADV_ENVIRON_<br>OM    |                                    |
|              |                               | PICKLIST_INFO_UPD<br>_TR.ADV_WEATHER_<br>OM    |                                    |

| Target Field | OBIEE Field                          | Source Field                                   | Transformation / Calculation Logic |
|--------------|--------------------------------------|--|------------------------------------|
| UDF10_DESCR  | Detailed Cause                       | PICKLIST_INFO_UPD<br>_TR.SCHEDULED_DE<br>V_OM  |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.HUMAN_ELEM_<br>OM     |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.OTHER_CAUSE_<br>OM    |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.FOREIGN_INTE<br>RF_OM |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.VEGETATION_O<br>M     |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.DEF_EQUIP_OM          |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.ADV_ENVIRON_<br>OM    |                                    |
|              |                                      | PICKLIST_INFO_UPD<br>_TR.ADV_WEATHER_<br>OM    |                                    |
| UDF11_CD     | User Defined Field 11<br>Code        | PICKLIST_INFO_UPD<br>_TR.REMEDY_OM             |                                    |
| UDF11_DESCR  | Priority                             | PICKLIST_INFO_UPD<br>_TR.REMEDY_OM             |                                    |
| UDF12_CD     | User Defined Field 12<br>Code        |  |                                    |
| UDF12_DESCR  | Standard Remarks                     |  |                                    |
| UDF13_CD     | User Defined Field 13<br>Code        |  |                                    |
| UDF13_DESCR  | User Defined Field 13<br>Description |  |                                    |
| UDF14_CD     | User Defined Field 14<br>Code        |  |                                    |
| UDF14_DESCR  | User Defined Field 14<br>Description |  |                                    |

| Target Field | OBIEE Field                          | Source Field                      | Transformation / Calculation Logic |
|--------------|--------------------------------------|-----------------------------------|------------------------------------|
| UDF15_CD     | User Defined Field 15<br>Code        | RELATED_OUTAGES.<br>KEY_EVENT_IDX |                                    |
| UDF15_DESCR  | User Defined Field 15<br>Description | RELATED_OUTAGES.<br>KEY_EVENT_IDX |                                    |
| UDF16_CD     | User Defined Field 16<br>Code        |                                   |                                    |
| UDF16_DESCR  | User Defined Field 16<br>Description |                                   |                                    |
| UDF17_CD     | User Defined Field 17<br>Code        |                                   |                                    |
| UDF17_DESCR  | User Defined Field 17<br>Description |                                   |                                    |
| UDF18_CD     | User Defined Field 18<br>Code        |                                   |                                    |
| UDF18_DESCR  | User Defined Field 18<br>Description |                                   |                                    |
| UDF19_CD     | User Defined Field 19<br>Code        |                                   |                                    |
| UDF19_DESCR  | User Defined Field 19<br>Description |                                   |                                    |
| UDF20_CD     | User Defined Field 20<br>Code        |                                   |                                    |
| UDF20_DESCR  | User Defined Field 20<br>Description |                                   |                                    |
| UDF21_CD     | User Defined Field 21<br>Code        |                                   |                                    |
| UDF21_DESCR  | User Defined Field 21<br>Description |                                   |                                    |
| UDF22_CD     | User Defined Field 22<br>Code        |                                   |                                    |
| UDF22_DESCR  | User Defined Field 22<br>Description |                                   |                                    |
| UDF23_CD     | User Defined Field 23<br>Code        |                                   |                                    |
| UDF23_DESCR  | User Defined Field 23<br>Description |                                   |                                    |
| UDF24_CD     | User Defined Field 24<br>Code        |                                   |                                    |
| UDF24_DESCR  | User Defined Field 24<br>Description |                                   |                                    |

| Target Field | OBIEE Field                          | Source Field | Transformation /<br>Calculation Logic |
|--------------|--------------------------------------|--------------|---------------------------------------|
| UDF25_CD     | User Defined Field 25<br>Code        |              |                                       |
| UDF25_DESCR  | User Defined Field 25<br>Description |              |                                       |
| UDF26_CD     | User Defined Field 26<br>Code        |              |                                       |
| UDF26_DESCR  | User Defined Field 26<br>Description |              |                                       |
| UDF27_CD     | User Defined Field 27<br>Code        |              |                                       |
| UDF27_DESCR  | User Defined Field 27<br>Description |              |                                       |
| UDF28_CD     | User Defined Field 28<br>Code        |              |                                       |
| UDF28_DESCR  | User Defined Field 28<br>Description |              |                                       |
| UDF29_CD     | User Defined Field 29<br>Code        |              |                                       |
| UDF29_DESCR  | User Defined Field 29<br>Description |              |                                       |
| UDF30_CD     | User Defined Field 30<br>Code        |              |                                       |
| UDF30_DESCR  | User Defined Field 30<br>Description |              |                                       |
| UDF31_CD     | User Defined Field 31<br>Code        |              |                                       |
| UDF31_DESCR  | User Defined Field 31<br>Description |              |                                       |
| UDF32_CD     | User Defined Field 32<br>Code        |              |                                       |
| UDF32_DESCR  | User Defined Field 32<br>Description |              |                                       |
| UDF33_CD     | User Defined Field 33<br>Code        |              |                                       |
| UDF33_DESCR  | User Defined Field 33<br>Description |              |                                       |
| UDF34_CD     | User Defined Field 34<br>Code        |              |                                       |
| UDF34_DESCR  | User Defined Field 34<br>Description |              |                                       |

| Target Field    | OBIEE Field                          | Source Field             | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|--------------------------|---|
| UDF35_CD        | User Defined Field 35<br>Code        |                          |   |
| UDF35_DESCR     | User Defined Field 35<br>Description |                          |   |
| UDF36_CD        | User Defined Field 36<br>Code        |                          |   |
| UDF36_DESCR     | User Defined Field 36<br>Description |                          |   |
| UDF37_CD        | User Defined Field 37<br>Code        |                          |   |
| UDF37_DESCR     | User Defined Field 37<br>Description |                          |   |
| UDF38_CD        | User Defined Field 38<br>Code        | JOBS.H_CLS               |   |
| UDF38_DESCR     | User Defined Field 38<br>Description | JOBS.H_CLS               |   |
| UDF39_CD        | User Defined Field 39<br>Code        | JOBS.H_IDX               |   |
| UDF39_DESCR     | User Defined Field 39<br>Description | JOBS.H_IDX               |   |
| UDF40_CD        | User Defined Field 40<br>Code        |                          |   |
| UDF40_DESCR     | User Defined Field 40<br>Description |                          |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                          | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| UPDATE_DTTM     | Update Date/Time                     |                          |   |

| Target Field | OBIEE Field | Source Field | Transformation /<br>Calculation Logic  |
|--------------|-------------|--------------|--|
| JOB_NBR      | Job Number  |              | Transformation Logic: This field is populated with the ODI job execution session number. |

# **Event Status Dimension**

The Event Status dimension extracts various statuses of events in the TE\_VALID\_STATES table from the Network Management System database.

## **Properties**

| Property                   | Value                  |
|----------------------------|------------------------|
| Target Table               | CD_EVENT_STATUS        |
| Table Type                 | Dimension              |
| SCD Type                   | Type 1                 |
| Source System Driver Table | TE_STATUSES A          |
| Stage Table                | STG_CD_EVENT_STATUS    |
| ODI Package                | B1_PKG_CD_EVENT_STATUS |
| ETL View                   | B1_D_EVENT_STATUS_VW   |

# Fields (

| Target Field           | OBIEE Field                             | Source Field                  | Transformation / Calculation Logic   |
|------------------------|---|-------------------------------|--|
| EVENT_STATUS_KEY       | Event Status Dimension<br>Surrogate Key |                               | Transformation Logic: This field is populated with the sequence from SPL_EVENT_STATUS _SEQ.NEXT_VAL. |
| SRC_STATUS             | Status (Natural Key)                    | TE_STATUSES.TRANS<br>_STATUS  |  |
| EVENT_STATUS_CD        | Event Status Code                       | TE_STATUSES.DESCR<br>IPTION   | Transformation Logic: If null, this field is populated with "-".                                     |
| EVENT_STATUS_DES<br>CR | Event Status Description                | TE_STATUSES.DESCR<br>IPTION   | Transformation Logic: If null, this field is populated with "-".                                     |
| UDF1_CD                | User Defined Field 1<br>Code            | TE_STATUS_GROUPS. DESCRIPTION |  |

| Target Field | OBIEE Field                          | Source Field                    | Transformation / Calculation Logic |
|--------------|--------------------------------------|---------------------------------|------------------------------------|
| UDF1_DESCR   | User Defined Field 1<br>Description  | TE_STATUS_GROUPS. DESCRIPTION   |                                    |
| UDF2_CD      | User Defined Field 2<br>Code         | TE_STATUS_GROUPS.<br>GROUP_NAME |                                    |
| UDF2_DESCR   | User Defined Field 2<br>Description  | TE_STATUS_GROUPS.<br>GROUP_NAME |                                    |
| UDF3_CD      | User Defined Field 3<br>Code         |                                 |                                    |
| UDF3_DESCR   | User Defined Field 3<br>Description  |                                 |                                    |
| UDF4_CD      | User Defined Field 4<br>Code         |                                 |                                    |
| UDF4_DESCR   | User Defined Field 4<br>Description  |                                 |                                    |
| UDF5_CD      | User Defined Field 5<br>Code         |                                 |                                    |
| UDF5_DESCR   | User Defined Field 5<br>Description  |                                 |                                    |
| UDF6_CD      | User Defined Field 6<br>Code         |                                 |                                    |
| UDF6_DESCR   | User Defined Field 6<br>Description  |                                 |                                    |
| UDF7_CD      | User Defined Field 7<br>Code         |                                 |                                    |
| UDF7_DESCR   | User Defined Field 7<br>Description  |                                 |                                    |
| UDF8_CD      | User Defined Field 8<br>Code         |                                 |                                    |
| UDF8_DESCR   | User Defined Field 8<br>Description  |                                 |                                    |
| UDF9_CD      | User Defined Field 9<br>Code         |                                 |                                    |
| UDF9_DESCR   | User Defined Field 9<br>Description  |                                 |                                    |
| UDF10_CD     | User Defined Field 10<br>Code        |                                 |                                    |
| UDF10_DESCR  | User Defined Field 10<br>Description |                                 |                                    |

| Target Field    | OBIEE Field              | Source Field                         | Transformation / Calculation Logic  |
|-----------------|--------------------------|--------------------------------------|---|
| DATA_LOAD_DTTM  | Data Load Date/Time      |                                      | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator    | B1_PROD_INSTANCE.<br>DSI             | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| UPDATE_DTTM     | TE_DTTM Update Date/Time | TE_STATUSES.JRN_U<br>PDATE_DTTM      | Transformation Logic: This field is populated with the updated  |
|                 |                          | TE_STATUS_GROUPS.<br>JRN_UPDATE_DTTM | timestamp value.  |
| JOB_NBR         | Job Number               |                                      | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.  |

## **Feeder Dimension**

The Feeder dimension extracts the feeder and corresponding substation information from the FEEDERS table.

| Value            |
|------------------|
| CD_FEEDER        |
| Dimension        |
| Type 2           |
| FEEDERS          |
| STG_CD_FEEDER    |
| B1_PKG_CD_FEEDER |
| B1_D_FEEDER_VW   |
|                  |

# Fields (

| Target Field   | OBIEE Field                                   | Source Field                | Transformation / Calculation Logic   |
|----------------|---|-----------------------------|--|
| FEEDER_KEY     | Feeder Duration<br>Dimension Surrogate<br>Key |                             | Transformation Logic: This field is populated with the sequence from SPL_FEEDER_SEQ.N EXT_VAL. |
| SRC_FEEDER_CLS | Feeder Class                                  | FEEDERS.H_CLS               |  |
| SRC_FEEDER_IDX | Feeder Index                                  | FEEDERS.H_IDX               |  |
| FEEDER_NAME    | Feeder Name                                   | FEEDERS.FEEDER_N<br>AME     | <b>Transformation Logic</b> : Use the feeder name if available. Else, use the                  |
|                |   | FEEDERS.H_CLS               | combination of class and index.  |
|                |   | FEEDERS.H_IDX               | incex.   |
| SUBSTN_CD      | Substation Code                               | FEEDERS.SUBSTATIO<br>N_NAME |  |
| SUBSTN_DESCR   | Substation Name                               | FEEDERS.SUBSTATIO<br>N_NAME |  |
| UDF1_CD        | User Defined Field 1<br>Code                  |                             |  |
| UDF1_DESCR     | User Defined Field 1<br>Description           |                             |  |
| UDF2_CD        | User Defined Field 2<br>Code                  |                             |  |
| UDF2_DESCR     | User Defined Field 2<br>Description           |                             |  |
| UDF3_CD        | User Defined Field 3<br>Code                  |                             |  |
| UDF3_DESCR     | User Defined Field 3<br>Description           |                             |  |
| UDF4_CD        | User Defined Field 4<br>Code                  |                             |  |
| UDF4_DESCR     | User Defined Field 4<br>Description           |                             |  |
| UDF5_CD        | User Defined Field 5<br>Code                  |                             |  |
| UDF5_DESCR     | User Defined Field 5<br>Description           |                             |  |
| UDF6_CD        | User Defined Field 6<br>Code                  |                             |  |

| Target Field    | OBIEE Field                          | Source Field          | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|-----------------------|---|
| UDF6_DESCR      | User Defined Field 6<br>Description  |                       |   |
| UDF7_CD         | User Defined Field 7<br>Code         |                       |   |
| UDF7_DESCR      | User Defined Field 7<br>Description  |                       |   |
| UDF8_CD         | User Defined Field 8<br>Code         |                       |   |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                       |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                       |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                       |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                       |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                       |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                       | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE. DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| EFF_START_DTTM  | Effective Start Date/<br>Time        |                       |   |
| EFF_END_DTTM    | Effective End Date/<br>Time          | FEEDERS.DEATH         |   |
| JOB_NBR         | Job Number                           |                       | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Meter Dimension**

The Meter dimension extracts meter ID and meter type details from the CU\_METERS table in the Network Management System source database.

### **Properties**

| Property                   | Value           |
|----------------------------|-----------------|
| Target Table               | CD_METER        |
| Table Type                 | Dimension       |
| SCD Type                   | Type 2          |
| Source System Driver Table | CU_METERS       |
| Stage Table                | STG_CD_METER    |
| ODI Package                | B1_PKG_CD_METER |
| ETL View                   | B1_D_METER_VW   |

| Target Field | OBIEE Field                         | Source Field             | Transformation / Calculation Logic  |
|--------------|-------------------------------------|--------------------------|---|
| METER_KEY    | Meter Dimension<br>Surrogate Key    |                          | Transformation Logic: This field is populated with the sequence from SPL_METER_SEQ.NE XT_VAL. |
| SRC_METER_ID | Meter ID                            | CU_METERS.METER_<br>ID   |   |
| METER_INFO   | Meter Number                        | CU_METERS.METER_<br>NO   |   |
| UDF1_CD      | User Defined Field 1<br>Code        | CU_METERS.METER_<br>TYPE |   |
| UDF1_DESCR   | User Defined Field 1<br>Description | CU_METERS.METER_<br>TYPE |   |
| UDF2_CD      | User Defined Field 2<br>Code        |                          |   |
| UDF2_DESCR   | User Defined Field 2<br>Description |                          |   |
| UDF3_CD      | User Defined Field 3<br>Code        |                          |   |
| UDF3_DESCR   | User Defined Field 3<br>Description |                          |   |
| UDF4_CD      | User Defined Field 4<br>Code        |                          |   |

| Target Field    | OBIEE Field                          | Source Field             | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|--------------------------|---|
| UDF4_DESCR      | User Defined Field 4<br>Description  |                          |   |
| UDF5_CD         | User Defined Field 5<br>Code         |                          |   |
| UDF5_DESCR      | User Defined Field 5<br>Description  |                          |   |
| UDF6_CD         | User Defined Field 6<br>Code         |                          |   |
| UDF6_DESCR      | User Defined Field 6<br>Description  |                          |   |
| UDF7_CD         | User Defined Field 7<br>Code         |                          |   |
| UDF7_DESCR      | User Defined Field 7<br>Description  |                          |   |
| UDF8_CD         | User Defined Field 8<br>Code         |                          |   |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                          |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                          |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                          |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                          |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                          |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                          | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |

| Target Field   | OBIEE Field                   | Source Field                   | Transformation / Calculation Logic   |
|----------------|-------------------------------|--------------------------------|--|
| EFF_START_DTTM | Effective Start Date/<br>Time | CU_METERS.LAST_U<br>PDATE_TIME |  |
| EFF_END_DTTM   | Effective End Date/<br>Time   | CU_METERS.LAST_U<br>PDATE_TIME |  |
| JOB_NBR        | Job Number                    |                                | Transformation Logic: This field is populated with the ODI job execution session number. |

# **Outage Duration Dimension**

The Outage Duration dimension extracts the outage duration age bucket information.

### **Properties**

| Property                   | Value              |
|----------------------------|--------------------|
| Target Table               | CD_OUTG_DUR        |
| Table Type                 | Dimension          |
| SCD Type                   | Type 1             |
| Source System Driver Table | B1_RANGE_LOOKUP    |
| Stage Table                | STG_CD_OUTG_DUR    |
| ODI Package                | B1_PKG_CD_OUTG_DUR |
| ETL View                   | B1_D_OUTG_DUR_VW   |

| Target Field   | OBIEE Field                                   | Source Field                    | Transformation / Calculation Logic  |
|----------------|---|---------------------------------|---|
| OUTG_DUR_KEY   | Outage Duration<br>Dimension Surrogate<br>Key |                                 | Transformation Logic:<br>This field is populated<br>with the sequence from<br>B1_OUTG_DUR_SEQ.<br>NEXT_VAL. |
| OUTG_DUR_DESCR | Outage Duration<br>Description                | B1_RANGE_LOOKUP.<br>DESCR       |   |
| RANGE_START    | Start Range                                   | B1_RANGE_LOOKUP.<br>START_RANGE |   |
| RANGE_END      | End Range                                     | B1_RANGE_LOOKUP.<br>END_RANGE   |   |

| Target Field | OBIEE Field                          | Source Field | Transformation / Calculation Logic |
|--------------|--------------------------------------|--------------|------------------------------------|
| UDF1_CD      | User Defined Field 1<br>Code         |              |                                    |
| UDF1_DESCR   | User Defined Field 1<br>Description  |              |                                    |
| UDF2_CD      | User Defined Field 2<br>Code         |              |                                    |
| UDF2_DESCR   | User Defined Field 2<br>Description  |              |                                    |
| UDF3_CD      | User Defined Field 3<br>Code         |              |                                    |
| UDF3_DESCR   | User Defined Field 3<br>Description  |              |                                    |
| UDF4_CD      | User Defined Field 4<br>Code         |              |                                    |
| UDF4_DESCR   | User Defined Field 4<br>Description  |              |                                    |
| UDF5_CD      | User Defined Field 5<br>Code         |              |                                    |
| UDF5_DESCR   | User Defined Field 5<br>Description  |              |                                    |
| UDF6_CD      | User Defined Field 6<br>Code         |              |                                    |
| UDF6_DESCR   | User Defined Field 6<br>Description  |              |                                    |
| UDF7_CD      | User Defined Field 7<br>Code         |              |                                    |
| UDF7_DESCR   | User Defined Field 7<br>Description  |              |                                    |
| UDF8_CD      | User Defined Field 8<br>Code         |              |                                    |
| UDF8_DESCR   | User Defined Field 8<br>Description  |              |                                    |
| UDF9_CD      | User Defined Field 9<br>Code         |              |                                    |
| UDF9_DESCR   | User Defined Field 9<br>Description  |              |                                    |
| UDF10_CD     | User Defined Field 10<br>Code        |              |                                    |
| UDF10_DESCR  | User Defined Field 10<br>Description |              |                                    |

| Target Field    | OBIEE Field           | Source Field             | Transformation / Calculation Logic  |
|-----------------|-----------------------|--------------------------|---|
| DATA_LOAD_DTTM  | Data Load Date/Time   |                          | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| UPDATE_DTTM     | Update Date/Time      |                          | Transformation Logic: This field is populated with the updated timestamp value.   |
| JOB_NBR         | Job Number            |                          | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Person Dimension**

The Person dimension extracts person data from the Oracle Utilities Network Management System with all related attributes.

| Property                   | Value         |
|----------------------------|---------------|
| Target Table               | CD_PER        |
| Table Type                 | Dimension     |
| SCD Type                   | Type 2        |
| Source System Driver Table | CU_CUSTOMERS  |
| Stage Table                | STG_CD_PER    |
| ODI Package                | B1_PKG_CD_PER |
| ETL View                   | B1_D_PER_VW   |

| Target Field  | OBIEE Field                         | Source Field                     | Transformation / Calculation Logic  |
|---------------|-------------------------------------|----------------------------------|---|
| BUSINESS_IND  | Business Indicator Flag             |                                  |   |
| PER_INFO      | Person Info String                  | CU_CUSTOMERS.CUS<br>T_NAME       |   |
| PER_KEY       | Person Dimension<br>Surrogate Key   |                                  | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_PER_SEQ.NEXT_<br>VAL. |
| PER_NAME      | Person Name                         | CU_CUSTOMERS.CUS<br>T_NAME       |   |
| PER_PHONE_NBR | Person Phone Number                 | CU_CUSTOMERS.CUS<br>T_HOME_PHONE | Transformation Logic: This field is populated with the phone number                                     |
|               |                                     | CU_CUSTOMERS.CUS<br>T_HOME_AC    | in the (001) 775-0125 format.   |
| SRC_PER_ID    | Person ID (Natural Key)             | CU_CUSTOMERS.CUS<br>T_ID         |   |
| UDF1_CD       | User Defined Field 1<br>Code        |                                  |   |
| UDF1_DESCR    | User Defined Field 1<br>Description |                                  |   |
| UDF2_CD       | User Defined Field 2<br>Code        |                                  |   |
| UDF2_DESCR    | User Defined Field 2<br>Description |                                  |   |
| UDF3_CD       | User Defined Field 3<br>Code        |                                  |   |
| UDF3_DESCR    | User Defined Field 3<br>Description |                                  |   |
| UDF4_CD       | User Defined Field 4<br>Code        |                                  |   |
| UDF4_DESCR    | User Defined Field 4<br>Description |                                  |   |
| UDF5_CD       | User Defined Field 5<br>Code        |                                  |   |
| UDF5_DESCR    | User Defined Field 5<br>Description |                                  |   |
| UDF6_CD       | User Defined Field 6<br>Code        |                                  |   |

| Target Field    | OBIEE Field                         | Source Field                      | Transformation / Calculation Logic  |
|-----------------|-------------------------------------|-----------------------------------|---|
| UDF6_DESCR      | User Defined Field 6<br>Description |                                   |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                 |                                   | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.   |
| DATA_SOURCE_IND | Data Source Indicator               | B1_PROD_INSTANCE. DSI             | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| EFF_END_DTTM    | Effective End Date/<br>Time         | CU_CUSTOMERS.LAS<br>T_UPDATE_TIME |   |
| EFF_START_DTTM  | Effective Start Date/<br>Time       | CU_CUSTOMERS.LAS<br>T_UPDATE_TIME |   |
| JOB_NBR         | Job Number                          |                                   | Transformation Logic: This field is populated with the ODI job execution session number.  |

### **Phase Dimension**

The Phase dimension extracts phase data from the Network Management System with all related attributes.

| Property                   | Value               |
|----------------------------|---------------------|
| Target Table               | CD_PHASE            |
| Table Type                 | Dimension           |
| SCD Type                   | Type 2              |
| Source System Driver Table | PHASE_BITMAP_LOOKUP |
| Stage Table                | STG_CD_PHASE        |
| ODI Package                | B1_PKG_CD_PHASE     |
| ETL View                   | B1_D_PHASE_VW       |

| Target Field   | OBIEE Field                         | Source Field                         | Transformation / Calculation Logic  |
|----------------|-------------------------------------|--------------------------------------|---|
| PHASE_KEY      | Phase Dimension<br>Surrogate Key    |                                      | Transformation Logic: This field is populated with the sequence from SPL_PHASE_SEQ.NEX T_VAL. |
| SRC_PHASE_ID   | Phase ID                            | PHASE_BITMAP_LOO<br>KUP.PHASE_BITS   |   |
| PHASE_CD       |                                     | PHASE_BITMAP_LOO<br>KUP.PHASE_STRING |   |
| PHASE_DESCR    | Phase                               | PHASE_BITMAP_LOO<br>KUP.PHASE_STRING |   |
| UDF1_CD        | User Defined Field 1<br>Code        |                                      |   |
| UDF1_DESCR     | User Defined Field 1<br>Description |                                      |   |
| UDF2_CD        | User Defined Field 2<br>Code        |                                      |   |
| UDF2_DESCR     | User Defined Field 2<br>Description |                                      |   |
| UDF3_CD        | User Defined Field 3<br>Code        |                                      |   |
| UDF3_DESCR     | User Defined Field 3<br>Description |                                      |   |
| UDF4_CD        | User Defined Field 4<br>Code        |                                      |   |
| UDF4_DESCR     | User Defined Field 4<br>Description |                                      |   |
| UDF5_CD        | User Defined Field 5<br>Code        |                                      |   |
| UDF5_DESCR     | User Defined Field 5<br>Description |                                      |   |
| DATA_LOAD_DTTM | Data Load Date/Time                 |                                      | Transformation Logic: This field is populated with the load timestamp value.                  |

| Target Field    | OBIEE Field                   | Source Field                      | Transformation / Calculation Logic  |
|-----------------|-------------------------------|-----------------------------------|---|
| DATA_SOURCE_IND | Data Source Indicator         | B1_PROD_INSTANCE.<br>DSI          | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| EFF_END_DTTM    | Effective End Date/<br>Time   | CU_CUSTOMERS.LAS<br>T_UPDATE_TIME |   |
| EFF_START_DTTM  | Effective Start Date/<br>Time | CU_CUSTOMERS.LAS<br>T_UPDATE_TIME |   |
| JOB_NBR         | Job Number                    |                                   | Transformation Logic: This field is populated with the ODI job execution session number.  |

### **Premise Dimension**

The Premise dimension extracts premise information from the CU\_SERVICE\_LOCATIONS table in the Network Management System source database.

| Property                   | Value                |
|----------------------------|----------------------|
| Target Table               | CD_PREM              |
| Table Type                 | Dimension            |
| SCD Type                   | Type 2               |
| Source System Driver Table | CU_SERVICE_LOCATIONS |
| Stage Table                | STG_CD_PREM          |
| ODI Package                | B1_PKG_CD_PREM       |
| ETL View                   | B1_D_PREM_VW         |

| Target Field | OBIEE Field                         | Source Field                                   | Transformation /<br>Calculation Logic  |
|--------------|-------------------------------------|--|--|
| PREM_KEY     | Premise Dimension<br>Surrogate Key  |  | Transformation Logic: This field is populated with the sequence from SPL_PREM_SEQ.NEX T_VAL. |
| SRC_PREM_ID  | Premise ID (Natural<br>Key)         | CU_SERVICE_LOCAT<br>IONS.SERV_LOC_ID           |  |
| PREM_INFO    | Premise Info String                 | CU_SERVICE_LOCAT<br>IONS.SERV_LOC_ID           |  |
| UDF1_CD      | Jurisdiction Code                   |  |  |
| UDF1_DESCR   | Jurisdiction                        |  |  |
| UDF2_CD      | Premise Type Code                   | CU_SERVICE_LOCAT<br>IONS.SERV_TYPE             |  |
| UDF2_DESCR   | Premise Type                        | CU_SERVICE_LOCAT<br>IONS.SERV_TYPE             |  |
| UDF3_CD      | Life Support Flag Code              | CU_SERVICE_LOCAT<br>IONS.SERV_LIFE_SUP<br>PORT |  |
| UDF3_DESCR   | Life Support Flag                   | CU_SERVICE_LOCAT<br>IONS.SERV_LIFE_SUP<br>PORT |  |
| UDF4_CD      | Trend Area Code                     |  |  |
| UDF4_DESCR   | Trend Area                          |  |  |
| UDF5_CD      | In City Limit Code                  |  |  |
| UDF5_DESCR   | In City Limit                       |  |  |
| UDF6_CD      | User Defined Field 6<br>Code        | CU_SERVICE_LOCAT<br>IONS.SERV_C_PRIORI<br>TY   |  |
| UDF6_DESCR   | User Defined Field 6<br>Description | CU_SERVICE_LOCAT<br>IONS.SERV_C_PRIORI<br>TY   |  |
| UDF7_CD      | User Defined Field 7<br>Code        | CU_SERVICE_LOCAT<br>IONS.SERV_D_PRIOR<br>ITY   |  |
| UDF7_DESCR   | User Defined Field 8<br>Description | CU_SERVICE_LOCAT<br>IONS.SERV_D_PRIOR<br>ITY   |  |
| UDF8_CD      | User Defined Field 8<br>Code        | CU_SERVICE_LOCAT<br>IONS.SERV_K_PRIOR<br>ITY   |  |

| Target Field | OBIEE Field                          | Source Field                                 | Transformation / Calculation Logic |
|--------------|--------------------------------------|--|------------------------------------|
| UDF8_DESCR   | User Defined Field 8<br>Description  | CU_SERVICE_LOCAT<br>IONS.SERV_K_PRIOR<br>ITY |                                    |
| UDF9_CD      | User Defined Field 9<br>Code         |  |                                    |
| UDF9_DESCR   | User Defined Field 9<br>Description  |  |                                    |
| UDF10_CD     | User Defined Field 10<br>Code        |  |                                    |
| UDF10_DESCR  | User Defined Field 10<br>Description |  |                                    |
| UDF11_CD     | User Defined Field 11<br>Code        |  |                                    |
| UDF11_DESCR  | User Defined Field 11<br>Description |  |                                    |
| UDF12_CD     | User Defined Field 12<br>Code        |  |                                    |
| UDF12_DESCR  | User Defined Field 12<br>Description |  |                                    |
| UDF13_CD     | User Defined Field<br>13Code         |  |                                    |
| UDF13_DESCR  | User Defined Field 13<br>Description |  |                                    |
| UDF14_CD     | User Defined Field 14<br>Code        |  |                                    |
| UDF14_DESCR  | User Defined Field 14<br>Description |  |                                    |
| UDF15_CD     | User Defined Field<br>15Code         |  |                                    |
| UDF15_DESCR  | User Defined Field 15<br>Description |  |                                    |
| UDF16_CD     | User Defined Field 16<br>Code        |  |                                    |
| UDF16_DESCR  | User Defined Field 16<br>Description |  |                                    |
| UDF17_CD     | User Defined Field<br>17Code         |  |                                    |
| UDF17_DESCR  | User Defined Field 17<br>Description |  |                                    |
| UDF18_CD     | User Defined Field 18<br>Code        |  |                                    |

| Target Field    | OBIEE Field                          | Source Field                      | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|-----------------------------------|---|
| UDF18_DESCR     | User Defined Field 18<br>Description |                                   |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                                   | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.   |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE. DSI             | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| EFF_END_DTTM    | Effective End Date/<br>Time          | CU_CUSTOMERS.LAS<br>T_UPDATE_TIME |   |
| EFF_START_DTTM  | Effective Start Date/<br>Time        | CU_CUSTOMERS.LAS<br>T_UPDATE_TIME |   |
| JOB_NBR         | Job Number                           |                                   | Transformation Logic: This field is populated with the ODI job execution session number.  |

### **Storm Dimension**

The Storm dimension extracts storm specific data from the Network Management System with all related attributes.

| Property                   | Value              |
|----------------------------|--------------------|
| Target Table               | CD_STORM           |
| Table Type                 | Dimension          |
| SCD Type                   | Type 1             |
| Source System Driver Table | STORMMAN_STORMS SS |
| Stage Table                | STG_CD_STORM       |
| ODI Package                | B1_PKG_CD_STORM    |
| ETL View                   | B1_D_STORM_VW      |

| Target Field           | OBIEE Field                         | Source Field           | Transformation /<br>Calculation Logic   |
|------------------------|-------------------------------------|------------------------|---|
| STORM_KEY              | Storm Dimension<br>Surrogate Key    |                        | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_STORM_SEQ.NE<br>XT_VAL. |
| SRC_STORM_NAME         | Storm Name                          | SS.STORM_NAME          |   |
| SRC_STORM_NAME_<br>SFX | Storm Name Suffix                   | SS.STORM_DATE          |   |
| STORM_TYPE_CD          | Storm Type Code                     | SS.STORM_TYPE          |   |
| STORM_TYPE_DESC<br>R   | Storm Type                          | SS.STORM_TYPE_NA<br>ME |   |
| STORM_LEVEL_CD         |                                     | SS.STORM_LEVEL         |   |
| STORM_LEVEL_DES<br>CR  | Storm Level                         | SS.STORM_LEVEL         |   |
| STORM_START_DTT<br>M   | Date/Time the Storm<br>Started      | SS.STORM_START         |   |
| STORM_END_DTTM         | Date/Time the Storm<br>Ended        | SS.STORM_END           |   |
| UDF1_CD                | User Defined Field 1<br>Code        | SS.STORM_START         |   |
| UDF1_DESCR             | User Defined Field 1<br>Description | SS.STORM_START         |   |
| UDF2_CD                | User Defined Field 2<br>Code        | SS.STORM_END           |   |
| UDF2_DESCR             | User Defined Field 2<br>Description | SS.STORM_END           |   |
| UDF3_CD                | User Defined Field 3<br>Code        |                        |   |
| UDF3_DESCR             | User Defined Field 3<br>Description |                        |   |
| UDF4_CD                | User Defined Field 4<br>Code        |                        |   |
| UDF4_DESCR             | User Defined Field 4<br>Description |                        |   |
| UDF5_CD                | User Defined Field 5<br>Code        |                        |   |
| UDF5_DESCR             | User Defined Field 5<br>Description |                        |   |

| Target Field    | OBIEE Field                          | Source Field             | Transformation /<br>Calculation Logic  |
|-----------------|--------------------------------------|--------------------------|--|
| UDF6_CD         | User Defined Field 6<br>Code         |                          |  |
| UDF6_DESCR      | User Defined Field 6<br>Description  |                          |  |
| UDF7_CD         | User Defined Field 7<br>Code         |                          |  |
| UDF7_DESCR      | User Defined Field 8<br>Description  |                          |  |
| UDF8_CD         | User Defined Field 8<br>Code         |                          |  |
| UDF8_DESCR      | User Defined Field 8<br>Description  |                          |  |
| UDF9_CD         | User Defined Field 9<br>Code         |                          |  |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                          |  |
| UDF10_CD        | User Defined Field 10<br>Code        |                          |  |
| UDF10_DESCR     | User Defined Field 10<br>Description |                          |  |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                          | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.  |
| DATA_SOURCE_IND | Data Source Indicator                | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E. NV_ID). |
| UPDATE_DTTM     | Update Date/Time                     |                          | Transformation Logic:<br>This field is populated<br>with the updated<br>timestamp value.   |
| JOB_NBR         | Job Number                           |                          | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.   |

# **Storm Outage Type Dimension**

The Storm Outage Type dimension extracts the storm outage type data from Oracle Utilities Network Management System with all related attributes.

### **Properties**

| Property                   | Value                       |
|----------------------------|-----------------------------|
| Target Table               | CD_STORM_OUTAGE_TYPE        |
| Table Type                 | Dimension                   |
| SCD Type                   | Type 1                      |
| Source System Driver Table | STORMMAN_OUTAGE_TYPES       |
| Stage Table                | STG_CD_STORM_OUTAGE_TYPE    |
| ODI Package                | B1_PKG_CD_STORM_OUTAGE_TYPE |
| ETL View                   | B1_D_STORM_OUTAGE_TYPE_VW   |

| Target Field              | OBIEE Field                                     | Source Field                                   | Transformation / Calculation Logic   |
|---------------------------|---|--|--|
| STORM_OUTAGE_TY<br>PE_KEY | Storm Outage Type<br>Dimension Surrogate<br>Key |  | Transformation Logic: This field is populated with the sequence from SPL_STORM_OUTAG E_TYPE_SEQ.NEXT_ VAL. |
| SRC_OUTAGE_TYPE           | Outage Type Code                                | STORMMAN_OUTAG<br>E_TYPES.OUTAGE_T<br>YPE      |  |
| OUTAGE_TYPE_CD            |   | STORMMAN_OUTAG<br>E_TYPES.OUTAGE_T<br>YPE      |  |
| OUTAGE_TYPE_DES<br>CR     | Outage Type Description                         | STORMMAN_OUTAG<br>E_TYPES.OUTAGE_T<br>YPE_NAME | Transformation Logic: If null, this populated with "-".  |
| UDF1_CD                   | User Defined Field 1<br>Code                    |  |  |
| UDF1_DESCR                | User Defined Field 1<br>Description             |  |  |
| UDF2_CD                   | User Defined Field 2<br>Code                    |  |  |
| UDF2_DESCR                | User Defined Field 2<br>Description             |  |  |
| UDF3_CD                   | User Defined Field 3<br>Code                    |  |  |

| Target Field    | OBIEE Field                         | Source Field          | Transformation /<br>Calculation Logic   |
|-----------------|-------------------------------------|-----------------------|---|
| UDF3_DESCR      | User Defined Field 3<br>Description |                       |   |
| UDF4_CD         | User Defined Field 4<br>Code        |                       |   |
| UDF4_DESCR      | User Defined Field 4<br>Description |                       |   |
| UDF5_CD         | User Defined Field 5<br>Code        |                       |   |
| UDF5_DESCR      | User Defined Field 5<br>Description |                       |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                 |                       | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator               | B1_PROD_INSTANCE. DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| UPDATE_DTTM     | Update Date/Time                    |                       | Transformation Logic: This field is populated with the updated timestamp value.   |
| JOB_NBR         | Job Number                          |                       | Transformation Logic: This field is populated with the ODI job execution session number.  |

# **Supply Node Lookup Dimension**

The Supply Node Lookup dimension extracts the distinct service point (premise, person, and meter) information along with the device they are attached to.

**Note**: This dimension is not joined to any fact, but is used to lookup data before the fact load.

# **Properties**

| Property                   | Value   |
|----------------------------|---|
| Target Table               | CD_SNL  |
| Table Type                 | Dimension   |
| SCD Type                   | Type 2  |
| Source System Driver Table | SUPPLY_NODES CU_SERVICE_POINTS CU_SERVICE_LOCATIONS |
| Stage Table                | STG_CD_SNL  |
| ODI Package                | B1_PKG_CD_SNL                                       |
| ETL View                   | B1_D_SNL_VW   |

| Target Field   | OBIEE Field                                      | Source Field                                     | Transformation / Calculation Logic  |
|----------------|--|--|---|
| SNL_KEY        | Supply Node Lookup<br>Dimension Surrogate<br>Key |  | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_SNL_SEQ.NEXT_<br>VAL. |
| SRC_METER_ID   | Meter ID   | CU_SERVICE_POINTS<br>.METER_ID                   |   |
| SRC_PERSON_ID  | Person ID  | CU_SERVICE_POINTS<br>.CUST_ID                    |   |
| SRC_PREMISE_ID | Premise ID                                       | CU_SERVICE_LOCAT<br>IONS.SERV_LOC_ID             |   |
| SRC_ACCOUNT_ID | Account ID                                       | CU_SERVICE_LOCAT<br>IONS.SERV_ACCOUN<br>T_NUMBER |   |
| SRC_ADDR_ID    | Address  | CU_SERVICE_POINTS<br>.SERV_LOC_ID                |   |
| DEVICE_ID      | Device ID  | CUSTOMER_EDIT_VI<br>EW.DEVICE_ID                 |   |
|                |  | SUPPLY_NODES.DEV<br>ICE_ID                       |   |
| FEEDER_ID      | Feeder ID  | CUSTOMER_EDIT_VI<br>EW.FEEDER                    |   |
|                |  | SUPPLY_NODES.FEE<br>DER                          |   |
| NCG_ID         | NCG ID   | SUPPLY_NODES.NCG                                 |   |

| Target Field    | OBIEE Field                         | Source Field             | Transformation / Calculation Logic  |
|-----------------|-------------------------------------|--------------------------|---|
| UDF1_CD         | User Defined Field 1<br>Code        |                          |   |
| UDF1_DESCR      | User Defined Field 1<br>Description |                          |   |
| UDF2_CD         | User Defined Field 2<br>Code        |                          |   |
| UDF2_DESCR      | User Defined Field 2<br>Description |                          |   |
| UDF3_CD         | User Defined Field 3<br>Code        |                          |   |
| UDF3_DESCR      | User Defined Field 3<br>Description |                          |   |
| UDF4_CD         | User Defined Field 4<br>Code        |                          |   |
| UDF4_DESCR      | User Defined Field 4<br>Description |                          |   |
| UDF5_CD         | User Defined Field 5<br>Code        |                          |   |
| UDF5_DESCR      | User Defined Field 5<br>Description |                          |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                 |                          | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator               | B1_PROD_INSTANCE.<br>DSI | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| EFF_START_DTTM  | Effective Start Date/<br>Time       |                          |   |

| Target Field | OBIEE Field                 | Source Field  | Transformation /<br>Calculation Logic  |
|--------------|-----------------------------|---|--|
| EFF_END_DTTM | Effective End Date/<br>Time | SUPPLY_NODES.LEA<br>ST(SUPPLY_NODES.D<br>EATH,CU_SERVICE_L<br>OCATIONS.JRN_EFF_<br>END_DTTM,CU_SER<br>VICE_POINTS.JRN_E<br>FF_END_DTTM) |  |
| JOB_NBR      | Job Number                  |   | Transformation Logic: This field is populated with the ODI job execution session number. |

## **Switch Plan Dimension**

The Switch Plan dimension extracts switch plan data from the Oracle Utilities Network Management System with all related attributes.

## **Properties**

| Property                   | Value             |
|----------------------------|-------------------|
| Target Table               | CD_SW_PLAN        |
| Table Type                 | Dimension         |
| SCD Type                   | Type 1            |
| Source System Driver Table | SWMAN_SHEET       |
| Stage Table                | STG_CD_SW_PLAN    |
| ODI Package                | B1_PKG_CD_SW_PLAN |
| ETL View                   | B1_D_SW_PLAN_VW   |

| Target Field    | OBIEE Field                            | Source Field                     | Transformation /<br>Calculation Logic   |
|-----------------|--|----------------------------------|---|
| SW_PLAN_KEY     | Switch Plan Dimension<br>Surrogate Key |                                  | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_SW_PLAN_SEQ.N<br>EXT_VAL. |
| SRC_SW_PLAN_CLS | Switch Plan Class                      | SWMAN_SHEET.SWIT<br>CH_SHEET_CLS |   |
| SRC_SW_PLAN_IDX | Switch Plan Index                      | SWMAN_SHEET.SWIT<br>CH_SHEET_IDX |   |

| Target Field | OBIEE Field                          | Source Field | Transformation /<br>Calculation Logic |
|--------------|--------------------------------------|--------------|---------------------------------------|
| UDF1_CD      | User Defined Field 1<br>Code         |              |                                       |
| UDF1_DESCR   | User Defined Field 1<br>Description  |              |                                       |
| UDF2_CD      | User Defined Field 2<br>Code         |              |                                       |
| UDF2_DESCR   | User Defined Field 2<br>Description  |              |                                       |
| UDF3_CD      | User Defined Field 3<br>Code         |              |                                       |
| UDF3_DESCR   | User Defined Field 3<br>Description  |              |                                       |
| UDF4_CD      | User Defined Field 4<br>Code         |              |                                       |
| UDF4_DESCR   | User Defined Field 4<br>Description  |              |                                       |
| UDF5_CD      | User Defined Field 5<br>Code         |              |                                       |
| UDF5_DESCR   | User Defined Field 5<br>Description  |              |                                       |
| UDF6_CD      | User Defined Field 6<br>Code         |              |                                       |
| UDF6_DESCR   | User Defined Field 6<br>Description  |              |                                       |
| UDF7_CD      | User Defined Field 7<br>Code         |              |                                       |
| UDF7_DESCR   | User Defined Field 7<br>Description  |              |                                       |
| UDF8_CD      | User Defined Field 8<br>Code         |              |                                       |
| UDF8_DESCR   | User Defined Field 8<br>Description  |              |                                       |
| UDF9_CD      | User Defined Field 9<br>Code         |              |                                       |
| UDF9_DESCR   | User Defined Field 9<br>Description  |              |                                       |
| UDF10_CD     | User Defined Field 10<br>Code        |              |                                       |
| UDF10_DESCR  | User Defined Field 10<br>Description |              |                                       |

| Target Field    | OBIEE Field           | Source Field                | Transformation / Calculation Logic  |
|-----------------|-----------------------|-----------------------------|---|
| DATA_LOAD_DTTM  | Data Load Date/Time   |                             | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator | B1_PROD_INSTANCE.<br>DSI    | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| UPDATE_DTTM     | Update Date/Time      | SWMAN_SHEET.UPD<br>ATE_TIME | Transformation Logic: This field is populated with the updated timestamp value.   |
| JOB_NBR         | Job Number            |                             | Transformation Logic: This field is populated with the ODI job execution session number.  |

### **Switch Plan State Dimension**

The Switch Plan State dimension extracts switch plan data from the Oracle Utilities Network Management System with all related attributes.

| Property                   | Value                   |
|----------------------------|-------------------------|
| Target Table               | CD_SW_PLAN_STATE        |
| Table Type                 | Dimension               |
| SCD Type                   | Type 1                  |
| Source System Driver Table | TE_VALID_STATES         |
| Stage Table                | STG_CD_SW_PLAN_STATE    |
| ODI Package                | B1_PKG_CD_SW_PLAN_STATE |
| ETL View                   | B1_D_SW_PLAN_STATE_VW   |

| Target Field          | OBIEE Field                                     | Source Field                    | Transformation /<br>Calculation Logic   |
|-----------------------|---|---------------------------------|---|
| SW_PLAN_STATE_KE<br>Y | Switch Plan State<br>Dimension Surrogate<br>Key |                                 | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_SW_PLAN_STAT<br>E_SEQ.NEXT_VAL. |
| SRC_STATE_KEY         |   | TE_VALID_STATES.ST<br>ATE_KEY   |   |
| STATE_CD              | Switch Plan State Code                          | TE_VALID_STATES.ST<br>ATE_NAME  |   |
| STATE_DESCR           | Switch Plan State                               | TE_VALID_STATES.D<br>ESCRIPTION |   |
| UDF1_CD               | User Defined Field 1<br>Code                    |                                 |   |
| UDF1_DESCR            | User Defined Field 1<br>Description             |                                 |   |
| UDF2_CD               | User Defined Field 2<br>Code                    |                                 |   |
| UDF2_DESCR            | User Defined Field 2<br>Description             |                                 |   |
| UDF3_CD               | User Defined Field 3<br>Code                    |                                 |   |
| UDF3_DESCR            | User Defined Field 3<br>Description             |                                 |   |
| UDF4_CD               | User Defined Field 4<br>Code                    |                                 |   |
| UDF4_DESCR            | User Defined Field 4<br>Description             |                                 |   |
| UDF5_CD               | User Defined Field 5<br>Code                    |                                 |   |
| UDF5_DESCR            | User Defined Field 5<br>Description             |                                 |   |
| DATA_LOAD_DTTM        | Data Load Date/Time                             |                                 | Transformation Logic:<br>This field is populated<br>with the load timestamp<br>value.                             |

| Target Field    | OBIEE Field           | Source Field                    | Transformation / Calculation Logic  |
|-----------------|-----------------------|---------------------------------|---|
| DATA_SOURCE_IND | Data Source Indicator | B1_JOB_CONFIG.DSI               | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| UPDATE_DTTM     | Update Date/Time      | TE_VALID_STATES.U<br>PDATE_DTTM | Transformation Logic: This field is populated with the updated timestamp value.   |
| JOB_NBR         | Job Number            |                                 | Transformation Logic: This field is populated with the ODI job execution session number.  |

## **User Dimension**

The User dimension extracts the details of all users from the Oracle Utilities Network Management System source database.

| Property                   | Value          |
|----------------------------|----------------|
| Target Table               | CD_USER        |
| Table Type                 | Dimension      |
| SCD Type                   | Type 2         |
| Source System Driver Table | CES_USER       |
| Stage Table                | STG_CD_USER    |
| ODI Package                | B1_PKG_CD_USER |
| ETL View                   | B1_D_USER_VW   |

| Target Field | OBIEE Field                         | Source Field           | Transformation / Calculation Logic  |
|--------------|-------------------------------------|------------------------|---|
| USER_KEY     | User Dimension<br>Surrogate Key     |                        | Transformation Logic: This field is populated with the sequence from SPL_USER_SEQ.NEXT_VAL. |
| USER_CD      | User Code (Natural Key)             | CES_USER.USER_NA<br>ME |   |
| USER_DESCR   | User Description                    | CES_USER.FULL_NA<br>ME | Transformation Logic: If null, this field is populated with "-".                            |
| UDF1_CD      | User Defined Field 1<br>Code        |                        |   |
| UDF1_DESCR   | User Defined Field 1<br>Description |                        |   |
| UDF2_CD      | User Defined Field 2<br>Code        |                        |   |
| UDF2_DESCR   | User Defined Field 2<br>Description |                        |   |
| UDF3_CD      | User Defined Field 3<br>Code        |                        |   |
| UDF3_DESCR   | User Defined Field 3<br>Description |                        |   |
| UDF4_CD      | User Defined Field 4<br>Code        |                        |   |
| UDF4_DESCR   | User Defined Field 4<br>Description |                        |   |
| UDF5_CD      | User Defined Field 5<br>Code        |                        |   |
| UDF5_DESCR   | User Defined Field 5<br>Description |                        |   |
| UDF6_CD      | User Defined Field 6<br>Code        |                        |   |
| UDF6_DESCR   | User Defined Field 6<br>Description |                        |   |
| UDF7_CD      | User Defined Field 7<br>Code        |                        |   |
| UDF7_DESCR   | User Defined Field 7<br>Description |                        |   |
| UDF8_CD      | User Defined Field 8<br>Code        |                        |   |

| Target Field    | OBIEE Field                          | Source Field                  | Transformation /<br>Calculation Logic   |
|-----------------|--------------------------------------|-------------------------------|---|
| UDF8_DESCR      | User Defined Field 8<br>Description  |                               |   |
| UDF9_CD         | User Defined Field 9<br>Code         |                               |   |
| UDF9_DESCR      | User Defined Field 9<br>Description  |                               |   |
| UDF10_CD        | User Defined Field 10<br>Code        |                               |   |
| UDF10_DESCR     | User Defined Field 10<br>Description |                               |   |
| DATA_LOAD_DTTM  | Data Load Date/Time                  |                               | Transformation Logic: This field is populated with the load timestamp value.  |
| DATA_SOURCE_IND | Data Source Indicator                | B1_JOB_CONFIG.DSI             | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| EFF_START_DTTM  | Effective Start Date/<br>Time        | CES_USER.LAST_UPD<br>ATE_TIME |   |
| EFF_END_DTTM    | Effective End Date/<br>Time          | CES_USER.LAST_UPD<br>ATE_TIME |   |
| JOB_NBR         | Job Number                           |                               | Transformation Logic: This field is populated with the ODI job execution session number.  |

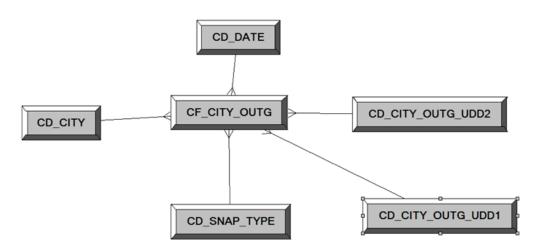
# **Fact Tables**

# **City Outage Fact**

The City Outage fact stores KPIs such as CMI, SAIDI, SAIFI, number of customers, number of interruptions, etc.

This fact is unusual in the sense that its data is not populated directly from the source tables in the replication schema. It is a calculated fact whose data is derived from the data in the Restored Customer Outage Fact and its related dimensions.

#### **Entity Relationship Diagram**



### **Properties**

| Property               | Value               |
|------------------------|---------------------|
| Target Table Name      | CF_CITY_OUTG        |
| Table Type             | Fact                |
| Fact Type              | Snapshot            |
| Driver Table           | CD_CITY             |
| Stage Table Name       | STG_CF_CITY_OUTG    |
| ODI Package Name       | B1_PKG_CF_CITY_OUTG |
| ETL View Name          | B1_F_CITY_OUTG_VW   |
| Materialized View Name |                     |

| Target Field  | OBIEE Field                      | Source Field | Transformation /<br>Calculation Logic  |
|---------------|----------------------------------|--------------|--|
| CITY_OUTG_KEY | City Outage Snapshot<br>Fact Key |              | Transformation Logic: This field is populated with the sequence from SPL_CITY_OUTG_SE Q. |

| Target Field          | OBIEE Field                          | Source Field   | Transformation / Calculation Logic   |
|-----------------------|--------------------------------------|--|--|
| TMED_IND              | Timed Indicator                      |  | Transformation Logic:<br>This field is populated<br>with '0'.  |
| SNAP_TYPE_CD          | Snapshot Type Code                   | B1_TARGET_ENTITY.<br>SCHED_TYPE_FLG                      | Transformation Logic: This field is populated the snapshot type.   |
| SNAPSHOT_DATE_<br>KEY | Snapshot Date                        | B1_JOB_CONFIG.SLIC<br>E_END_DTTM                         | Transformation Logic: Based on the snapshot date, this field is populated with surrogate key from CD_DATE.                                 |
| BEGIN_DATE_KEY        | Begin Date                           | B1_JOB_CONFIG.SLIC<br>E_START_DTTM                       | Transformation Logic: Based on the begin date, this field is populated with surrogate key from CD_DATE.                                    |
| END_DATE_KEY          | End Date                             | B1_JOB_CONFIG.SLIC<br>E_END_DTTM                         | Transformation Logic: Based on the end date, this field is populated with surrogate key from CD_DATE.                                      |
| NUM_CUST_SERVED       | Number of Customers<br>Served        | CD_SNL.EFF_START_<br>DTTM<br>CD_SNL.EFF_END_D<br>TTM     | Transformation Logic: This field is populated with the average number of customers in the city during the period.                          |
| NUM_SUST_INTRPT       | Number Sustained<br>Interruptions    | CF_CUST_RST_OUTG. BEGIN_DTTM  CF_CUST_RST_OUTG. RST_DTTM | Transformation Logic: This field is populated with the count of outages by city where outage duration is greater than P_MOM_DURATION_MINS. |
| NUM_MOM_INTRPT        | Number of Momentary<br>Interruptions | CF_CUST_RST_OUTG. BEGIN_DTTM  CF_CUST_RST_OUTG. RST_DTTM | Transformation Logic: This field is populated with the count of outages by city where outage duration is less than P_MOM_DURATION_MINS.    |
| CMI                   | Total Customer Minutes               | CF_CUST_RST_OUTG. BEGIN_DTTM  CF_CUST_RST_OUTG. RST_DTTM | Transformation Logic: This field is populated with the customer minutes interrupted.   |

| Target Field             | OBIEE Field                       | Source Field                                | Transformation /<br>Calculation Logic   |
|--------------------------|-----------------------------------|---|---|
| NUM_MULT_SUST_<br>INTRPT | T (dillo) 1. Editi C dott         | CF_CUST_RST_OUTG.<br>PER.SRC_PER_ID         | Transformation Logic: This field is populated with the customer count   |
|                          |                                   | CF_CUST_RST_OUTG.<br>PREM.SRC_PREM_ID       | who experienced more<br>than P_CEMI_COUNT<br>sustained interruptions  |
|                          |                                   | CF_CUST_RST_OUTG.<br>METER.SRC_METER_<br>ID | during the period.  |
| NUM_MULT_CUST_<br>INTRPT | Numb. Mult. Cust.<br>Interruption | CF_CUST_RST_OUTG.<br>PER.SRC_PER_ID         | Transformation Logic: This field is populated with the customer count   |
|                          |                                   | CF_CUST_RST_OUTG.<br>PREM.SRC_PREM_ID       | who experienced more<br>than P_CEMI_COUNT<br>interruptions (both  |
|                          |                                   | CF_CUST_RST_OUTG.<br>METER.SRC_METER_<br>ID | sustained and momentary) during the period.   |
| SAIDI                    | SAIDI                             | CF_CUST_RST_OUTG.<br>BEGIN_DTTM             | Transformation Logic: This field is populated with customer minutes   |
|                          |                                   | CF_CUST_RST_OUTG.<br>RST_DTTM               | interrupted by number of customers served.  |
| CAIDI                    | CAIDI                             |   | Transformation Logic:<br>This field is populated<br>with customer minutes<br>interrupted by number of<br>outages.   |
| SAIFI                    | SAIFI                             |   | Transformation Logic:<br>This field is populated<br>with number of outages<br>by number of customers<br>served.   |
| CEMI                     | CEMI                              |   | Transformation Logic: This field is populated with the ratio of individual customers experiencing more than P_CEMI_COUNT sustained interruptions to the total number of customers served. |

| Target Field | OBIEE Field | Source Field | Transformation /<br>Calculation Logic   |
|--------------|-------------|--------------|---|
| CEMSMI       | CEMSMI      |              | Transformation Logic: This field is populated with the ratio of individual customers experiencing more than P-CEMI_COUNT of both sustained and momentary interruption events to the total customers served. |
| CAIFI        | CAIFI       |              | Transformation Logic: This field is populated with the average frequency of sustained interruptions for customers experiencing sustained interruptions during the specified period for the specified area.  |
| MAIFI        | MAIFI       |              | Transformation Logic:<br>This field is populated<br>with the number of<br>momentary interruptions<br>by number of customers<br>served.  |
| MAIFIE       | MAIFIE      |              | Transformation Logic: This field indicates how often an average customer experienced a momentary interruption event during the specified period.  |
|              |             |              | <b>Note</b> : It does not include momentary interruptions immediately preceding a lockout.  |
| ASAI         | ASAI        |              | Transformation Logic:<br>This field is populated<br>with the average service<br>availability index value.   |
| ACI          | ACI         |              |   |

| Target Field           | OBIEE Field                             | Source Field     | Transformation / Calculation Logic   |
|------------------------|---|------------------|--|
| MSAIFI                 | MSAIFI                                  |                  | Transformation Logic:<br>This field indicates how<br>often an average<br>customer experienced a<br>momentary and sustained<br>interruption during the<br>specified period.   |
| CITY_KEY               | City Dimension<br>Surrogate Key         | CD_CITY.CITY_KEY |  |
| NUM_CUST_INTRPT        | Number Customers<br>Interrupted         |                  | Transformation Logic: This field is populated with the number of customers who experienced an interruption during the period.  |
| NUM_MOM_E_<br>INTRPT   | Number of Mom. E.<br>Intrpt             |                  | Transformation Logic: This field is populated with the number of momentary events during the period, excluding the events that immediately precede a sustained interruption. |
| NUM_EVENT              | Number of Events                        |                  | Transformation Logic: This field is populated with the number of events during the period.   |
| CITY_OUTG_UDD1_<br>KEY | City Outage User<br>Defined Dimension 1 |                  |  |
| CITY_OUTG_UDD2_<br>KEY | City Outage User<br>Defined Dimension 2 |                  |  |
| FACT_CNT               | Number of Calls                         |                  | Transformation Logic:<br>This field is populated<br>with the standard value of<br>'1'.   |
| UDM1                   | User Defined Measure 1                  |                  |  |
| UDM2                   | User Defined Measure 2                  |                  |  |
| UDM3                   | User Defined Measure 3                  |                  |  |
| UDM4                   | User Defined Measure 4                  |                  |  |
| UDM5                   | User Defined Measure 5                  |                  |  |
| UDDGEN1                | User Defined Degenerate<br>Dimension 1  |                  |  |

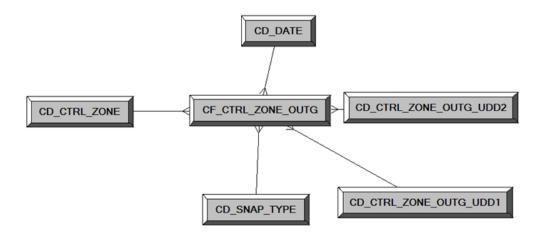
| Target Field             | OBIEE Field  | Source Field                     | Transformation /<br>Calculation Logic  |
|--------------------------|--|----------------------------------|--|
| UDDGEN2                  | User Defined Degenerate<br>Dimension 2                 |                                  |  |
| UDDGEN3                  | User Defined Degenerate<br>Dimension 3                 |                                  |  |
| NUM_CUST_SUST_<br>INTRPT | Number of Customers<br>with Sustained<br>Interruptions |                                  | Transformation Logic: This field is populated with the number of customers who experienced a sustained interruption during the period.   |
| SNAPSHOT_DT              | Snapshot Date  | B1_JOB_CONFIG.SLIC<br>E_END_DTTM |  |
| SRC_CITY                 | City   | CD_CITY.SRC_CITY                 |  |
| SRC_STATE                | State  | CD_CITY.SRC_STATE                |  |
| SRC_COUNTRY              | Country  | CD_CITY.SRC_COUN<br>TRY          |  |
| DATA_SOURCE_IND          | Data Source Indicator                                  | B1_PROD_INSTANCE. DSI            | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR                  | Job Number   |                                  | Transformation Logic: This field is populated with the ODI job execution session number.   |

# **Control Zone Outage Fact**

The Control Zone Outage fact stores the KPI related information (such as CMI, SAIDI, SAIFI, number of customers, number of interruptions, etc) in the source system.

This fact is unusual in the sense that its data is not populated directly from the source tables in the replication schema. It is a calculated fact whose data is derived from the data in the Restored Customer Outage Fact and its related dimensions.

### **Entity Relationship Diagram**



## **Properties**

| Property               | Value  |
|------------------------|--|
| Target Table Name      | CF_CTRL_ZONE_OUTG                                      |
| Table Type             | Fact   |
| Fact Type              | Snapshot   |
| Driver Table           | CD_CTRL_ZONE   |
| Stage Table Name       | STG_CF_CTRL_ZONE_OUTG                                  |
| ODI Package Name       | B1_PKG_CF_CTRL_ZONE_OUTG                               |
| ETL View Name          | B1_F_CTRL_ZONE_OUTG_VW                                 |
| Materialized View Name | B1_CTRL_ZONE_OUTG_MON_MV1<br>B1_CTRL_ZONE_OUTG_MON_MV2 |

| Target Field           | OBIEE Field                              | Source Field | Transformation /<br>Calculation Logic   |
|------------------------|--|--------------|---|
| CTRL_ZONE_OUTG_<br>KEY | Control Zone Outage<br>Snapshot Fact Key |              | Transformation Logic: This field is populated with the sequence from SPL_CTRL_ZONE_OU TG_SEQ. |
| TMED_IND               | Timed Indicator                          |              |   |

| Target Field             | OBIEE Field                          | Source Field   | Transformation / Calculation Logic   |
|--------------------------|--------------------------------------|--|--|
| SNAP_TYPE_CD             | Snapshot Type Code                   | B1_TARGET_ENTITY.<br>SCHED_TYPE_FLG                      |  |
| SNAPSHOT_DATE_<br>KEY    | Snapshot Date                        | B1_JOB_CONFIG.SLIC<br>E_END_DTTM                         | Transformation Logic: Based on the snapshot date, this field is populated with surrogate key from CD_DATE.                                 |
| BEGIN_DATE_KEY           | Begin Date                           | B1_JOB_CONFIG.SLIC<br>E_START_DTTM                       | Transformation Logic: Based on the begin date, this field is populated with surrogate key from CD_DATE.                                    |
| END_DATE_KEY             | End Date                             | B1_JOB_CONFIG.SLIC<br>E_END_DTTM                         | Transformation Logic: Based on the end date, this field is populated with surrogate key from CD_DATE.                                      |
| NUM_CUST_SERVED          | Number of Customers<br>Served        | CD_SNL.EFF_START_<br>DTTM<br>CD_SNL.EFF_END_D            | Transformation Logic: This field is populated with the average number of customers in the city   |
|                          |                                      | TTM  | during the period.   |
| NUM_SUST_INTRPT          | Number Sustained<br>Interruptions    | CF_CUST_RST_OUTG. BEGIN_DTTM  CF_CUST_RST_OUTG. RST_DTTM | Transformation Logic: This field is populated with the count of outages by city where outage duration is greater than p_mom_duration mins. |
| NUM_MOM_INTRPT           | Number of Momentary<br>Interruptions | CF_CUST_RST_OUTG. BEGIN_DTTM  CF_CUST_RST_OUTG.          | Transformation Logic: This field is populated with the count of outages by city where outage   |
|                          |                                      | RST_DTTM   | duration is less than p_mom_duration mins.   |
| CMI                      | Total Customer Minutes               | CF_CUST_RST_OUTG.<br>BEGIN_DTTM                          | Transformation Logic: This field is populated  |
|                          |                                      | CF_CUST_RST_OUTG.<br>RST_DTTM                            | with the customer minutes interrupted.   |
| NUM_MULT_SUST_<br>INTRPT | Numb. Mult. Sust.<br>Interruption    | CF_CUST_RST_OUTG.<br>PER.SRC_PER_ID                      | Transformation Logic: This field is populated with the customer count  |
|                          |                                      | CF_CUST_RST_OUTG.<br>PREM.SRC_PREM_ID                    | who experienced more<br>than P_CEMI_COUNT<br>sustained interruptions   |
|                          |                                      | CF_CUST_RST_OUTG.<br>METER.SRC_METER_<br>ID              | during the period.   |

| Target Field             | OBIEE Field | Source Field                                | Transformation /<br>Calculation Logic   |
|--------------------------|-------------|---|---|
| NUM_MULT_CUST_<br>INTRPT | - (         | CF_CUST_RST_OUTG.<br>PER.SRC_PER_ID         | Transformation Logic: This field is populated with the customer count   |
|                          |             | CF_CUST_RST_OUTG.<br>PREM.SRC_PREM_ID       | who experienced more than P_CEMI_COUNT  |
|                          |             | CF_CUST_RST_OUTG.<br>METER.SRC_METER_<br>ID | interruptions (both<br>sustained and<br>momentary) during the<br>period.  |
| SAIDI                    | SAIDI       | CF_CUST_RST_OUTG.<br>BEGIN_DTTM             | Transformation Logic: This field is populated   |
|                          |             | CF_CUST_RST_OUTG.<br>RST_DTTM               | with customer minutes interrupted by number of customers served.  |
| CAIDI                    | CAIDI       |   | Transformation Logic:<br>This field is populated<br>with customer minutes<br>interrupted by number of<br>outages.   |
| SAIFI                    | SAIFI       |   | Transformation Logic:<br>This field is populated<br>with number of outages<br>by number of customers<br>served.   |
| CEMI                     | CEMI        |   | Transformation Logic: This field is populated with the ratio of individual customers experiencing more than P_CEMI_COUNT sustained interruptions to the total number of customers served.                   |
| CEMSMI                   | CEMSMI      |   | Transformation Logic: This field is populated with the ratio of individual customers experiencing more than P-CEMI_COUNT of both sustained and momentary interruption events to the total customers served. |

| Target Field    | OBIEE Field                             | Source Field                   | Transformation / Calculation Logic   |
|-----------------|---|--------------------------------|--|
| CAIFI           | CAIFI                                   |                                | Transformation Logic: This field is populated with the average frequency of sustained interruptions for customers experiencing sustained interruptions during the specified period for the specified area. |
| MAIFI           | MAIFI                                   |                                | Transformation Logic:<br>This field is populated<br>with the number of<br>momentary interruptions<br>by number of customers<br>served.   |
| MAIFIE          | MAIFIE                                  |                                | Transformation Logic: This field indicates how often an average customer experienced a momentary interruption event during the specified period.   |
|                 |   |                                | <b>Note</b> : It does not include<br>momentary interruptions<br>immediately preceding a<br>lockout.  |
| ASAI            | ASAI                                    |                                | Transformation Logic:<br>This field is populated<br>with the average service<br>availability index value.  |
| ACI             | ACI                                     |                                |  |
| MSAIFI          | MSAIFI                                  |                                | Transformation Logic: This field indicates how often an average customer experienced a momentary and sustained interruption during the specified period.   |
| CTRL_ZONE_KEY   | Control Zone Dimension<br>Surrogate Key | CD_CTRL_ZONE.CTR<br>L_ZONE_KEY |  |
| NUM_CUST_INTRPT | Number Customers<br>Interrupted         |                                | Transformation Logic: This field is populated with the number of customers who experienced an interruption during the period.  |

| Target Field                | OBIEE Field  | Source Field                     | Transformation / Calculation Logic   |
|-----------------------------|--|----------------------------------|--|
| NUM_MOM_E_<br>INTRPT        | Number of Mom. E.<br>Intrpt                            |                                  | Transformation Logic: This field is populated with the number of momentary events during the period, excluding the events that immediately precede a sustained interruption. |
| NUM_EVENT                   | Number of Events                                       |                                  | Transformation Logic: This field is populated with the number of events during the period.   |
| CTRL_ZONE_OUTG_<br>UDD1_KEY | Control Zone Outage<br>User Defined Dimension<br>1 Key |                                  |  |
| CTRL_ZONE_OUTG_<br>UDD2_KEY | Control Zone Outage<br>User Defined Dimension<br>2 Key |                                  |  |
| FACT_CNT                    | Number of Calls  |                                  | Transformation Logic:<br>This field is populated<br>with the standard value of<br>'1'.   |
| UDM1                        | User Defined Measure 1                                 |                                  |  |
| UDM2                        | User Defined Measure 2                                 |                                  |  |
| UDM3                        | User Defined Measure 3                                 |                                  |  |
| UDM4                        | User Defined Measure 4                                 |                                  |  |
| UDM5                        | User Defined Measure 5                                 |                                  |  |
| UDDGEN1                     | User Defined Degenerate<br>Dimension 1                 |                                  |  |
| UDDGEN2                     | User Defined Degenerate<br>Dimension 2                 |                                  |  |
| UDDGEN3                     | User Defined Degenerate<br>Dimension 3                 |                                  |  |
| NUM_CUST_SUST_<br>INTRPT    | Numb. Cust. Sust.<br>Interruption                      |                                  | Transformation Logic: This field is populated with the number of customers who experienced a sustained interruption during the period.                                       |
| SNAPSHOT_DT                 | Snapshot Date  | B1_JOB_CONFIG.SLIC<br>E_END_DTTM |  |

| Target Field    | OBIEE Field           | Source Field                  | Transformation / Calculation Logic   |
|-----------------|-----------------------|-------------------------------|--|
| SRC_NCG_ID      |                       | CD_CTRL_ZONE.CD_<br>CTRL_ZONE |  |
| DATA_SOURCE_IND | Data Source Indicator | B1_PROD_INSTANCE.<br>DSI      | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number            |                               | Transformation Logic: This field is populated with the ODI job execution session number.   |

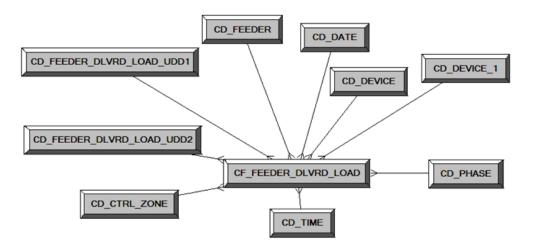
## **Feeder Delivered Load Snapshot Fact**

The Feeder Delivered Load Snapshot fact stores the feeder delivered load information from Oracle Utilities Network Management System.

The following measures are populated by the extract:

- BRKR\_AMP\_LIMIT. Breaker Amp Limit
- AMP. Amp Phase A, B and C
- KW. KW Phase A, B and C
- KVAR. KVAR Phase A, B and C
- KVA. KVA Phase A, B and C
- VOLTAGE. Voltage Phase A, B and C
- POWER\_FACTOR. Power Factor Phase A, B and C

#### **Entity Relationship Diagram**



| Property               | Value                       |
|------------------------|-----------------------------|
| Target Table Name      | CF_FEEDER_DLVRD_LOAD        |
| Table Type             | Fact                        |
| Fact Type              | Snapshot                    |
| Driver Table           | FLM_FDR_LOAD                |
| Stage Table Name       | STG_CF_FEEDER_DLVRD_LOAD    |
| ODI Package Name       | B1_PKG_CF_FEEDER_DLVRD_LOAD |
| ETL View Name          | B1_F_FEEDER_DLVRD_LOAD_VW   |
| Materialized View Name | B1_FEEDER_DLVRD_MON_MV1     |

| Target Field              | OBIEE Field                                 | Source Field                                       | Transformation /<br>Calculation Logic  |
|---------------------------|---|--|--|
| FEEDER_DLVRD_<br>LOAD_KEY | Feeder Delivered Load<br>Fact Surrogate Key |  | Transformation Logic:<br>This field is populated<br>with the sequence from<br>B1_PAY_PLAN_ACCU<br>M_SEQ. |
| SRC_FEEDER_CLS            | Feeder Class                                | FLM_FDR_LOAD.FDR<br>_CLS                           |  |
| SRC_FEEDER_IDX            | Feeder Index                                | FLM_FDR_LOAD.FDR<br>_IDX                           |  |
| SRC_DTTM                  | Snapshot Date/Time                          | FLM_FDR_LOAD.ANA<br>LYSIS_DATE                     |  |
| FEEDER_KEY                | Feeder Key                                  | FLM_FDR_LOAD.FDR<br>_CLS                           | Note: Lookup in CD_FEEDER  |
|                           |   | FLM_FDR_LOAD.FDR<br>_IDX                           | dimension table and populate the surrogate key.  |
| CTRL_ZONE_KEY             | Control Zone Key                            | NETWORK_COMPON<br>ENTS.NCG                         | Note: Lookup in CD_CTRL_ZONE dimension table and populate the surrogate key.                             |
| BRKR_DEVICE_KEY           | Breaker Device Key                          | FLM_FDR_LOAD.CB_<br>CLS<br>FLM_FDR_LOAD.CB_I<br>DX | Note: Lookup in CD_DEVICE dimension table and populate the surrogate key.                                |
| SUBSTN_DEVICE_<br>KEY     | Substation Device<br>Dimension              | FLM_FDR_LOAD.CB_<br>CLS<br>FLM_FDR_LOAD.CB_I<br>DX | Note: Lookup in CD_DEVICE dimension table and populate the surrogate key.                                |
| SNAPSHOT_DATE_<br>KEY     | Snapshot Date Type                          | FLM_FDR_LOAD.ANA<br>LYSIS_DATE                     | Transformation Logic: Extract the date part and then lookup in CD_DATE dimension table.                  |
| SNAPSHOT_TIME_<br>KEY     | Snapshot Time Type                          | FLM_FDR_LOAD.ANA<br>LYSIS_DATE                     | Transformation Logic: Extract the date part and then lookup in CD_TIME dimension table.                  |
| PHASE_KEY                 |   |  | Note: Lookup in<br>CD_PHASE dimension<br>table and populate the<br>surrogate key.                        |

| Target Field                   | OBIEE Field             | Source Field              | Transformation / Calculation Logic |
|--------------------------------|-------------------------|---------------------------|------------------------------------|
| FEEDER_DLVRD_<br>LOAD_UDD1_KEY |                         |                           |                                    |
| FEEDER_DLVRD_<br>LOAD_UDD2_KEY |                         |                           |                                    |
| BRKR_AMP_LIMIT                 | Breaker Amp Limit       | PF_SWITCHES.AMP_<br>LIMIT |                                    |
| AMP                            | Amp – Phase A, B and C  | FLM_FDR_LOAD.<br>AMP_A    |                                    |
|                                |                         | FLM_FDR_LOAD.<br>AMP_B    |                                    |
|                                |                         | FLM_FDR_LOAD.<br>AMP_C    |                                    |
| KW                             | kW – Phase A, B and C   | FLM_FDR_LOAD.<br>KW_A     |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KW_B     |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KW_C     |                                    |
| KVAR                           | kVAr – Phase A, B and C | FLM_FDR_LOAD.<br>KVAR_A   |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KVAR_B   |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KVAR_C   |                                    |
| KVA                            | kVA – Phase A, B and C  | FLM_FDR_LOAD.<br>KW_A     |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KVAR_A   |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KW_B     |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KVAR_B   |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KW_C     |                                    |
|                                |                         | FLM_FDR_LOAD.<br>KVAR_C   |                                    |

| Target Field | OBIEE Field                                 | Source Field          | Transformation /<br>Calculation Logic  |
|--------------|---|-----------------------|--|
| VOLTAGE      | Voltage – Phase A, B and C                  | FLM_FDR_LOAD.<br>KV_A |  |
|              |   | FLM_FDR_LOAD.<br>KV_B |  |
|              |   | FLM_FDR_LOAD.<br>KV_C |  |
| POWER_FACTOR | Power Factor – Phase A,<br>B and C          |                       |  |
| FACT_CNT     | Count                                       |                       | Transformation Logic:<br>This field is populated<br>with the standard value of<br>'1'. |
| UDM1         | User Defined Measure 1                      |                       |  |
| UDM2         | User Defined Measure 2                      |                       |  |
| UDM3         | User Defined Measure 3                      |                       |  |
| UDM4         | User Defined Measure 4                      |                       |  |
| UDM5         | User Defined Measure 5                      |                       |  |
| UDM6         | User Defined Measure 6                      |                       |  |
| UDM7         | User Defined Measure 7                      |                       |  |
| UDM8         | User Defined Measure 8                      |                       |  |
| UDM9         | User Defined Measure 9                      |                       |  |
| UDM10        | User Defined Measure 10                     |                       |  |
| UDDGEN1      | User Defined Degenerate<br>Dimension 1      |                       |  |
| UDDGEN2      | User Defined Degenerate<br>Dimension 2      |                       |  |
| UDDGEN3      | User Defined Degenerate<br>Dimension 3      |                       |  |
| UDDGEN4      | User Defined Degenerate<br>Dimension 4      |                       |  |
| UDDGEN5      | User Defined Degenerate<br>Dimension 5      |                       |  |
| UDDGENL1     | User Defined Long<br>Degenerate Dimension 1 |                       |  |
| UDDGENL2     | User Defined Long<br>Degenerate Dimension 2 |                       |  |

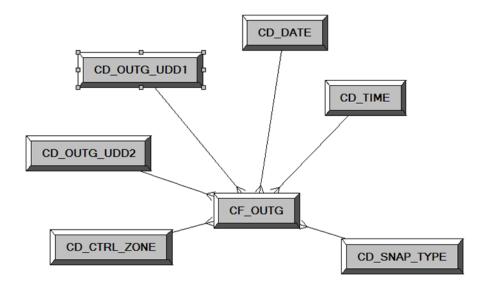
| Target Field    | OBIEE Field                                 | Source Field  | Transformation /<br>Calculation Logic   |
|-----------------|---|---|---|
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |   |   |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |   |   |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |   |   |
| UDDFK1_KEY      | User Defined Dimension<br>Foreign Key 1     |   |   |
| UDDFK2_KEY      | User Defined Dimension<br>Foreign Key 2     |   |   |
| UDDFK3_KEY      | User Defined Dimension<br>Foreign Key 3     |   |   |
| UDDFK4_KEY      | User Defined Dimension<br>Foreign Key 4     |   |   |
| UDDFK5_KEY      | User Defined Dimension<br>Foreign Key 5     |   |   |
| SRC_PHASE_ID    | Phase ID                                    |   |   |
| DATA_SOURCE_IND | Data Source Indicator                       | B1_PROD_INSTANCE. DSI  BI_APPLICATION_ PARAMS.AP_MIN_ VALUE | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.F. NV_ID). |
| JOB_NBR         | Job Number                                  |   | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.  |

## **Outage Fact**

The Outage fact is an hourly snapshot fact that stores various measures at the control zone level.

This fact is unusual in the sense that its data is not populated directly from the source tables in the replication schema. It is a calculated fact whose data is derived from the data in the restored facts (Restored Call Fact, Restored Coew Fact, Restored Job Fact, and Restored Customer Outage Fact) and the recent facts (Recent Call Fact, Recent Crew Fact, Recent Job Fact, and Recent Customer Outage Fact).

## **Entity Relationship Diagram**



### **Properties**

| Property               | Value           |
|------------------------|-----------------|
| Target Table Name      | CF_OUTG         |
| Table Type             | Fact            |
| Fact Type              | Snapshot        |
| Driver Table           |                 |
| Stage Table Name       | STG_CF_OUTG     |
| ODI Package Name       | B1_PKG_CF_OUTG  |
| ETL View Name          | B1_F_CF_OUTG_VW |
| Materialized View Name | B1_OUTG_MON_MV1 |

| Target Field | OBIEE Field                  | Source Field | Transformation /<br>Calculation Logic   |
|--------------|------------------------------|--------------|---|
| OUTG_KEY     | Outage Fact Surrogate<br>Key |              | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_OUTG_SEQ. |

| Target Field            | OBIEE Field                       | Source Field                     | Transformation /<br>Calculation Logic   |
|-------------------------|-----------------------------------|----------------------------------|---|
| CTRL_ZONE_KEY           | Control Zone Key                  | CD_CTRL_ZONE.CTR<br>L_ZONE_KEY   |   |
| SNAP_TYPE_CD            | Snapshot Type                     |                                  | Transformation Logic:<br>This field is populated<br>with the standard value of<br>"H" (hourly).           |
| SNAPSHOT_DATE_<br>KEY   | Snapshot Date Type                |                                  | Note: Extract the date part and lookup in CD_DATE dimension table to populate the surrogate key.          |
| SNAPSHOT_TIME_<br>KEY   | Snapshot Time Type                |                                  | Note: Extract the date part and lookup in CD_TIME dimension table to populate the surrogate key.          |
| NUM_CREW_ASSIGN         | Number of Crew<br>Assignments     | CF_RECENT_CREW.F<br>ACT_CNT      |   |
| NUM_CREW_DISP           | Number of Crew<br>Dispatches      | CF_RECENT_CREW.F<br>ACT_CNT      |   |
| NUM_CUST_OUTG           | Number of Customers<br>Out        | CF_CUST_RECENT_O<br>UTG.FACT_CNT |   |
| NUM_CUST_RST            | Number of Customers<br>Restore    | CF_CUST_RECENT_O<br>UTG.FACT_CNT |   |
| NUM_CUST_NEW            | Number of New<br>Customers        | CF_CUST_RECENT_O<br>UTG.FACT_CNT |   |
| NUM_CUST_MOM            | Number of Customer<br>Momentaries | CF_RECENT_JOB.FAC<br>T_CNT       |   |
| NUM_EVENT               | Number of Events                  | CF_RECENT_JOB.FAC<br>T_CNT       |   |
| NUM_NEW_EVENT           | Number of New Events              | CF_RECENT_JOB.FAC<br>T_CNT       |   |
| NUM_CLOSED_<br>EVENT    | Number of Closed<br>Events        | CF_RECENT_JOB.FAC<br>T_CNT       |   |
| NUM_CANCELLED_<br>EVENT | Number of Cancelled<br>Events     | CF_RECENT_JOB.CA<br>NCELLED_IND  |   |
| NUM_CALL                | Number of Calls                   | CF_RECENT_CALL.F<br>ACT_CNT      | Transformation Logic:<br>This field is populated<br>with the number of calls<br>received during the hour. |
| OUTG_UDD1_KEY           |                                   |                                  |   |
| OUTG_UDD2_KEY           |                                   |                                  |   |

| Target Field    | OBIEE Field                            | Source Field                     | Transformation /<br>Calculation Logic   |
|-----------------|--|----------------------------------|---|
| FACT_CNT        |  |                                  | Transformation Logic:<br>This field is populated<br>with the standard value of<br>'1'.  |
| UDM1            | User Defined Measure 1                 |                                  |   |
| UDM2            | User Defined Measure 2                 |                                  |   |
| UDM3            | User Defined Measure 3                 |                                  |   |
| UDM4            | User Defined Measure 4                 |                                  |   |
| UDM5            | User Defined Measure 5                 |                                  |   |
| UDDGEN1         | User Defined Degenerate<br>Dimension 1 |                                  |   |
| UDDGEN2         | User Defined Degenerate<br>Dimension 2 |                                  |   |
| UDDGEN3         | User Defined Degenerate<br>Dimension 3 |                                  |   |
| SNAPSHOT_DTTM   | Snapshot Date/Time                     | B1_JOB_CONFIG.SLIC<br>E_END_DTTM |   |
| SRC_NCG_ID      |  | CD_CTRL_ZONE.SRC<br>_NCG_ID      |   |
| DATA_SOURCE_IND | Data Source Indicator                  | B1_PROD_INSTANCE. DSI            | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.ENV_ID). |
| JOB_NBR         | Job Number                             |                                  | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.  |

### **Recent Call Fact**

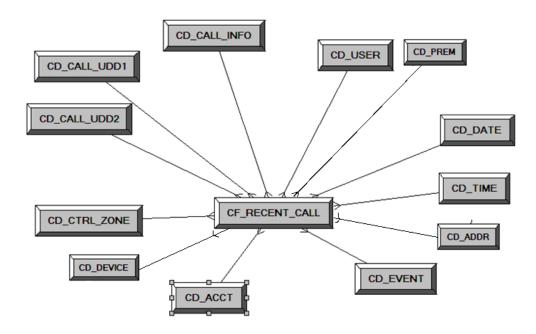
The Recent Call fact stores incidents' details created in Oracle Utilities Network Management System, also capturing the associated job details. The fact stores details about all un-restored jobs and jobs restored within the last 'X' number of days. The value 'X' days has to be configured using the Oracle Utilities Administration Tool.

See the Configuring Oracle Utilities Network Management System (NMS) section in the Configuring Oracle Utilities Analytics chapter in the Oracle Utilities Analytics Administration Guide for more details.

The ETL job for this fact is configured to load data in near real-time (NRT). The primary purpose to configure it as NRT is to support tracking current (active) and relatively recent restored outages. The NRT data store can also be used to help gauge the ability of the existing resources to deal with a current storm to help determine if external/foreign (crew) resources are or are not required.

The "recent fact" data store is not intended to be a long-term repository and hence the purging mechanism based on the user configured 'X' days.

#### **Entity Relationship Diagram**



| Property          | Value                 |
|-------------------|-----------------------|
| Target Table Name | CF_RECENT_CALL        |
| Table Type        | Fact                  |
| Fact Type         | Accumulation          |
| Driver Table      | INCIDENTS             |
| Stage Table Name  | STG_CF_RECENT_CALL    |
| ODI Package Name  | B1_PKG_CF_RECENT_CALL |
| ETL View Name     | B1_F_RECENT_CALL_VW   |

Materialized View Name

| Target Field    | OBIEE Field                          | Source Field  | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|---|---|
| RECENT_CALL_KEY | Recent Call Key                      |   | Transformation Logic: This field is populated with the sequence from SPL_RECENT_CALL_SEQ. |
| SRC_INCIDENT_ID | Source Incident ID                   | INCIDENTS.DECODE<br>(NVL(ASSOCIATE_ID<br>X, 0), 0, NUMB,<br>ASSOCIATE_IDX)                  |   |
| EVENT_KEY       | Event Key                            | JOBS.NUMB   | Note: Lookup in the CD_EVENT dimension table and replace with surrogate key.              |
| ACCT_KEY        | Account Key                          | INCIDENTS.ACCOUN<br>T_NUM   | Note: Lookup in the CD_ACCOUNT dimension table and replace with surrogate key.            |
| PRIORITY_IND    | Priority Indicator                   | INCIDENTS.DECODE<br>(SUBSTR(<br>INCIDENTS.COMPLA<br>INT, 7, 1), '1', '1', '2', '1',<br>'0') | <b>Note</b> : Use parameter B1_PRTY_BIT instead of 7.                                     |
| CALL_DATE_KEY   | Call Date Key                        | INCIDENTS.INPUT_T<br>IME  | Note: Extract the date part and then lookup in CD_DATE dimension table.                   |
| CALL_TIME_KEY   | Call Time Key                        | INCIDENTS.INPUT_T<br>IME  | Note: Extract the date part and then lookup in CD_DATE dimension table.                   |
| CALL_UDD1_KEY   | Call User Defined<br>Dimension 1 Key |   |   |
| CALL_UDD2_KEY   | Call User Defined<br>Dimension 2 Key |   |   |
| CTRL_ZONE_KEY   | Control Zone Key                     | INCIDENTS.NCG   | Note: Replace with surrogate key.   |
| USER_KEY        | User Key                             | CES_USER.USER_NA<br>ME  | Note: Look up in the CD_USER table and populate with surrogate key.                       |

| Target Field  | OBIEE Field                               | Source Field  | Transformation / Calculation Logic                                  |
|---------------|---|---|---|
| CALL_INFO_KEY | Call Info Key                             | INCIDENTS.DECODE<br>(NVL(<br>ASSOCIATE_IDX, 0),<br>0, NUMB,<br>ASSOCIATE_IDX) | Note: Replace with surrogate key.                                   |
| PREM_KEY      | Premise Key                               | CES_CUSTOMERS.SE<br>RV_LOC_ID   | Note: Look up in the CD_PREM table and populate with surrogate key. |
| ADDR_KEY      | Address Key                               | CES_CUSTOMERS.SE<br>RV_LOC_ID   | Note: Look up in the CD_ADDR table and populate with surrogate key. |
| DEVICE_KEY    | Device Key                                | INCIDENTS.H_IDX   | Note: Look up in the  |
|               |   | INCIDENTS.H_CLS   | CD_DEVICE table and populate with surrogate key.                    |
| UDM1          | User Defined Measure 1                    |   |   |
| UDM2          | User Defined Measure 2                    |   |   |
| UDM3          | User Defined Measure 3                    |   |   |
| UDM4          | User Defined Measure 4                    |   |   |
| UDM5          | User Defined Measure 5                    |   |   |
| UDM6          | User Defined Measure 6                    |   |   |
| UDM7          | User Defined Measure 7                    |   |   |
| UDM8          | User Defined Measure 8                    |   |   |
| UDM9          | User Defined Measure 9                    |   |   |
| UDM10         | User Defined Measure 10                   |   |   |
| UDDFK1_KEY    | User Defined Dimension<br>Surrogate Key 1 |   |   |
| UDDFK2_KEY    | User Defined Dimension<br>Surrogate Key 2 |   |   |
| UDDFK3_KEY    | User Defined Dimension<br>Surrogate Key 3 |   |   |
| UDDFK4_KEY    | User Defined Dimension<br>Surrogate Key 4 |   |   |
| UDDFK5_KEY    | User Defined Dimension<br>Surrogate Key 5 |   |   |
| UDDGEN1       | User Defined Degenerate<br>Dimension 1    | JOBS.RESTORE_TIME   |   |

| Target Field    | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|---|--------------|--|
| UDDGEN2         | User Defined Degenerate<br>Dimension 2      |              |  |
| UDDGEN3         | User Defined Degenerate<br>Dimension 3      |              |  |
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1.  |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

### **Recent Crew Fact**

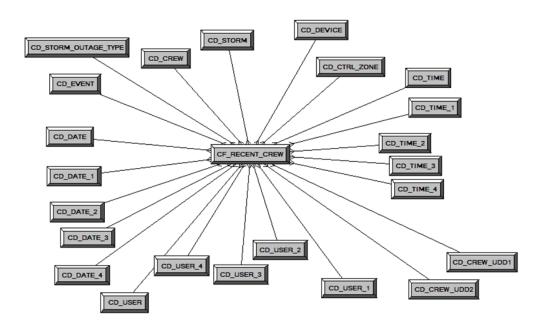
For every job created in the source system, several activities (such as assignment, un-assignment, dispatch, arrival, and completion) are performed to complete the job. Each of these activities are carried out by the corresponding crew. The Recent Crew fact stores all such crew activity information for every job created in the source system. The fact stores details about all unrestored jobs and jobs restored within the last 'X' number of days. The value 'X' days has to be configured using the Oracle Utilities Administration Tool.

See Configuring Oracle Utilities Network Management System (NMS) in the Configuring Oracle Utilities Analytics chapter in the Oracle Utilities Analytics Administration Guide for more details.

The ETL job for this fact is configured to load data in near real-time (NRT). The primary purpose to configure it as NRT is to support tracking current (active) and relatively recent restored outages. The NRT data store can also be used to help gauge the ability of the existing resources to deal with a current storm to help determine if external/foreign (crew) resources are or are not required.

The "recent fact" data store is not intended to be a long-term repository and hence the purging mechanism based on the user configured 'X' days.

#### **Entity Relationship Diagram**



| Property          | Value                 |
|-------------------|-----------------------|
| Target Table Name | CF_RECENT_CREW        |
| Table Type        | Fact                  |
| Fact Type         | Accumulation          |
| Driver Table      | INCIDENTS             |
| Stage Table Name  | STG_CF_RECENT_CREW    |
| ODI Package Name  | B1_PKG_CF_RECENT_CREW |

| Property               | Value               |
|------------------------|---------------------|
| ETL View Name          | B1_F_RECENT_CREW_VW |
| Materialized View Name |                     |

| Target Field         | OBIEE Field                          | Source Field                            | Transformation /<br>Calculation Logic   |
|----------------------|--------------------------------------|---|---|
| RECENT_CREW_KEY      | Recent Crew Key                      |   | Transformation Logic: This field is populated with the sequence from SPL_RECENT_CALL_SEQ.                                       |
| EVENT_KEY            | Event Key                            | JOBS.NUMB                               | <b>Note</b> : Replace with surrogate key.   |
| SRC_EVENT_NBR        | Source Event Number                  | JOBS.NUMB                               |   |
| INROUTE_<br>DURATION | Inroute Duration                     | CREW_DISPATCHES.<br>WHEN_HAPPENED       | Transformation Logic: This field is populated with the total time spent by the crew in 'Dispatch' state for a particular event. |
| ASSIGN_DATE_KEY      | Last Assign Date Key                 | CREW_ASSIGNMENT S ASSIGN.WHEN_HAPP ENED | Note: Replace with surrogate key.   |
| ASSIGN_TIME_KEY      | Last Assign Time Key                 | CREW_ASSIGNMENT S ASSIGN.WHEN_HAPP ENED | Note: Replace with surrogate key.   |
| CREW_UDD1_KEY        | Crew User Defined<br>Dimension 1 Key |   |   |
| CREW_UDD2_KEY        | Crew User Defined<br>Dimension 2 Key |   |   |
| CTRL_ZONE_KEY        | Control Zone Key                     | JOBS.NCG                                | Note: Lookup in CD_CTRL_ZONE dimension table to populate surrogate key.   |
| ASSIGN_USER_KEY      | Assign User Key                      | CREW_ASSIGNMENT<br>S ASSIGN.CES_USER    | Note: Lookup in<br>CD_USER dimension<br>table to populate<br>surrogate key.   |
| CREW_KEY             | Crew Key                             | CREW_EVENT_HIST<br>ORY.CREW_ID          | Note: Lookup in<br>CD_CREW dimension<br>table to populate<br>surrogate key.   |

| Target Field          | OBIEE Field       | Source Field                                       | Transformation / Calculation Logic  |
|-----------------------|-------------------|--|---|
| WORK_DURATION         | Work Duration     | CREW_DISPATCHES.<br>WHEN_HAPPENED                  | Transformation Logic: This field is populated with the total time spent by the crew in 'Arrive' state for a particular event. |
| ASSIGN_DURATION       | Assign Duration   | CREW_ASSIGNMENT<br>S.WHEN_HAPPENED                 | Transformation Logic: This field is populated with the total time spent by the crew in 'Assign' state for a particular event. |
| DISPATCH_<br>DURATION | Dispatch Duration | CREW_DISPATCHES.<br>WHEN_HAPPENED                  |   |
|                       |                   | CREW_ASSIGNMENT<br>S.WHEN_HAPPENED                 |   |
| DEVICE_KEY            | Device Key        | JOBS.H_IDX<br>JOBS.H_CLS                           | Note: Look up H_IDX<br>and H_CLS in<br>CD_DEVICE dimension<br>table and populate the<br>surrogate key.                        |
| UNASSIGN_USER_<br>KEY | Unassign User Key | CREW_ASSIGNMENT<br>S<br>UNASSIGN.CES_USER          |   |
| UNASSIGN_DATE_<br>KEY | Unassign Date Key | CREW_ASSIGNMENT<br>S<br>UNASSIGN.WHEN_H<br>APPENED | Note: Extract the date part from WHEN_HAPPENED and then lookup in CD_DATE dimension table.                                    |
| UNASSIGN_TIME_<br>KEY | Unassign Time Key | CREW_ASSIGNMENT<br>S<br>UNASSIGN.WHEN_H<br>APPENED | Note: Extract the time part from WHEN_HAPPENED and then lookup in CD_DATE dimension table.                                    |
| ACCEPT_USER_KEY       | Accept User Key   | CREW_DISPATCHES<br>DISPATCH.CES_USER               | Transformation Logic: This field is populated with the last user who dispatched the crew. MAX(DISPATCH.WHE N_HAPPENED).       |

| Target Field    | OBIEE Field        | Source Field                                  | Transformation /<br>Calculation Logic  |
|-----------------|--------------------|---|--|
| ACCEPT_DATE_KEY | Accept Date Key    | CREW_DISPATCHES<br>DISPATCH.WHEN_H<br>APPENED | Note: Extract the date part from WHEN_HAPPENED and then lookup in CD_DATE dimension table.   |
| ACCEPT_TIME_KEY | Accept Time Key    | CREW_DISPATCHES<br>DISPATCH.WHEN_H<br>APPENED | Note: Extract the time part from WHEN_HAPPENED and then lookup in CD_TIME dimension table.   |
| ARRIVE_TIME_KEY | Arrive Time Key    | CREW_DISPATCHES<br>ARRIVE.WHEN_HAP<br>PENED   | Note: Extract the time part from WHEN_HAPPENED and then lookup in CD_TIME dimension table.   |
| CMPL_TIME_KEY   | Complete Time Key  | CREW_DISPATCHES<br>COMPLETE.WHEN_H<br>APPENED | Note: Extract the time part from WHEN_HAPPENED and then lookup in CD_TIME dimension table.   |
| ARRIVE_DATE_KEY | Arrive Date Key    | CREW_DISPATCHES<br>ARRIVE.WHEN_HAP<br>PENED   | Note: Extract the date part from WHEN_HAPPENED and then lookup in CD_DATE dimension table.   |
| CMPL_DATE_KEY   | Completed Date Key | CREW_DISPATCHES<br>COMPLETE.WHEN_H<br>APPENED | Note: Extract the date part from WHEN_HAPPENED and then lookup in CD_DATE dimension table.   |
| CMPL_USER_KEY   | Completed User Key | CREW_DISPATCHES<br>COMPLETE.CES_USE<br>R      | Transformation Logic: This field is populated with the last user name from CREW_EVENT_HIST ORY if the job is complete. Else, it is null. |
| ARRIVE_USER_KEY | Arrive User Key    | CREW_DISPATCHES<br>ARRIVE.CES_USER            |  |

| Target Field              | OBIEE Field                               | Source Field                   | Transformation / Calculation Logic   |
|---------------------------|---|--------------------------------|--|
| STORM_KEY                 | Storm Key                                 | STORMAN_STORMS.S<br>TORM_NAME  | Note: Lookup in CD_STORM dimension   |
|                           |   | STORMAN_STORMS.S<br>TORM_DATE  | table to populate the surrogate key.   |
| STORM_OUTAGE_TY<br>PE_KEY | Storm Outage Type Key                     | JOBS.STORMMAN_TY<br>PE         | Note: Look up in<br>CD_STORM_OUTAGE<br>_TYPE dimension table<br>and populate the<br>surrogate key. |
| SRC_CREW_ID               | Source Crew ID                            | CREW_EVENT_HIST<br>ORY.CREW_ID |  |
| UDM1                      | User Defined Measure 1                    |                                |  |
| UDM2                      | User Defined Measure 2                    |                                |  |
| UDM3                      | User Defined Measure 3                    |                                |  |
| UDM4                      | User Defined Measure 4                    |                                |  |
| UDM5                      | User Defined Measure 5                    |                                |  |
| UDM6                      | User Defined Measure 6                    |                                |  |
| UDM7                      | User Defined Measure 7                    |                                |  |
| UDM8                      | User Defined Measure 8                    |                                |  |
| UDM9                      | User Defined Measure 9                    |                                |  |
| UDM10                     | User Defined Measure 10                   |                                |  |
| UDDFK1_KEY                | User Defined Dimension<br>Surrogate Key 1 |                                |  |
| UDDFK2_KEY                | User Defined Dimension<br>Surrogate Key 2 |                                |  |
| UDDFK3_KEY                | User Defined Dimension<br>Surrogate Key 3 |                                |  |
| UDDFK4_KEY                | User Defined Dimension<br>Surrogate Key 4 |                                |  |
| UDDFK5_KEY                | User Defined Dimension<br>Surrogate Key 5 |                                |  |
| UDDGEN1                   | User Defined Degenerate<br>Dimension 1    | JOBS.RESTORE_TIME              |  |
| UDDGEN2                   | User Defined Degenerate<br>Dimension 2    |                                |  |
| UDDGEN3                   | User Defined Degenerate<br>Dimension 3    |                                |  |

| Target Field    | OBIEE Field                                 | Source Field | Transformation / Calculation Logic   |
|-----------------|---|--------------|--|
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1.  |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

### **Recent Job Fact**

The Recent Job fact stores job information from the source system. It stores KPIs such as number of events, outage duration, restoration duration, resolved event count, etc.

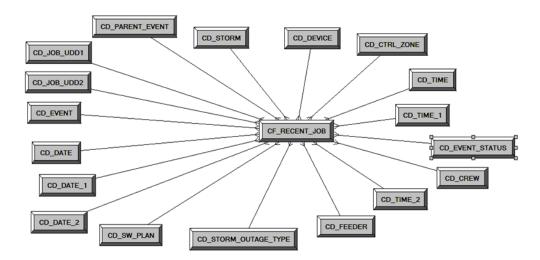
The fact stores details about all un-restored jobs and jobs restored within the last 'X' number of days. The value 'X' days has to be configured using the Oracle Utilities Administration Tool.

See Configuring Oracle Utilities Network Management System (NMS) in the Configuring Oracle Utilities Analytics chapter in the Oracle Utilities Analytics Administration Guide for more details.

The ETL job for this fact is configured to load data in near real-time (NRT). The primary purpose to configure it as NRT is to support tracking current (active) and relatively recent restored outages. The NRT data store can also be used to help gauge the ability of the existing resources to deal with a current storm to help determine if external/foreign (crew) resources are or are not required.

The "recent fact" data store is not intended to be a long-term repository and hence the purging mechanism based on the user configured 'X' days.

#### **Entity Relationship Diagram**



| Property               | Value                        |
|------------------------|------------------------------|
| Target Table Name      | CF_RECENT_JOB                |
| Table Type             | Fact                         |
| Fact Type              | Accumulation                 |
| Driver Table           | JOBS<br>PICKLIST_INFO_UPD_TR |
| Stage Table Name       | STG_CF_RECENT_JOB            |
| ODI Package Name       | B1_PKG_CF_RECENT_JOB         |
| ETL View Name          | B1_F_RECENT_JOB_VW           |
| Materialized View Name |                              |

| Target Field         | OBIEE Field        | Source Field      | Transformation /<br>Calculation Logic   |
|----------------------|--------------------|-------------------|---|
| RECENT_JOB_KEY       | Recent Job Key     |                   | Transformation Logic: This field is populated with the sequence from SPL_RECENT_JOB_SE Q.                 |
| SRC_JOB_NBR          | Source Job Number  | JOBS.NUMB         |   |
| EVENT_KEY            | Event Key          | JOBS.NUMB         | Note: Lookup in CD_EVENT and populate the surrogate key.  |
| EVENT_STATUS_<br>KEY | Event Status Key   | JOBS.STATUS       | Note: Lookup in CD_EVENT_STATUS and populate the surrogate key.   |
| BEGIN_DATE_KEY       | Begin Date Key     | JOBS.BEGIN_TIME   | Note: Extract the date part and then lookup in the CD_DATE dimension table to populate the surrogate key. |
| BEGIN_TIME_KEY       | Begin Time Key     | JOBS.BEGIN_TIME   | Note: Extract the time part and then lookup in the CD_TIME dimension table to populate the surrogate key. |
| BEGIN_DTTM           | Begin Date Time    | JOBS.BEGIN_TIME   |   |
| RST_TIME_KEY         | Restored Time Key  | JOBS.RESTORE_TIME | Note: Extract the time part and then lookup in the CD_TIME dimension table to populate the surrogate key. |
| RST_DATE_KEY         | Restored Date Key  | JOBS.RESTORE_TIME | Note: Extract the date part and then lookup in the CD_DATE dimension table to populate the surrogate key. |
| RST_DTTM             | Restored Date Time | JOBS.RESTORE_TIME |   |
| RST_IND              | Restored Indicator | JOBS.RESTORE_TIME |   |

| Target Field     | OBIEE Field                    | Source Field                                     | Transformation / Calculation Logic  |
|------------------|--------------------------------|--|---|
| EST_RST_TIME_KEY | Estimated Restored Time<br>Key | JOBS.EST_REST_TIM<br>E                           | Note: Extract the time part and then lookup in the CD_TIME dimension table to populate the surrogate key.   |
| EST_RST_DATE_KEY | Estimated Restored Date<br>Key | JOBS.EST_REST_TIM<br>E                           | Note: Extract the date part and then lookup in the CD_DATE dimension table to populate the surrogate key.   |
| PLANNED_IND      | Planned Indicator              | SWMAN_SHEET_CAT<br>EGORY.SHEET_CATE<br>GORY_NAME |   |
| EXCLUDE_IND      | Exclude Indicator              | JOBS.STATE_VALUE                                 |   |
|                  |                                | PICKLIST_INFO_UPD<br>_TR.NO_DTR_FLAG             |   |
|                  |                                | SWMAN_SHEET_CAT<br>EGORY.SHEET_CATE<br>GORY_NAME |   |
| OMS_EXCLUDE_IND  | OMS Exclude Indicator          | PICKLIST_INFO_UPD<br>_TR.NO_DTR_FLAG             |   |
| CANCELLED_IND    | Cancelled Indicator            | JOBS.STATE_VALUE                                 |   |
| OUTG_DURATION    | Outage Duration                | JOBS.RESTORE_TIME JOBS.BEGIN_TIME                | Transformation Logic:<br>This field is populated as<br>the difference (in<br>minutes) between begin<br>date/time and the actual<br>restoration date/time of<br>the job. |
| CTRL_ZONE_KEY    | Control Zone Key               | JOBS.NCG   |   |
| DEVICE_KEY       | Device Key                     | JOBS.H_IDX<br>JOBS.H_CLS                         | Transformation Logic:<br>If H_IDX and H_CLS is<br>'0' then populate<br>DEVICE_KEY as '0'.   |
| CMPL_USER_KEY    | Completed User Key             | WHO_COMPLETED.U<br>SER_NAME                      | Note: Lookup in the CD_USER dimension table and populate the surrogate key.   |
| RESP_USER_KEY    | Responsible User Key           | WHO_RESPONSIBLE.<br>USER_NAME                    | Note: Lookup in the CD_USER dimension table and populate the surrogate key.   |

| Target Field              | OBIEE Field                     | Source Field                      | Transformation / Calculation Logic   |
|---------------------------|---------------------------------|-----------------------------------|--|
| CREW_KEY                  | Crew Key                        | CREW_VW.CREW_ID                   | Note: Lookup in the CD_CREW dimension table and populate the surrogate key.      |
| JOB_UDD1_KEY              | User Defined Dimension<br>1 Key |                                   | Note: Lookup in CD_JOB_UDD1 and populate the surrogate key.                      |
| JOB_UDD2_KEY              | User Defined Dimension<br>2 Key |                                   | Note: Lookup in CD_JOB_UDD1 and populate the surrogate key.                      |
| FEEDER_KEY                | Feeder Key                      | JOBS.FEEDER_CLS                   | Transformation Logic: If FEEDER_IDX and  |
|                           |                                 | JOBS.FEEDER_IDX                   | FEEDER_CLS are '0' then populate FEEDER_KEY as '0'.                              |
| SW_PLAN_KEY               | Switch Plan Key                 | JOBS.SWSHEET_IDX                  | Transformation Logic: If SWSHEET_IDX and   |
|                           |                                 | JOBS.SWSHEET_CLS                  | SWSHEET_CLS are '0' then populate SW_PLAN_KEY as '0'.                            |
| STORM_KEY                 | Storm Key                       | STORMAN_STORMS.S<br>TORM_NAME     | Note: Lookup in<br>CD_STORM dimension<br>table to populate                       |
|                           |                                 | STORMAN_STORMS.S<br>TORM_DATE     | surrogate key.   |
| STORM_OUTAGE_<br>TYPE_KEY | Storm Outage Type Key           | JOBS.STORMMAN_TY<br>PE            | Note: Lookup in CD_STORM_OUTAGE _TYPE dimension table to populate surrogate key. |
| PARENT_EVENT_<br>KEY      | Parent Event Key                | PARENT_EVENT.NU<br>MB             | Note: Lookup in<br>CD_EVENT dimension<br>table to populate                       |
|                           |                                 | JOBS.NUMB                         | surrogate key.   |
| OUTG_DUR_KEY              | Outage Duration                 | JOBS.RESTORE_TIME JOBS.BEGIN_TIME | Note: Populate the OUTG_DURTN_KEY from CD_OUTG_DURTN                             |
|                           |                                 |                                   | where OUTG_DURATION is between RANGE_START and RANGE_END.                        |

| DURATION_ DEVIATION_KEY  DURATION_ DEVIATION_KEY  DURATION_ DEVIATION_KEY  DURATION_ DEVIATION_KEY  DURATION_ DEVIATION_KEY  DURATION_ DEVIATION_ DEVIATION_ EST_REST_TIME  EST_REST_TIME  EST_REST_TIME  DOUTG_DURATION  EST_REST_TIME  DOUTG_DURATION  EST_REST_TIME  EST_REST_TIME  DOUTG_DURATION  EST_REST_TIME  EST_REST_TIME  DOUTG_DURATION  EST_REST_TIME  DOUTG_DURATION  EST_REST_TIME  Transformation Loth  This field is populate the difference (in minutes) between the begin date/time and estimated restoration date/time of the job.  UDM1  Customers Impacted  DOBS.RESTORE_TIME  Transformation Loth  This field is populate with the number of customers impacted with the justomers impacted with the justomers impacted with the justomers impacted of received by counting number of incidents associated with the justomers impacted with the justomers impacted of received by counting number of incidents associated with the justomers impacted with the justomers impacted of received by counting number of incidents associated with the justomers impacted with the justomers impacted of received by counting number of incidents associated with the justomers impacted with the justomers impacted of received by counting number of incidents associated with the justomers impacted with the justome | Target Field    | OBIEE Field              | Source Field      | Transformation / Calculation Logic   |
|--|-----------------|--------------------------|-------------------|--|
| DURATION_ DEVIATION_REY  DURATION_ DURATION_ DURATION_ DURATION_ DURATION_ DURATION_ DURATION_ DURATION  | EST_RST_DUR_KEY | Est Restoration Duration | E                 | EST_RST_DURTN_KE<br>Y from   |
| DEVIATION_KEY  DEVIATION_KEY  DOBS.EST_REST_TIM  E  URITN_KEY from CD_ESTMITD_VS_ACT URITN_KEY from CD_ESTMITD_VS_L_DURIN where OUTG_DURATIO between RANGE_START at RANGE_END.  EST_RST_DUR  Outage Duration  DOBS.BEGIN_TIME  JOBS.BEGIN_TIME  JOBS.BEGIN_TIME  Transformation Lo This field is populate the difference (in minutes) between the begin date/time and estimated restoration date/time of the job.  UDM1  Customers Impacted  JOBS.NUM_CUST_OU  Transformation Lo This field is populate with the number of customers impacted  UDM2  Calls Received  INCIDENTS.NUMB  Transformation Lo This field is populate with the number of received by counting number of incidents associated with the jumber of incidents associated with the  |                 |                          | JOBS.BEGIN_TIME   | OUTG_DURATION is<br>between<br>RANGE_START and   |
| JOBS.EST_REST_TIM   Label      |                 | Duration Deviation       | JOBS.RESTORE_TIME |  |
| UDM1 Customers Impacted JOBS.NUM_CUST_OU This field is populate the difference (in minutes) between the begin date/time and estimated restoration date/time of the job.  UDM1 Customers Impacted JOBS.NUM_CUST_OU This field is populate with the number of customers impacted.  UDM2 Calls Received INCIDENTS.NUMB Transformation Loth This field is populate with the number of creceived by counting number of incidents associated with the job.  UDM3 Estimated Duration Deviation Deviation  UDM4 User Defined Measure 4  UDM4 User Defined Measure 5  UDM6 User Defined Measure 6   |                 |                          | •                 | URTN_KEY from CD_ESTMTD_VS_ACT L_DURTN where OUTG_DURATION is between RANGE_START and  |
| UDM2 Calls Received INCIDENTS.NUMB Transformation Lo This field is populate with the number of customers impacted.  UDM3 Estimated Duration Deviation Deviation  UDM3 Estimated Duration Deviation  UDM4 User Defined Measure 4  UDM5 User Defined Measure 6  UDM6 UDM6 INCIDENTS. Time the difference (in minutes) between the begin date/time and the estimate restoration date/time into the plob.  Transformation Lo This field is populate with the number of received by counting number of incidents associated with the job.   | EST_RST_DUR     | Outage Duration          | •                 | <b>Transformation Logic:</b> This field is populated as  |
| UDM2 Calls Received INCIDENTS.NUMB Transformation Lo This field is populate with the number of customers impacted.  UDM2 Calls Received INCIDENTS.NUMB Transformation Lo This field is populate with the number of or received by counting number of incidents associated with the jo  UDM3 Estimated Duration Deviation JOBS.RESTORE_TIME JOBS.EST_REST_TIM E minutes) between the actual restoration dat time and the estimate restoration date/time the job.  UDM4 User Defined Measure 4  UDM5 User Defined Measure 5  UDM6 USer Defined Measure 6   |                 |                          | JOBS.BEGIN_TIME   |  |
| UDM3  Estimated Duration Deviation Deviation JOBS.RESTORE_TIME JOBS.EST_REST_TIM E  UDM4  User Defined Measure 4  UDM5  User Defined Measure 6  This field is populate with the number of or received by counting number of incidents associated with the journee of the number of incidents associated with the journee of the populate with the difference of minutes) between the actual restoration date/time the job.  UDM4  User Defined Measure 5  UDM6  User Defined Measure 6   | UDM1            | Customers Impacted       | -                 |  |
| Deviation  JOBS.EST_REST_TIM  E  With the difference (in minutes) between the actual restoration date time and the estimate restoration date/time the job.  UDM4  User Defined Measure 4  UDM5  User Defined Measure 5  UDM6  User Defined Measure 6   | UDM2            | Calls Received           | INCIDENTS.NUMB    | Transformation Logic: This field is populated with the number of calls received by counting the number of incidents associated with the job. |
| JOBS.EST_REST_TIM E  with the difference (in minutes) between the actual restoration date time and the estimate restoration date/time the job.  UDM4  User Defined Measure 4  UDM5  User Defined Measure 5  UDM6  User Defined Measure 6   | UDM3            |                          | JOBS.RESTORE_TIME | Transformation Logic:  |
| UDM5 User Defined Measure 5 UDM6 User Defined Measure 6  |                 | Deviation                | •                 | with the difference (in<br>minutes) between the<br>actual restoration date/<br>time and the estimated<br>restoration date/time of            |
| UDM6 User Defined Measure 6  | UDM4            | User Defined Measure 4   |                   |  |
|  | UDM5            | User Defined Measure 5   |                   |  |
| HDM7 Hoor Defice J Marrier 7   | UDM6            | User Defined Measure 6   |                   |  |
| UDIM/ User Defined Measure /   | UDM7            | User Defined Measure 7   |                   |  |

| Target Field | OBIEE Field                                 | Source Field      | Transformation / Calculation Logic  |
|--------------|---|-------------------|---|
| UDM8         | User Defined Measure 8                      |                   |   |
| UDM9         | User Defined Measure 9                      |                   |   |
| UDM10        | User Defined Measure 10                     |                   |   |
| UDDFK1_KEY   | User Defined Dimension<br>Surrogate Key 1   |                   |   |
| UDDFK2_KEY   | User Defined Dimension<br>Surrogate Key 2   |                   |   |
| UDDFK3_KEY   | User Defined Dimension<br>Surrogate Key 3   |                   |   |
| UDDFK4_KEY   | User Defined Dimension<br>Surrogate Key 4   |                   |   |
| UDDFK5_KEY   | User Defined Dimension<br>Surrogate Key 5   |                   |   |
| UDDGEN1      | User Defined Degenerate<br>Dimension 1      | JOBS.RESTORE_TIME |   |
| UDDGEN2      | User Defined Degenerate<br>Dimension 2      |                   |   |
| UDDGEN3      | User Defined Degenerate<br>Dimension 3      |                   |   |
| UDDGEN4      | User Defined Degenerate<br>Dimension 4      |                   |   |
| UDDGEN5      | User Defined Degenerate<br>Dimension 5      |                   |   |
| UDDGENL1     | User Defined Long<br>Degenerate Dimension 1 |                   |   |
| UDDGENL2     | User Defined Long<br>Degenerate Dimension 2 |                   |   |
| UDDGENL3     | User Defined Long<br>Degenerate Dimension 3 |                   |   |
| UDDGENL4     | User Defined Long<br>Degenerate Dimension 4 |                   |   |
| UDDGENL5     | User Defined Long Degenerate Dimension 5    |                   |   |
| FACT_CNT     | Fact Count                                  |                   | Transformation Logic: This field is populated with the standard value of 1. |

| Target Field    | OBIEE Field           | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|-----------------------|--------------|--|
| DATA_SOURCE_IND | Data Source Indicator |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number            |              | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.   |

### **Recent Customer Outage Fact**

The Recent Customer Outage fact stores the details of customers experiencing service interruptions based on the supply node log information from the source system. The supply node log data will be mapped to the Supply Node Lookup Dimension to determine the actual list of customers experiencing the outage. Some of the measures captured in this fact are outage duration, CMI, number of momentary outages etc.

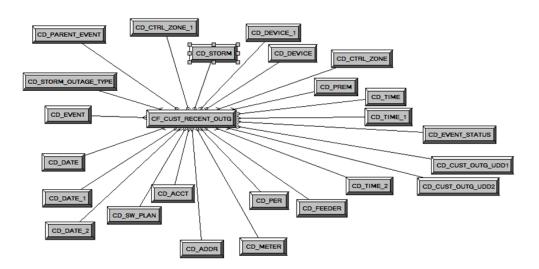
The fact stores details about all un-restored jobs and jobs restored within the last 'X' number of days. The value 'X' days has to be configured using the Oracle Utilities Administration Tool.

See Configuring Oracle Utilities Network Management System (NMS) in the Configuring Oracle Utilities Analytics chapter in the Oracle Utilities Analytics Administration Guide for more details.

The ETL job for this fact is configured to load data in near real-time (NRT). The primary purpose to configure it as NRT is to support tracking current (active) and relatively recent restored outages. The NRT data store can also be used to help gauge the ability of the existing resources to deal with a current storm to help determine if external/foreign (crew) resources are or are not required.

The "recent fact" data store is not intended to be a long-term repository and hence the purging mechanism based on the user configured 'X' days.

#### **Entity Relationship Diagram**



#### **Properties**

| Property          | Value                         |
|-------------------|-------------------------------|
| Target Table Name | CF_CUST_RECENT_OUTG           |
| Table Type        | Fact                          |
| Fact Type         | Accumulation                  |
| Driver Table      | SUPPLY_NODE_LOG SNL<br>JOBS J |
| Stage Table Name  | STG_CF_CUST_RECENT_OUTG       |
| ODI Package Name  | B1_PKG_CF_CUST_RECENT_OUTG    |

| Property               | Value                    |
|------------------------|--------------------------|
| ETL View Name          | B1_F_CUST_RECENT_OUTG_VW |
| Materialized View Name |                          |

| Target Field             | OBIEE Field       | Source Field                     | Transformation / Calculation Logic   |
|--------------------------|-------------------|----------------------------------|--|
| CUST_RECENT_<br>OUTG_KEY | Recent Outage Key |                                  | Transformation Logic: This field is populated with the sequence from SPL_CUST_RECENT_OUTG_SEQ. |
| SRC_ID                   | Source Outage ID  | SUPPLY_NODE_LOG. ID              |  |
| EVENT_KEY                | Event Key         | JOBS.NUMB                        | Note: Lookup in the CD_EVENT dimension table to populate the surrogate key.                    |
| EVENT_STATUS_<br>KEY     | Event Status Key  | JOBS.STATUS                      | Note: Lookup in the CD_EVENT_STATUS dimension table to populate the surrogate key.             |
| ACCT_KEY                 | Account Key       | CD_ACCT.SRC_ACCT_<br>ID          |  |
|                          |                   | INCIDENTS.ACCOUN<br>T_NUM        |  |
|                          |                   | CES_CUSTOMERS.AC<br>COUNT_NUMBER |  |
| PREM_KEY                 | Premise Key       | CD_PREM.SRC_PREM<br>_ID          |  |
| PER_KEY                  | Person Key        | CD_PER.SRC_PER_ID                |  |
| METER_KEY                | Meter Key         | CD_METER.SRC_MET<br>ER_ID        |  |
| ADDR_KEY                 | Address Key       | CD_ADDR.SRC_ADD<br>R_ID          |  |
| BEGIN_DATE_KEY           | Begin Date Key    | SUPPLY_NODE_LOG.<br>OUTAGE_TIME  | Note: Extract the date part and then lookup in the CD_DATE dimension table.                    |
| BEGIN_TIME_KEY           | Begin Time Key    | SUPPLY_NODE_LOG.<br>OUTAGE_TIME  | Note: Extract the time part and then lookup in the CD_TIME dimension table.                    |

| Target Field            | OBIEE Field                     | Source Field                                     | Transformation / Calculation Logic   |
|-------------------------|---------------------------------|--|--|
| BEGIN_DTTM              | Begin Date Time                 | SUPPLY_NODE_LOG.<br>OUTAGE_TIME                  |  |
| RST_DATE_KEY            | Restored Time Key               | SUPPLY_NODE_LOG.<br>RESTORE_TIME                 | Note: Extract the date part and then lookup in the CD_DATE dimension table.  |
| RST_TIME_KEY            | Restored Date Key               | SUPPLY_NODE_LOG.<br>RESTORE_TIME                 | Note: Extract the time part and then lookup in the CD_TIME dimension table.  |
| RST_DTTM                | Restored Date Time              | SUPPLY_NODE_LOG. RESTORE_TIME                    |  |
| RST_IND                 | Restored Indicator              | SUPPLY_NODE_LOG.<br>RESTORE_TIME                 |  |
| EST_RST_TIME_KEY        | Estimated Restored Time<br>Key  | JOBS.EST_REST_TIM<br>E                           | Note: Extract the time part and then lookup in the CD_TIME dimension table.  |
| EST_RST_DATE_KEY        | Estimated Restored Date<br>Key  | JOBS.EST_REST_TIM<br>E                           | Note: Extract the date part and then lookup in the CD_DATE dimension table.  |
| CTRL_ZONE_KEY           | Control Zone Key                | SUPPLY_NODE_LOG.<br>NCG                          | Note: Lookup in CD_CTRL_ZONE dimension table and populate the surrogate key. |
| CAUSE_CTRL_ZONE_<br>KEY | Cause Control Zone Key          | JOBS.NCG   | Note: Lookup in CD_CTRL_ZONE dimension table and populate the surrogate key. |
| CUST_OUTG_UDD1_<br>KEY  | User Defined Dimension<br>1 Key |  |  |
| CUST_OUTG_UDD2_<br>KEY  | User Defined Dimension<br>2 Key |  |  |
| PLANNED_IND             | Planned Indicator               | SWMAN_SHEET_CAT<br>EGORY.SHEET_CATE<br>GORY_NAME |  |

| Target Field              | OBIEE Field                                | Source Field   | Transformation / Calculation Logic                                    |
|---------------------------|--|--|---|
| EXCLUDE_IND               | Exclude Indicator                          | JOBS J.STATE_VALUE                                       |   |
|                           |  | PICKLIST_INFO_UPD<br>_TR P.NO_DTR_FLAG                   |   |
|                           |  | SWMAN_SHEET_CAT<br>EGORY<br>SSCA.SHEET_CATEG<br>ORY_NAME |   |
| OMS_EXCLUDE_IND           | OMS Exclude Indicator                      | PICKLIST_INFO_UPD<br>_TR.NO_DTR_FLAG                     |   |
| CANCELLED_IND             | Cancelled Indicator                        | JOBS.STATE_VALUE   |   |
| OUTG_DURATION             | Outage Duration                            | SUPPLY_NODE_LOG.<br>OUTAGE_TIME                          |   |
|                           |  | SUPPLY_NODE_LOG.<br>RESTORE_TIME                         |   |
| NUM_MOMENTARY             | number of momentaries covered              | JOBS.NUM_MOMENT<br>ARIES                                 |   |
| AFF_DEVICE_KEY            | ICE_KEY AFF Device Key SUPPLY_N<br>ICE_IDX | SUPPLY_NODES.DEV<br>ICE_IDX                              | Transformation Logic: If H_IDX and H_CLS are '0' then populate        |
|                           |  | SUPPLY_NODES.<br>DEVICE_CLS                              | DEVICE_KEY as '0'.  |
| CAUSE_DEVICE_KEY          | Cause Device Key                           | JOBS.H_IDX   | Transformation Logic: If H_IDX and H_CLS                              |
|                           |  | JOBS.H_CLS   | are '0' then populate DEVICE_KEY as '0'.                              |
| FEEDER_KEY                | Feeder Key                                 | JOBS.FEEDER_CLS  | Transformation Logic:   |
|                           |  | JOBS.FEEDER_IDX  | If FEEDER_IDX and FEEDER_CLS are '0' then populate FEEDER_KEY as '0'. |
| SW_PLAN_KEY               | Switch Plan Key                            | JOBS.SWSHEET_IDX   | Transformation Logic: If SWSHEET_IDX and                              |
|                           |  | JOBS.SWSHEET_CLS   | SWSHEET_CLS are '0' then populate SW_PLAN_KEY as '0'.                 |
| STORM_KEY                 | Storm Key                                  | STORMAN_STORMS.S<br>TORM_NAME                            | Note: Lookup in CD_STORM dimension                                    |
|                           |  | STORMAN_STORMS.S<br>TORM_DATE                            | to populate the surrogate key.  |
| STORM_OUTAGE_<br>TYPE_KEY | Storm Outage Type Key                      | JOBS.STORMMAN_TY<br>PE                                   | Note: Lookup in CD_STORM_OUTAGE _TYPE and populate the surrogate key. |

| Target Field               | OBIEE Field                               | Source Field                          | Transformation /<br>Calculation Logic   |
|----------------------------|---|---------------------------------------|---|
| PARENT_EVENT_<br>KEY       | Parent Event Key                          | PARENT_EVENT.NU<br>MB                 | Note: Lookup in CD_EVENT and populate the surrogate key.  |
| CMI                        | CMI                                       | SUPPLY_NODE_LOG.<br>OUTAGE_TIME       |   |
|                            |   | SUPPLY_NODE_LOG.<br>RESTORE_TIME      |   |
| OUTG_DUR_KEY               | Outage Duration                           | SUPPLY_NODE_LOG.<br>OUTAGE_TIME,      | Transformation Logic: This field is populated with  |
|                            |   | SUPPLY_NODE_LOG.<br>RESTORE_TIME      | OUTG_DURTN_KEY from CD_OUTG_DURTN where OUTG_DURTN is between RANGE_START and RANGE_END.  |
| EST_RST_DUR_KEY            | Est Restoration Duration<br>Surrogate key | JOBS.BEGIN_TIME, JOBS.EST_REST_TIM E  | Transformation Logic: This field is populated with EST_RST_DURTN_KE Y from CD_EST_RST_DURTN where OUTG_DURTN is between RANGE_START and RANGE_END.                |
| DURATION_<br>DEVIATION_KEY | Duration Deviation<br>Surrogate Key       | JOBS.RESTORE_TIME JOBS.EST_REST_TIM E | Transformation Logic: This field is populated with ESTMTD_VS_ACTL_D URTN_KEY from CD_ESTMTD_VS_ACT L_DURTN where OUTG_DURTN is between RANGE_START and RANGE_END. |
| EST_RST_DUR                | Est Restoration Duration                  | JOBS.BEGIN_TIME                       |   |
|                            |   | JOBS.EST_REST_TIM<br>E                |   |
| DURATION_<br>DEVIATION     | Duration Deviation                        | JOBS.RESTORE_TIME                     |   |
|                            |   | JOBS.EST_REST_TIM<br>E                |   |

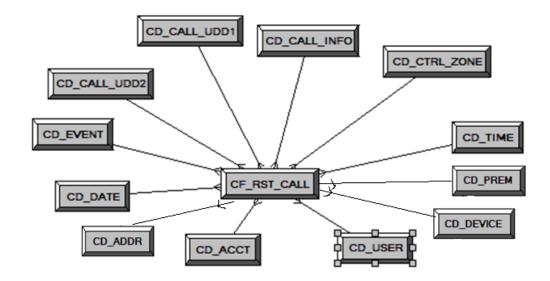
| Target Field   | OBIEE Field                               | Source Field              | Transformation / Calculation Logic  |
|----------------|---|---------------------------|---|
| SRC_PREMISE_ID |   | CD_PREM.SRC_PREM<br>_ID   |   |
| SRC_PERSON_ID  |   | CD_PER.SRC_PER_ID         |   |
| SRC_METER_ID   |   | CD_METER.SRC_MET<br>ER_ID |   |
| DEVICE_ID      |   | CD_DEVICE.DEVICE<br>_ID   |   |
| CREW_KEY       |   | CREW_VW.CREW_ID           | Transformation Logic: This field is used to lookup in CD_CREW and populate the surrogate key. |
| UDM1           | User Defined Measure 1                    |                           |   |
| UDM2           | User Defined Measure 2                    |                           |   |
| UDM3           | User Defined Measure 3                    |                           |   |
| UDM4           | User Defined Measure 4                    |                           |   |
| UDM5           | User Defined Measure 5                    |                           |   |
| UDM6           | User Defined Measure 6                    |                           |   |
| UDM7           | User Defined Measure 7                    |                           |   |
| UDM8           | User Defined Measure 8                    |                           |   |
| UDM9           | User Defined Measure 9                    |                           |   |
| UDM10          | User Defined Measure 10                   |                           |   |
| UDDFK1_KEY     | User Defined Dimension<br>Surrogate Key 1 |                           |   |
| UDDFK2_KEY     | User Defined Dimension<br>Surrogate Key 2 |                           |   |
| UDDFK3_KEY     | User Defined Dimension<br>Surrogate Key 3 |                           |   |
| UDDFK4_KEY     | User Defined Dimension<br>Surrogate Key 4 |                           |   |
| UDDFK5_KEY     | User Defined Dimension<br>Surrogate Key 5 |                           |   |
| UDDGEN1        | User Defined Degenerate<br>Dimension 1    |                           |   |
| UDDGEN2        | User Defined Degenerate<br>Dimension 2    |                           |   |
| UDDGEN3        | User Defined Degenerate<br>Dimension 3    |                           |   |

| Target Field    | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|---|--------------|--|
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1.  |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

## **Restored Call Fact**

The Restored Call fact stores details about the incidents created in the source system and also captures details about the associated jobs. The data is stored for all restored and un-restored jobs.

## **Entity Relationship Diagram**



### **Properties**

| Property               | Value               |
|------------------------|---------------------|
| Target Table Name      | CF_RST_CALL         |
| Table Type             | Fact                |
| Fact Type              | Accumulation        |
| Driver Table           | INCIDENTS           |
| Stage Table Name       | STG_CF_RST_CALL     |
| ODI Package Name       | B1_PKG_CF_RST_CALL  |
| ETL View Name          | B1_F_RECENT_CALL_VW |
| Materialized View Name |                     |

| Target Field | OBIEE Field     | Source Field | Transformation /<br>Calculation Logic   |
|--------------|-----------------|--------------|---|
| RST_CALL_KEY | Recent Call Key |              | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_RST_CALL_SEQ. |

| Target Field    | OBIEE Field                          | Source Field  | Transformation / Calculation Logic  |
|-----------------|--------------------------------------|---|---|
| SRC_INCIDENT_ID | Source Incident ID                   | INCIDENTS.DECODE<br>(NVL(<br>ASSOCIATE_IDX, 0),<br>0, NUMB,<br>ASSOCIATE_IDX)       |   |
| EVENT_KEY       | Event Key                            | JOBS.NUMB   | Note: Lookup in the CD_EVENT dimension table and replace with surrogate key.                |
| ACCT_KEY        | Account Key                          | INCIDENTS.ACCOUN<br>T_NUM   | Note: Lookup in the CD_ACCOUNT dimension table and replace with surrogate key.              |
| PRIORITY_IND    | Priority Indicator                   | INCIDENTS.DECODE<br>(SUBSTR(<br>COMPLAINT, 7, 1), '1',<br>'1', '2', '1', '0'), ' ') |   |
| CALL_DATE_KEY   | Call Date Key                        | INCIDENTS.INPUT_T<br>IME  |   |
| CALL_TIME_KEY   | Call Time Key                        | INCIDENTS.INPUT_T<br>IME  | Transformation Logic: Extract the date part and then lookup in the CD_DATE dimension table. |
| CALL_UDD1_KEY   | Call User Defined<br>Dimension 1 Key | INCIDENTS.INPUT_T<br>IME  | Transformation Logic: Extract the time part and then lookup in the CD_TIME dimension table. |
| CALL_UDD2_KEY   | Call User Defined<br>Dimension 2 Key |   |   |
| CTRL_ZONE_KEY   | Control Zone Key                     | INCIDENTS.SRC_NC<br>G_ID  | Note: Replace with surrogate key.   |
| USER_KEY        | User Key                             | CES_USER.USER_NA<br>ME  | Note: Look up in the CD_USER dimension table and replace with surrogate key.                |
| CALL_INFO_KEY   | Call Info Key                        | INCIDENTS.DECODE (NVL( ASSOCIATE_IDX, 0), 0, NUMB, ASSOCIATE_IDX)                   | Note: Replace with surrogate key.   |

| Target Field | OBIEE Field                               | Source Field                  | Transformation / Calculation Logic  |
|--------------|---|-------------------------------|---|
| PREM_KEY     | Premise Key                               | CES_CUSTOMERS.SE<br>RV_LOC_ID | Note: Look up in the CD_PREM dimension table and replace with surrogate key.  |
| ADDR_KEY     | Address Key                               | CES_CUSTOMERS.SE<br>RV_LOC_ID | Note: Look up in the CD_ADDR dimension table and replace with surrogate key.  |
| DEVICE_KEY   | Device Key                                | INCIDENTS.H_IDX               | Note: Look up in the  |
|              |   | INCIDENTS.H_CLS               | CD_DEVICE dimension table and replace with surrogate key.   |
| UDM1         | User Defined Measure 1                    |                               |   |
| UDM2         | User Defined Measure 2                    |                               |   |
| UDM3         | User Defined Measure 3                    |                               |   |
| UDM4         | User Defined Measure 4                    |                               |   |
| UDM5         | User Defined Measure 5                    |                               |   |
| UDM6         | User Defined Measure 6                    |                               |   |
| UDM7         | User Defined Measure 7                    |                               |   |
| UDM8         | User Defined Measure 8                    |                               |   |
| UDM9         | User Defined Measure 9                    |                               |   |
| UDM10        | User Defined Measure 10                   |                               |   |
| UDDFK1_KEY   | User Defined Dimension<br>Surrogate Key 1 |                               |   |
| UDDFK2_KEY   | User Defined Dimension<br>Surrogate Key 2 |                               |   |
| UDDFK3_KEY   | User Defined Dimension<br>Surrogate Key 3 |                               |   |
| UDDFK4_KEY   | User Defined Dimension<br>Surrogate Key 4 |                               |   |
| UDDFK5_KEY   | User Defined Dimension<br>Surrogate Key 5 |                               |   |
| UDDGEN1      | User Defined Degenerate<br>Dimension 1    | JOBS.RESTORE_TIME             | Transformation Logic:<br>If RESTORE_TIME is<br>'null' then value is '0', else<br>'1'. '0' indicates the job is<br>unrestored and '1'<br>indicates it is restored. |
| UDDGEN2      | User Defined Degenerate<br>Dimension 2    |                               |   |

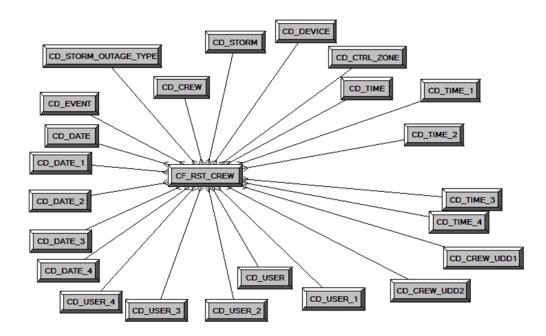
| Target Field    | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|---|--------------|--|
| UDDGEN3         | User Defined Degenerate<br>Dimension 3      |              |  |
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1.  |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

### **Restored Crew Fact**

For all jobs created in the source system, several activities (such as assignment, un-assignment, dispatch, arrival and completion) are performed to complete them. Each of these activities are carried out by the corresponding crew.

The Recent Crew fact stores all such crew activity information for every job created in the source system. The data is stored for all restored and un-restored jobs.

### **Entity Relationship Diagram**



### **Properties**

| Property               | Value                  |
|------------------------|------------------------|
| Target Table Name      | CF_RST_CREW            |
| Table Type             | Fact                   |
| Fact Type              | Accumulation           |
| Driver Table           | CREW_EVENT_HISTORY_CEH |
| Stage Table Name       | STG_CF_RST_CREW        |
| ODI Package Name       | B1_PKG_CF_RST_CREW     |
| ETL View Name          | B1_F_RECENT_CREW_VW    |
| Materialized View Name | B1_RST_CREW_MON_MV1    |

| Target Field          | OBIEE Field                          | Source Field                            | Transformation / Calculation Logic  |
|-----------------------|--------------------------------------|---|---|
| RST_CREW_KEY          | Restored Crew Key                    |   | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_RST_CREW_SEQ. |
| EVENT_KEY             | Event Key                            | JOBS.NUMB                               | Transformation Logic: This field is populated with the surrogate key.                           |
| SRC_EVENT_NBR         | Source Event Number                  | JOBS.NUMB                               |   |
| INROUTE_<br>DURATION  | Inroute Duration                     | CREW_DISPATCHES.<br>WHEN_HAPPENED       |   |
| ASSIGN_DATE_KEY       | Assign Date Key                      | CREW_ASSIGNMENT S ASSIGN.WHEN_HAPP ENED | Transformation Logic: This field is populated with the last assigned date.                      |
| ASSIGN_TIME_KEY       | Assign Time Key                      | CREW_ASSIGNMENT S ASSIGN.WHEN_HAPP ENED | Transformation Logic: This field is populated with the last assigned time.                      |
| CREW_UDD1_KEY         | Crew User Defined<br>Dimension 1 Key |   |   |
| CREW_UDD2_KEY         | Crew User Defined<br>Dimension 2 Key |   |   |
| CTRL_ZONE_KEY         | Control Zone Key                     | JOBS.NCG                                | Transformation Logic: This field is populated with the surrogate key.                           |
| ASSIGN_USER_KEY       | Assign User Key                      | CREW_ASSIGNMENT<br>S ASSIGN.CES_USER    | Transformation Logic: This field is populated with the surrogate key.                           |
| CREW_KEY              | Crew Key                             | CREW_EVENT_HIST<br>ORY.CREW_ID          | Transformation Logic: This field is populated with the surrogate key.                           |
| WORK_DURATION         | Work Duration                        | CREW_DISPATCHES.<br>WHEN_HAPPENED       |   |
| ASSIGN_DURATION       | Assign Duration                      | CREW_ASSIGNMENT<br>S.WHEN_HAPPENED      |   |
| DISPATCH_<br>DURATION | Dispatch Duration                    | CREW_DISPATCHES.<br>WHEN_HAPPENED       |   |
|                       |                                      | CREW_ASSIGNMENT<br>S.WHEN_HAPPENED      |   |

| Target Field          | OBIEE Field        | Source Field                                       | Transformation /<br>Calculation Logic  |
|-----------------------|--------------------|--|--|
| DEVICE_KEY            | Device Key         | JOBS.H_IDX<br>JOBS.H_CLS                           | Transformation Logic: This field is populated with the surrogate key.  |
| UNASSIGN_USER_<br>KEY | Unassign User Key  | CREW_ASSIGNMENT S UNASSIGN.CES_USER                | Transformation Logic: This field is populated with the last assigned user.                                       |
| UNASSIGN_DATE_<br>KEY | Unassign Date Key  | CREW_ASSIGNMENT S UNASSIGN.WHEN_H APPENED          | Transformation Logic: This field is populated with the last unassigned date.                                     |
| UNASSIGN_TIME_<br>KEY | Unassign Time Key  | CREW_ASSIGNMENT<br>S<br>UNASSIGN.WHEN_H<br>APPENED | Transformation Logic: This field is populated with the last unassigned time.                                     |
| ACCEPT_USER_KEY       | Accept User Key    | CREW_DISPATCHES<br>DISPATCH.CES_USER               | Transformation Logic: This field is populated with the last dispatched user.                                     |
| ACCEPT_DATE_KEY       | Accept Date Key    | CREW_DISPATCHES<br>DISPATCH.WHEN_H<br>APPENED      | Transformation Logic: This field is populated with the last accepted date.                                       |
| ACCEPT_TIME_KEY       | Accept Time Key    | CREW_DISPATCHES<br>DISPATCH.WHEN_H<br>APPENED      | Transformation Logic: This field is populated with the last accepted time.                                       |
| ARRIVE_TIME_KEY       | Arrive Time Key    | CREW_DISPATCHES<br>ARRIVE.WHEN_HAP<br>PENED        | Transformation Logic: This field is populated with the last arrived time.  |
| CMPL_TIME_KEY         | Complete Time Key  | CREW_DISPATCHES<br>COMPLETE.WHEN_H<br>APPENED      | Transformation Logic: This field is populated with the last arrived time.  |
| ARRIVE_DATE_KEY       | Arrive Date Key    | CREW_DISPATCHES<br>COMPLETE.WHEN_H<br>APPENED      | Transformation Logic: This field is populated with the last arrived date.  |
| CMPL_DATE_KEY         | Completed Date Key | CREW_DISPATCHES<br>COMPLETE.WHEN_H<br>APPENED      | Transformation Logic: This field is populated with the last job completion date.                                 |
| CMPL_USER_KEY         | Completed User Key | CREW_DISPATCHES<br>COMPLETE.CES_USE<br>R           | Transformation Logic: This field is populated with the last user name if the job is completed. Else, it is null. |

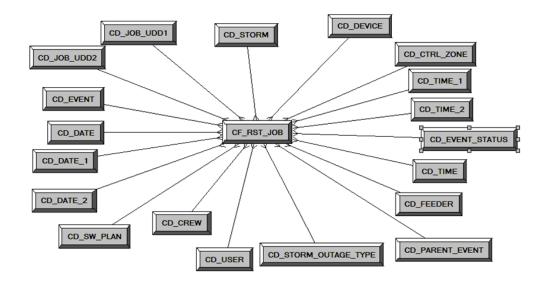
| Target Field              | OBIEE Field                               | Source Field                       | Transformation / Calculation Logic  |
|---------------------------|---|------------------------------------|---|
| ARRIVE_USER_KEY           | Arrive User Key                           | CREW_DISPATCHES<br>ARRIVE.CES_USER | Transformation Logic: This field is populated with the last user name.  |
| STORM_KEY                 | Storm Key                                 | STORMAN_STORMS.S<br>TORM_NAME      | Transformation Logic: This field is populated with the last storm name  |
|                           |   | STORMAN_STORMS.S<br>TORM_DATE      | and date.   |
| STORM_OUTAGE_<br>TYPE_KEY | Storm Outage Type Key                     | JOBS.STORMMAN_TY<br>PE             | Transformation Logic:<br>This field is populated<br>with the type of the last<br>storm.   |
| SRC_CREW_ID               | Source Crew ID                            | CREW_EVENT_HIST<br>ORY.CREW_ID     |   |
| UDM1                      | User Defined Measure 1                    |                                    |   |
| UDM2                      | User Defined Measure 2                    |                                    |   |
| UDM3                      | User Defined Measure 3                    |                                    |   |
| UDM4                      | User Defined Measure 4                    |                                    |   |
| UDM5                      | User Defined Measure 5                    |                                    |   |
| UDM6                      | User Defined Measure 6                    |                                    |   |
| UDM7                      | User Defined Measure 7                    |                                    |   |
| UDM8                      | User Defined Measure 8                    |                                    |   |
| UDM9                      | User Defined Measure 9                    |                                    |   |
| UDM10                     | User Defined Measure 10                   |                                    |   |
| UDDFK1_KEY                | User Defined Dimension<br>Surrogate Key 1 |                                    |   |
| UDDFK2_KEY                | User Defined Dimension<br>Surrogate Key 2 |                                    |   |
| UDDFK3_KEY                | User Defined Dimension<br>Surrogate Key 3 |                                    |   |
| UDDFK4_KEY                | User Defined Dimension<br>Surrogate Key 4 |                                    |   |
| UDDFK5_KEY                | User Defined Dimension<br>Surrogate Key 5 |                                    |   |
| UDDGEN1                   | User Defined Degenerate<br>Dimension 1    | JOBS.RESTORE_TIME                  | Transformation Logic:<br>If RESTORE_TIME is<br>'null' then value is '0', else<br>'1'. '0' indicates the job is<br>unrestored and '1'<br>indicates it is restored. |

| Target Field    | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|---|--------------|--|
| UDDGEN2         | User Defined Degenerate<br>Dimension 2      |              |  |
| UDDGEN3         | User Defined Degenerate<br>Dimension 3      |              |  |
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1.  |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

## **Restored Job Fact**

The Restored Job fact stores job information from the source system. It stores KPIs such as number of events, outage duration, restoration duration, resolved event count, etc. The data is stored for all restored and un-restored jobs.

### **Entity Relationship Diagram**



### **Properties**

| Property               | Value  |
|------------------------|--|
| Target Table Name      | CF_RST_JOB   |
| Table Type             | Fact   |
| Fact Type              | Accumulation   |
| Driver Table           | JOBS<br>PICKLIST_INFO_UPD_TR   |
| Stage Table Name       | STG_CF_RST_JOB   |
| ODI Package Name       | B1_PKG_CF_RST_JOB  |
| ETL View Name          | B1_F_RECENT_JOB_VW   |
| Materialized View Name | B1_RST_JOB_MON_MV1 B1_RST_JOB_MON_MV2 B1_RST_JOB_MON_MV3 B1_RST_JOB_TOPX_MON_MV1 |

| Target Field | OBIEE Field      | Source Field | Transformation /<br>Calculation Logic  |
|--------------|------------------|--------------|--|
| RST_JOB_KEY  | Restored Job Key |              | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_RST_JOB_SEQ. |

| Target Field         | OBIEE Field                    | Source Field                                     | Transformation /<br>Calculation Logic  |
|----------------------|--------------------------------|--|--|
| SRC_JOB_NBR          | Source Job Number              | JOBS.NUMB  |  |
| EVENT_KEY            | Event Key                      | JOBS.NUMB  |  |
| EVENT_STATUS_<br>KEY | Event Status Key               | JOBS.STATUS                                      |  |
| BEGIN_DATE_KEY       | Begin Date Key                 | JOBS.BEGIN_TIME                                  |  |
| BEGIN_TIME_KEY       | Begin Time Key                 | JOBS.BEGIN_TIME                                  |  |
| BEGIN_DTTM           | Begin Date Time                | JOBS.BEGIN_TIME                                  |  |
| RST_TIME_KEY         | Restored Time Key              | JOBS.RESTORE_TIME                                |  |
| RST_DATE_KEY         | Restored Date Key              | JOBS.RESTORE_TIME                                |  |
| RST_DTTM             | Restored Date Time             | JOBS.RESTORE_TIME                                |  |
| RST_IND              | Restored Indicator             | JOBS.RESTORE_TIME                                | Transformation Logic:<br>If the restoration time is<br>null, this field is<br>populated with '0', else<br>'1'. |
| EST_RST_TIME_KEY     | Estimated Restored Time<br>Key | JOBS.EST_REST_TIM<br>E                           |  |
| EST_RST_DATE_KEY     | Estimated Restored Date<br>Key | JOBS.EST_REST_TIM<br>E                           |  |
| PLANNED_IND          | Planned Indicator              | SWMAN_SHEET_CAT<br>EGORY.SHEET_CATE<br>GORY_NAME |  |
| EXCLUDE_IND          | Exclude Indicator              | JOBS.STATE_VALUE                                 |  |
|                      |                                | PICKLIST_INFO_UPD<br>_TR.NO_DTR_FLAG             |  |
|                      |                                | SWMAN_SHEET_CAT<br>EGORY.SHEET_CATE<br>GORY_NAME |  |
| OMS_EXCLUDE_IND      | OMS Exclude Indicator          | PICKLIST_INFO_UPD<br>_TR.NO_DTR_FLAG             |  |
| CANCELLED_IND        | Cancelled Indicator            | JOBS.STATE_VALUE                                 |  |
| OUTG_DURATION        | Outage Duration                | JOBS.RESTORE_TIME                                | Transformation Logic: This field is populated  |
|                      |                                | JOBS.BEGIN_TIME                                  | with the difference (in minutes) between the begin date/time and the actual restoration date/time of the job.  |
| CTRL_ZONE_KEY        | Control Zone Key               | JOBS.NCG   |  |

| Target Field              | OBIEE Field                           | Source Field                  | Transformation / Calculation Logic   |
|---------------------------|---------------------------------------|-------------------------------|--|
| DEVICE_KEY                | Device Key                            | JOBS.H_IDX                    | Transformation Logic:  |
|                           |                                       | JOBS.H_CLS                    | If H_IDX and H_CLS are '0', then populate DEVICE_KEY as '0'.                 |
| CMPL_USER_KEY             | Completed User Key                    | WHO_COMPLETED.U<br>SER_NAME   |  |
| RESP_USER_KEY             | Responsible User Key                  | WHO_RESPONSIBLE.<br>USER_NAME |  |
| CREW_KEY                  | Crew Key                              | CREW_VW.CREW_ID               |  |
| JOB_UDD1_KEY              | User Defined Dimension<br>1 Key       |                               |  |
| JOB_UDD2_KEY              | User Defined Dimension<br>2 Key       |                               |  |
| FEEDER_KEY                | Feeder Key                            | JOBS.FEEDER_CLS               | Transformation Logic:  |
|                           |                                       | JOBS.FEEDER_IDX               | If FEEDER_IDX and FEEDER_CLS are '0', then this field is populated as '0'.   |
| SW_PLAN_KEY               | Switch Plan Key                       | JOBS.SWSHEET_IDX              | Transformation Logic:  |
|                           |                                       | JOBS.SWSHEET_CLS              | If SWSHEET_IDX and SWSHEET_CLS are '0', then this field is populated as '0'. |
| STORM_KEY                 | Storm Key                             | STORMAN_STORMS.S<br>TORM_NAME | Transformation Logic: This field is populated                                |
|                           |                                       | STORMAN_STORMS.S<br>TORM_DATE | with the storm name and date.  |
| STORM_OUTAGE_<br>TYPE_KEY | Storm Outage Type Key                 | JOBS.STORMMAN_TY<br>PE        |  |
| PARENT_EVENT_<br>KEY      | Parent Event Key                      | PARENT_EVENT.NU<br>MB         |  |
|                           |                                       | JOBS.NUMB                     |  |
| OUTG_DUR_KEY              | Outage Duration Key                   | JOBS.RESTORE_TIME             |  |
|                           |                                       | JOBS.BEGIN_TIME               |  |
| EST_RST_DUR_KEY           | Estimated Restoration<br>Duration Key | JOBS.EST_REST_TIM<br>E        |  |
|                           |                                       | JOBS.BEGIN_TIME               |  |
| DURATION_                 | Duration Deviation Key                | JOBS.RESTORE_TIME             |  |
| DEVIATION_KEY             |                                       | JOBS.EST_REST_TIM<br>E        |  |

| Target Field | OBIEE Field                               | Source Field           | Transformation / Calculation Logic  |
|--------------|---|------------------------|---|
| EST_RST_DUR  | Estimated Restoration<br>Duration         | JOBS.EST_REST_TIM E    | Transformation Logic: This field is populated with the difference (in   |
|              |   | JOBS.BEGIN_TIME        | minutes) between the<br>begin date/time and the<br>estimated restoration<br>date/time of the job.   |
| UDM1         | Customers Impacted                        | JOBS.NUM_CUST_OU<br>T  | Transformation Logic: This field is populated with the number of customers impacted.  |
| UDM2         | Calls Received                            | INCIDENTS.NUMB         | Transformation Logic:<br>This field is populated<br>with the number of calls<br>received by counting the<br>number of incidents<br>associated with the job. |
| UDM3         | Estimated Duration<br>Deviation           | JOBS.RESTORE_TIME      | Transformation Logic:   |
|              | Deviation                                 | JOBS.EST_REST_TIM<br>E | This field is populated with the difference (in minutes) between the actual restoration date/time and the estimated restoration date/time of the job.       |
| UDM4         | User Defined Measure 4                    |                        |   |
| UDM5         | User Defined Measure 5                    |                        |   |
| UDM6         | User Defined Measure 6                    |                        |   |
| UDM7         | User Defined Measure 7                    |                        |   |
| UDM8         | User Defined Measure 8                    |                        |   |
| UDM9         | User Defined Measure 9                    |                        |   |
| UDM10        | User Defined Measure 10                   |                        |   |
| UDDFK1_KEY   | User Defined Dimension<br>Surrogate Key 1 |                        |   |
| UDDFK2_KEY   | User Defined Dimension<br>Surrogate Key 2 |                        |   |
| UDDFK3_KEY   | User Defined Dimension<br>Surrogate Key 3 |                        |   |
| UDDFK4_KEY   | User Defined Dimension<br>Surrogate Key 4 |                        |   |
| UDDFK5_KEY   | User Defined Dimension<br>Surrogate Key 5 |                        |   |

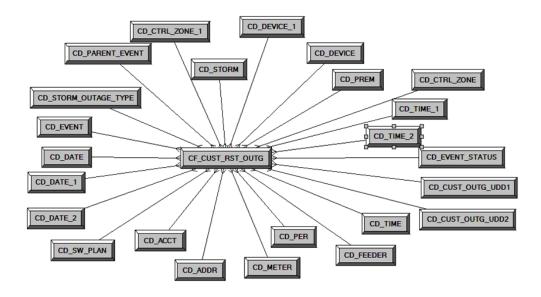
| Target Field    | OBIEE Field                                 | Source Field | Transformation / Calculation Logic   |
|-----------------|---|--------------|--|
| UDDGEN1         | User Defined Degenerate<br>Dimension 1      |              |  |
| UDDGEN2         | User Defined Degenerate<br>Dimension 2      |              |  |
| UDDGEN3         | User Defined Degenerate<br>Dimension 3      |              |  |
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic:<br>This field is populated<br>with the standard value of<br>'1'.   |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

## **Restored Customer Outage Fact**

The Restored Customer Outage fact stores the details of customers experiencing service interruptions based on the supply node log information from the source system. The supply node log data will be mapped to the Supply Node Lookup Dimension to determine the actual list of customers experiencing the outage.

Few measures captured in this fact are outage duration, CMI, number of momentary outages, etc. The data is stored for all restored and un-restored jobs.

### **Entity Relationship Diagram**



#### **Properties**

| Property               | Value  |
|------------------------|--|
| Target Table Name      | CF_CUST_RST_OUTG                                     |
| Table Type             | Fact   |
| Fact Type              | Accumulation   |
| Driver Table           | SUPPLY_NODE_LOG SNL                                  |
| Stage Table Name       | STG_CF_CUST_RST_OUTG                                 |
| ODI Package Name       | B1_PKG_CF_CUST_RST_OUTG                              |
| ETL View Name          | B1_F_CUST_RECENT_OUTG_VW                             |
| Materialized View Name | B1_CUST_RST_OUTG_MON_MV1<br>B1_CUST_RST_OUTG_MON_MV2 |

| Target Field          | OBIEE Field        | Source Field                     | Transformation / Calculation Logic   |
|-----------------------|--------------------|----------------------------------|--|
| CUST_RST_OUTG_<br>KEY | Recent Outage Key  |                                  | Transformation Logic: This field is populated with the sequence from SPL_CUST_RST_OUT G_SEQ.         |
| SRC_ID                | Source Outage ID   | SUPPLY_NODE_LOG. ID              |  |
| EVENT_KEY             | Event Key          | JOBS.NUMB                        |  |
| EVENT_STATUS_<br>KEY  | Event Status Key   | JOBS.STATUS                      |  |
| ACCT_KEY              | Account Key        | CD_ACCT.SRC_ACCT_<br>ID          |  |
|                       |                    | INCIDENTS.ACCOUN<br>T_NUM        |  |
|                       |                    | CES_CUSTOMERS.AC<br>COUNT_NUMBER |  |
| PREM_KEY              | Premise Key        | CD_PREM.SRC_PREM<br>_ID          |  |
| PER_KEY               | Person Key         | CD_PER.SRC_PER_ID                |  |
| METER_KEY             | Meter Key          | CD_METER.SRC_MET<br>ER_ID        |  |
| ADDR_KEY              | Address Key        | CD_ADDR.SRC_ADD<br>R_ID          |  |
| BEGIN_DATE_KEY        | Begin Date Key     | SUPPLY_NODE_LOG.<br>OUTAGE_TIME  |  |
| BEGIN_TIME_KEY        | Begin Time Key     | SUPPLY_NODE_LOG.<br>OUTAGE_TIME  |  |
| BEGIN_DTTM            | Begin Date Time    | SUPPLY_NODE_LOG.<br>OUTAGE_TIME  |  |
| RST_DATE_KEY          | Restored Time Key  | SUPPLY_NODE_LOG.<br>RESTORE_TIME |  |
| RST_TIME_KEY          | Restored Date Key  | SUPPLY_NODE_LOG.<br>RESTORE_TIME |  |
| RST_DTTM              | Restored Date Time | SUPPLY_NODE_LOG.<br>RESTORE_TIME |  |
| RST_IND               | Restored Indicator | SUPPLY_NODE_LOG.<br>RESTORE_TIME | Transformation Logic:<br>If restore time is null, this<br>field is populated with '0'.<br>Else, '1'. |

| Target Field            | OBIEE Field                     | Source Field   | Transformation / Calculation Logic                              |
|-------------------------|---------------------------------|--|---|
| EST_RST_TIME_KEY        | Estimated Restored Time<br>Key  | JOBS.EST_REST_TIM<br>E                                   |   |
| EST_RST_DATE_KEY        | Estimated Restored Date<br>Key  | JOBS.EST_REST_TIM<br>E                                   |   |
| CTRL_ZONE_KEY           | Control Zone Key                | SUPPLY_NODE_LOG.<br>NCG                                  |   |
| CAUSE_CTRL_ZONE_<br>KEY | Cause Control Zone Key          | JOBS.NCG   |   |
| CUST_OUTG_UDD1_<br>KEY  | User Defined Dimension<br>1 Key |  |   |
| CUST_OUTG_UDD2_<br>KEY  | User Defined Dimension<br>2 Key |  |   |
| PLANNED_IND             | Planned Indicator               | SWMAN_SHEET.SHE<br>ET_CATEGORY_NAM<br>E                  |   |
| EXCLUDE_IND             | Exclude Indicator               | JOBS J.STATE_VALUE                                       |   |
|                         |                                 | PICKLIST_INFO_UPD<br>_TR P.NO_DTR_FLAG                   |   |
|                         |                                 | SWMAN_SHEET_CAT<br>EGORY<br>SSCA.SHEET_CATEG<br>ORY_NAME |   |
| OMS_EXCLUDE_IND         | OMS Exclude Indicator           | PICKLIST_INFO_UPD<br>_TR.NO_DTR_FLAG                     |   |
| CANCELLED_IND           | Cancelled Indicator             | JOBS.STATE_VALUE   |   |
| OUTG_DURATION           | Outage Duration                 | SUPPLY_NODE_LOG.<br>OUTAGE_TIME                          | Transformation Logic: This field is populated                   |
|                         |                                 | SUPPLY_NODE_LOG.<br>RESTORE_TIME                         | with the difference<br>between restore time and<br>outage time. |
| NUM_MOMENTARY           | Number of momentaries covered   | JOBS.MOMENTARIES   |   |
| AFF_DEVICE_KEY          | AFF Device Key                  | SUPPLY_NODES.DEV<br>ICE_IDX                              | Transformation Logic: If H_IDX and H_CLS                        |
|                         |                                 | SUPPLY_NODES.DEV<br>ICE_CLS                              | are '0', this field is populated with '0'.                      |
| CAUSE_DEVICE_KEY        | Cause Device Key                | JOBS.H_IDX   | Transformation Logic:   |
|                         |                                 | JOBS.H_CLS are '0', th                                   | If H_IDX and H_CLS are '0', this field is populated with '0'.   |

| Target Field               | OBIEE Field                       | Source Field   | Transformation /<br>Calculation Logic   |
|----------------------------|-----------------------------------|--|---|
| FEEDER_KEY                 | Feeder Key                        | SUPPLY_NODES.FEE<br>DER                                  | Transformation Logic:<br>If FEEDER_IDX and<br>FEEDER_CLS are '0',<br>this field is populated<br>with '0'.                             |
| SW_PLAN_KEY                | Switch Plan Key                   | JOBS.SWSHEET_IDX JOBS.SWSHEET_CLS                        | Transformation Logic:<br>If SWSHEET_IDX and<br>SWSHEET_CLS are '0',<br>this field is populated<br>with '0'.                           |
| STORM_KEY                  | Storm Key                         | STORMMAN_STORMS .STORM_NAME  STORMMAN_STORMS .STORM_DATE | Transformation Logic:<br>This field is populated<br>with the storm name and<br>date.  |
| STORM_OUTAGE_<br>TYPE_KEY  | Storm Outage Type Key             | JOBS.STORMMAN_TY<br>PE                                   |   |
| PARENT_EVENT_<br>KEY       | Parent Event Key                  | PARENT_EVENT.NU<br>MB                                    |   |
| CMI                        | Customer Minutes<br>Interrupted   | SUPPLY_NODE_LOG.<br>OUTAGE_TIME                          |   |
|                            |                                   | SUPPLY_NODE_LOG.<br>RESTORE_TIME                         |   |
| OUTG_DUR_KEY               | Outage Duration Key               | SUPPLY_NODE_LOG. OUTAGE_TIME SUPPLY_NODE_LOG.            | Transformation Logic: This field is populated with the difference between restore time and  |
|                            |                                   | RESTORE_TIME   | outage time.  |
| EST_RST_DUR_KEY            | Estimated Restore<br>Duration Key | JOBS.BEGIN_TIME JOBS.EST_REST_TIM E                      | Transformation Logic: This field is populated with the difference between estimated restoration time and begin time.                  |
| DURATION_<br>DEVIATION_KEY | Duration Deviation Key            | JOBS.RESTORE_TIME  JOBS.EST_REST_TIM  E                  | Transformation Logic:<br>This field is populated<br>with the difference<br>between restoration time<br>and estimated restore<br>time. |
| EST_RST_DUR                | Estimated Restoration<br>Duration | JOBS.BEGIN_TIME JOBS.EST_REST_TIM E                      | Transformation Logic:<br>This field is populated<br>with the difference<br>between estimated<br>restore time and begin<br>time.       |

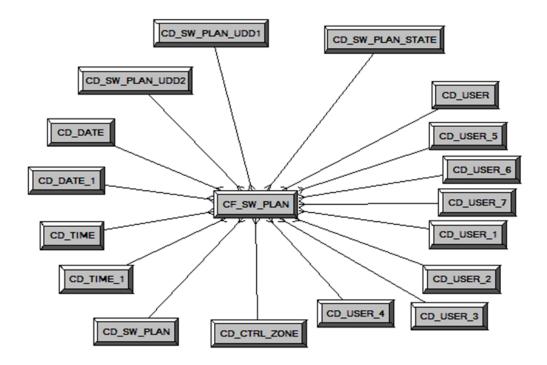
| Target Field           | OBIEE Field                               | Source Field              | Transformation /<br>Calculation Logic   |
|------------------------|---|---------------------------|---|
| DURATION_<br>DEVIATION | Duration Deviation                        | JOBS.RESTORE_TIME         | Transformation Logic: This field is populated   |
|                        |   | JOBS.EST_REST_TIM<br>E    | with the difference<br>between restore time and<br>estimated restore time.                    |
| SRC_PREMISE_ID         | Premise ID                                | CD_PREM.SRC_PREM<br>_ID   |   |
| SRC_PERSON_ID          | Person ID                                 | CD_PER.SRC_PER_ID         |   |
| SRC_METER_ID           | Meter ID                                  | CD_METER.SRC_MET<br>ER_ID |   |
| DEVICE_ID              | Device ID                                 | CD_DEVICE.DEVICE<br>_ID   |   |
| CREW_KEY               |   | CREW_VW.CREW_ID           | Transformation Logic: This field is used to lookup in CD_CREW and populate the surrogate key. |
| UDM1                   | User Defined Measure 1                    |                           |   |
| UDM2                   | User Defined Measure 2                    |                           |   |
| UDM3                   | User Defined Measure 3                    |                           |   |
| UDM4                   | User Defined Measure 4                    |                           |   |
| UDM5                   | User Defined Measure 5                    |                           |   |
| UDM6                   | User Defined Measure 6                    |                           |   |
| UDM7                   | User Defined Measure 7                    |                           |   |
| UDM8                   | User Defined Measure 8                    |                           |   |
| UDM9                   | User Defined Measure 9                    |                           |   |
| UDM10                  | User Defined Measure 10                   |                           |   |
| UDDFK1_KEY             | User Defined Dimension<br>Surrogate Key 1 |                           |   |
| UDDFK2_KEY             | User Defined Dimension<br>Surrogate Key 2 |                           |   |
| UDDFK3_KEY             | User Defined Dimension<br>Surrogate Key 3 |                           |   |
| UDDFK4_KEY             | User Defined Dimension<br>Surrogate Key 4 |                           |   |
| UDDFK5_KEY             | User Defined Dimension<br>Surrogate Key 5 |                           |   |
| UDDGEN1                | User Defined Degenerate<br>Dimension 1    |                           |   |

| Target Field    | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|---|--------------|--|
| UDDGEN2         | User Defined Degenerate<br>Dimension 2      |              |  |
| UDDGEN3         | User Defined Degenerate<br>Dimension 3      |              |  |
| UDDGEN4         | User Defined Degenerate<br>Dimension 4      |              |  |
| UDDGEN5         | User Defined Degenerate<br>Dimension 5      |              |  |
| UDDGENL1        | User Defined Long<br>Degenerate Dimension 1 |              |  |
| UDDGENL2        | User Defined Long<br>Degenerate Dimension 2 |              |  |
| UDDGENL3        | User Defined Long<br>Degenerate Dimension 3 |              |  |
| UDDGENL4        | User Defined Long<br>Degenerate Dimension 4 |              |  |
| UDDGENL5        | User Defined Long<br>Degenerate Dimension 5 |              |  |
| FACT_CNT        | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1.  |
| DATA_SOURCE_IND | Data Source Indicator                       |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number                                  |              | Transformation Logic: This field is populated with the ODI job execution session number.   |

## **Switch Plan Fact**

The Switch Plan fact supports KPIs such as number of steps, number of aborted/failed steps, number of safety documents, etc.

## **Entity Relationship Diagram**



## **Properties**

| Property               | Value             |
|------------------------|-------------------|
| Target Table Name      | CF_SW_PLAN        |
| Table Type             | Fact              |
| Fact Type              | Accumulation      |
| Driver Table           | SWMAN_SHEET S     |
| Stage Table Name       | STG_CF_SW_PLAN    |
| ODI Package Name       | B1_PKG_CF_SW_PLAN |
| ETL View Name          | B1_F_SW_PLAN_VW   |
| Materialized View Name |                   |

| Target Field  | OBIEE Field                       | Source Field | Transformation /<br>Calculation Logic  |
|---------------|-----------------------------------|--------------|--|
| SW_PLAN_F_KEY | Switch Plan Fact<br>Surrogate Key |              | Transformation Logic:<br>This field is populated<br>with the sequence from<br>SPL_SW_PLAN_SEQ. |

| Target Field          | OBIEE Field           | Source Field                         | Transformation / Calculation Logic                             |
|-----------------------|-----------------------|--------------------------------------|--|
| SRC_SW_PLAN_CLS       | Switch Plan Class     | SWMAN_SHEET.SWIT<br>CH_SHEET_CLS     |  |
| SRC_SW_PLAN_IDX       | Switch Plan Index     | SWMAN_SHEET.SWIT<br>CH_SHEET_IDX     |  |
| SW_PLAN_KEY           | Switch Plan Key       | SWMAN_SHEET.SWIT<br>CH_SHEET_CLS     |  |
|                       |                       | SWMAN_SHEET.SWIT<br>CH_SHEET_IDX     |  |
| CTRL_ZONE_KEY         | Control Zone Key      | SWMAN_SHEET.NCG                      |  |
| SW_PLAN_STATE_<br>KEY | Switch Plan State Key | SWMAN_SHEET.STAT<br>E_KEY            |  |
| BEGIN_DATE_KEY        | Begin Date            | Switch Plan<br>Begin.WHEN_ISSUED     |  |
| BEGIN_TIME_KEY        | Begin Time            | Switch Plan<br>Begin.WHEN_ISSUED     |  |
| BEGIN_DTTM            | Begin Date/Time       | Switch Plan<br>Begin.WHEN_ISSUED     |  |
| END_DATE_KEY          | End Date              | Switch Plan<br>End.WHEN_EXECUT<br>ED |  |
| END_TIME_KEY          | End Time              | Switch Plan<br>End.WHEN_EXECUT<br>ED |  |
| END_DTTM              | End Date/Time         | Switch Plan<br>End.WHEN_EXECUT<br>ED |  |
| USER_KEY1             | User 1                |                                      | Transformation Logic:<br>This field is populated<br>with '0'.  |
| USER_KEY2             | User 2                |                                      | Transformation Logic: This field is populated with '0'.        |
| USER_KEY3             | User 3                |                                      | Transformation Logic: This field is populated with '0'.        |
| USER_KEY4             | User 4                |                                      | Transformation Logic: This field is populated with '0'.        |
| USER_KEY5             | User 5                |                                      | <b>Transformation Logic:</b> This field is populated with '0'. |

| Target Field             | OBIEE Field                                   | Source Field  | Transformation / Calculation Logic  |
|--------------------------|---|---|---|
| USER_KEY6                | User 6  |   | Transformation Logic: This field is populated with '0'.   |
| USER_KEY7                | User 7  |   | Transformation Logic:<br>This field is populated<br>with '0'.   |
| USER_KEY8                | User 8  |   | Transformation Logic:<br>This field is populated<br>with '0'.   |
| SW_PLAN_UDD1_<br>KEY     |   |   |   |
| SW_PLAN_UDD2_<br>KEY     |   |   |   |
| DURATION                 | Duration                                      | Switch Plan Begin.1440 *  ( CT.WHEN_EXECUTE D-ID.WHEN_ISSUED )  Switch Plan End.1440 * ( CT.WHEN_EXECUTE D-ID.WHEN_ISSUED ) |   |
| NBR_OF_STEPS             | Number of steps                               | SWMAN_STEP.COUN<br>T(*)   |   |
| NBR_OF_FAILED_<br>STEPS  | Number of failed steps                        |   |   |
| NBR_OF_ABORTED_<br>STEPS | Number of aborted steps                       |   | Transformation Logic: This field is populated with the difference between restore time and outage time. |
| NBR_OF_SAFETY_<br>DOCS   | Number of safety documents                    | SWMAN_SAFETY_DO<br>CS.ID  |   |
| UDM1                     | User Defined Measure 1                        |   |   |
| UDM2                     | User Defined Measure 2                        |   |   |
| UDM3                     | User Defined Measure 3                        |   |   |
| UDM4                     | User Defined Measure 4                        |   |   |
| UDM5                     | User Defined Measure 5                        |   |   |
|                          |   |   |   |
| UDM6                     | User Defined Measure 6                        |   |   |
| UDM6<br>UDM7             | User Defined Measure 6 User Defined Measure 7 |   |   |

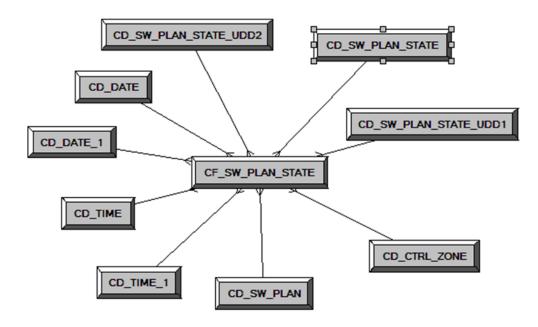
| Target Field | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic                                       |
|--------------|---|--------------|---|
| UDM9         | User Defined Measure 9                      |              |   |
| UDM10        | User Defined Measure 10                     |              |   |
| UDDFK1_KEY   | User Defined Dimension<br>Surrogate Key 1   |              |   |
| UDDFK2_KEY   | User Defined Dimension<br>Surrogate Key 2   |              |   |
| UDDFK3_KEY   | User Defined Dimension<br>Surrogate Key 3   |              |   |
| UDDFK4_KEY   | User Defined Dimension<br>Surrogate Key 4   |              |   |
| UDDFK5_KEY   | User Defined Dimension<br>Surrogate Key 5   |              |   |
| UDDGEN1      | User Defined Degenerate<br>Dimension 1      |              |   |
| UDDGEN2      | User Defined Degenerate<br>Dimension 2      |              |   |
| UDDGEN3      | User Defined Degenerate<br>Dimension 3      |              |   |
| UDDGEN4      | User Defined Degenerate<br>Dimension 4      |              |   |
| UDDGEN5      | User Defined Degenerate<br>Dimension 5      |              |   |
| UDDGENL1     | User Defined Long<br>Degenerate Dimension 1 |              |   |
| UDDGENL2     | User Defined Long<br>Degenerate Dimension 2 |              |   |
| UDDGENL3     | User Defined Long<br>Degenerate Dimension 3 |              |   |
| UDDGENL4     | User Defined Long<br>Degenerate Dimension 4 |              |   |
| UDDGENL5     | User Defined Long Degenerate Dimension 5    |              |   |
| FACT_CNT     | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1. |

| Target Field    | OBIEE Field           | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|-----------------------|--------------|--|
| DATA_SOURCE_IND | Data Source Indicator |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number            |              | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.   |

## **Switch Plan State Fact**

The Switch Plan State fact supports KPIs such as state duration, number of log entries, etc.

### **Entity Relationship Diagram**



### **Properties**

| Property               | Value                   |
|------------------------|-------------------------|
| Target Table Name      | CF_SW_PLAN_STATE        |
| Table Type             | Fact                    |
| Fact Type              | Accumulation            |
| Driver Table           | SWMAN_AUDIT_LOG SAL1    |
| Stage Table Name       | STG_CF_SW_PLAN_STATE    |
| ODI Package Name       | B1_PKG_CF_SW_PLAN_STATE |
| ETL View Name          | B1_F_SW_PLAN_STATE_VW   |
| Materialized View Name |                         |

| Target Field            | OBIEE Field                       | Source Field                       | Transformation / Calculation Logic   |
|-------------------------|-----------------------------------|------------------------------------|--|
| SW_PLAN_STATE_F_<br>KEY | Switch Plan Fact<br>Surrogate Key |                                    | Transformation Logic: This field is populated with the sequence from SPL_SW_PLAN_STAT E_SEQ. |
| SRC_LOG_ENTRY           | Switch Plan Log Entry<br>ID       | SWMAN_AUDIT_LOG<br>SAL1.SEQ_LOG_ID |  |

| Target Field               | OBIEE Field                            | Source Field                        | Transformation / Calculation Logic |
|----------------------------|--|-------------------------------------|------------------------------------|
| SW_PLAN_KEY                | Switch Plan Key                        | SWMAN_SHEET.SWIT<br>CH_SHEET_CLS    |                                    |
|                            |  | SWMAN_SHEET.SWIT<br>CH_SHEET_IDX    |                                    |
| CTRL_ZONE_KEY              | Control Zone Key                       | SWMAN_SHEET.NCG                     |                                    |
| SW_PLAN_STATE_<br>KEY      | Switch Plan State Key                  | TE_VALID_STATES.ST<br>ATE_KEY       |                                    |
| BEGIN_DATE_KEY             | Begin Date                             | SWMAN_AUDIT_LOG<br>SAL1.INSERT_TIME |                                    |
| BEGIN_TIME_KEY             | Begin Time                             | SWMAN_AUDIT_LOG<br>SAL1.INSERT_TIME |                                    |
| BEGIN_DTTM                 | Begin Date/Time                        | SWMAN_AUDIT_LOG<br>SAL1.INSERT_TIME |                                    |
| END_DATE_KEY               | End Date                               | SWMAN_AUDIT_LOG<br>SAL2.INSERT_TIME |                                    |
| END_TIME_KEY               | End Time                               | SWMAN_AUDIT_LOG<br>SAL2.INSERT_TIME |                                    |
| END_DTTM                   | End Date/Time                          | SWMAN_AUDIT_LOG<br>SAL2.INSERT_TIME |                                    |
| SW_PLAN_STATE_<br>UDD1_KEY |  |                                     |                                    |
| SW_PLAN_STATE_<br>UDD2_KEY |  |                                     |                                    |
| STATE_DURATION             | Duration of the Switch<br>Plan State   | SWMAN_AUDIT_LOG<br>SAL1.INSERT_TIME |                                    |
|                            |  | SWMAN_AUDIT_LOG<br>SAL2.INSERT_TIME |                                    |
| USER_KEY                   | Number of Switch Plan<br>State Changes | CES_USER.USER_NA<br>ME              |                                    |
| UDM1                       | User Defined Measure 1                 |                                     |                                    |
| UDM2                       | User Defined Measure 2                 |                                     |                                    |
| UDM3                       | User Defined Measure 3                 |                                     |                                    |
| UDM4                       | User Defined Measure 4                 |                                     |                                    |
| UDM5                       | User Defined Measure 5                 |                                     |                                    |
| UDM6                       | User Defined Measure 6                 |                                     |                                    |
| UDM7                       | User Defined Measure 7                 |                                     |                                    |
| UDM8                       | User Defined Measure 8                 |                                     |                                    |

| Target Field | OBIEE Field                                 | Source Field | Transformation /<br>Calculation Logic                                       |
|--------------|---|--------------|---|
| UDM9         | User Defined Measure 9                      |              |   |
| UDM10        | User Defined Measure 10                     |              |   |
| UDDFK1_KEY   | User Defined Dimension<br>Surrogate Key 1   |              |   |
| UDDFK2_KEY   | User Defined Dimension<br>Surrogate Key 2   |              |   |
| UDDFK3_KEY   | User Defined Dimension<br>Surrogate Key 3   |              |   |
| UDDFK4_KEY   | User Defined Dimension<br>Surrogate Key 4   |              |   |
| UDDFK5_KEY   | User Defined Dimension<br>Surrogate Key 5   |              |   |
| UDDGEN1      | User Defined Degenerate<br>Dimension 1      |              |   |
| UDDGEN2      | User Defined Degenerate<br>Dimension 2      |              |   |
| UDDGEN3      | User Defined Degenerate<br>Dimension 3      |              |   |
| UDDGEN4      | User Defined Degenerate<br>Dimension 4      |              |   |
| UDDGEN5      | User Defined Degenerate<br>Dimension 5      |              |   |
| UDDGENL1     | User Defined Long<br>Degenerate Dimension 1 |              |   |
| UDDGENL2     | User Defined Long<br>Degenerate Dimension 2 |              |   |
| UDDGENL3     | User Defined Long<br>Degenerate Dimension 3 |              |   |
| UDDGENL4     | User Defined Long<br>Degenerate Dimension 4 |              |   |
| UDDGENL5     | User Defined Long Degenerate Dimension 5    |              |   |
| FACT_CNT     | Fact Count                                  |              | Transformation Logic: This field is populated with the standard value of 1. |

| Target Field    | OBIEE Field           | Source Field | Transformation /<br>Calculation Logic  |
|-----------------|-----------------------|--------------|--|
| DATA_SOURCE_IND | Data Source Indicator |              | Transformation Logic: This field is populated with the DSI value on the source product instance configuration. This table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system (CI_INSTALLATION.E NV_ID). |
| JOB_NBR         | Job Number            |              | Transformation Logic:<br>This field is populated<br>with the ODI job<br>execution session<br>number.   |

# **User Defined Dimension Tables**

All of the star schemas in Oracle Utilities Analytics product are supplied with user defined dimension tables that are joined to the respective fact. Customers need not make any changes to the physical table schema for any additional requirement. These dimensions help customers to easily extend an existing star schema without an upgrade impact. Customers can make use of these user defined dimensions to pull in data for an additional dimension for a fact.

For more details, see "Chapter 5: Extending Oracle Utilities Analytics" in the *Oracle Utilities Analytics Administration Guide*.

The table below lists various facts in the Oracle Utilities Network Management System star schemas and the user defined dimensions available for them.

| Fact                 | User Defined Dimension    |
|----------------------|---------------------------|
| CF_CITY_OUTG         | CD_CITY_OUTG_UDD1         |
|                      | CD_CITY_OUTG_UDD2         |
| CF_CTRL_ZONE_OUTG    | CD_CTRL_ZONE_OUTG_UDD1    |
|                      | CD_CTRL_ZONE_OUTG_UDD2    |
| CF_CUST_RECENT_OUTG  | CD_CUST_OUTG_UDD1         |
|                      | CD_CUST_OUTG_UDD2         |
| CF_CUST_RST_OUTG     | CD_CUST_OUTG_UDD1         |
|                      | CD_CUST_OUTG_UDD2         |
| CF_FEEDER_DLVRD_LOAD | CD_FEEDER_DLVRD_LOAD_UDD1 |
|                      | CD_FEEDER_DLVRD_LOAD_UDD2 |
| CF_OUTG              | CD_OUTG_UDD1              |
|                      | CD_OUTG_UDD2              |
| CF_RECENT_CALL       | CD_CALL_UDD1              |
|                      | CD_CALL_UDD2              |
| CF_RECENT_CREW       | CD_CREW_UDD1              |
|                      | CD_CREW_UDD2              |
| CF_RECENT_JOB        | CD_JOB_UDD1               |
|                      | CD_JOB_UDD2               |
| CF_RST_CALL          | CD_CALL_UDD1              |
|                      | CD_CALL_UDD2              |
| CF_RST_CREW          | CD_CREW_UDD1              |
|                      | CD_CREW_UDD2              |
| CF_RST_JOB           | CD_JOB_UDD1               |
|                      | CD_JOB_UDD2               |
|                      |                           |

| Fact             | User Defined Dimension |
|------------------|------------------------|
| CF_SW_PLAN       | CD_SW_PLAN_UDD1        |
|                  | CD_SW_PLAN_UDD2        |
| CF_SW_PLAN_STATE | CD_SW_PLAN_STATE_UDD1  |
|                  | CD_SW_PLAN_STATE_UDD2  |