

**Oracle Utilities Extractors and Schema
for Oracle Utilities Operational Device
Management**

Data Mapping Guide

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Oracle Utilities Extractors and Schema for Oracle Utilities Operational Device Management Data Mapping Guide

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Preface

This guide provides the data mapping information from the Oracle Utilities Operational Device Management 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 Operational Device Management.

Related Documents

For more information, see the following documents:

- *Oracle Utilities Analytics Installation Guide*
- *Oracle Utilities Analytics Quick Install Guide*
- *Oracle Utilities Analytics Release Notes*
- *Oracle Utilities Analytics User's Guide*
- *Oracle Utilities Analytics Administration Guide*

See Also:

- Oracle Utilities Operational Device Management Documentation Library

Notational 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 |
| <i>italic</i> | 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 Operational Device Management 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 Operational Device Management.

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 | Type 1 - Existing records are updated directly. The nature of the dimension on how it handles changes made in the source system. 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 start date as the current date and a high date. |
| Fact Type | Whether this is a snapshot or transactional fact table |
| Source System Driver Table | Name of the table in source database from which data is extracted |
| Stage Table | Name of the table in the staging schema (BI data warehouse) that can be used to query the data records generated from the ETL view |

| Property | Value |
|-------------------|---|
| 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 |
| Source 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. |

Fields

The Fields table lists the individual properties of each field in the fact or dimension table. The following fields are listed in the table:

| 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 Operational Device Management

This section contains data maps for the following Oracle Utilities Extractors and Schema for Oracle Utilities Operational Device Management data:

- **Dimension Tables**
- **Fact Tables**

Dimension Tables

Operational Device Dimension

The Operational Device dimension extracts asset data related to operational devices from the Oracle Utilities Operational Device Management system. The appropriate firmware versions are retrieved based on the configuration set on the BI Extract Parameters in Oracle Utilities Operational Device Management.

Properties

| Property | Value |
|----------------------------|----------------------|
| Target Table | CD_OPR_DEVICE |
| Table Type | Dimension |
| SCD Type | Type 2 |
| Source System Driver Table | W1_ASSET |
| Stage Table | STG_CD_OPR_DEVICE |
| ODI Package | B1_PKG_CD_OPR_DEVICE |
| ETL View | B1_D_OPR_DEVICE_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|----------------|---|--|
| OPR_DEVICE_KEY | Operational Device Dimension Surrogate Key | |
| SRC_ASSET_ID | Source Asset ID | W1_ASSET.ASSET_ID |
| FIRMWARE1 | Firmware Version 1 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 1 slot is retrieved. |
| FIRMWARE2 | Firmware Version 2 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 2 slot is retrieved. |

| Target Field | OBIEE Field | Source Field |
|--------------|--------------------|--|
| FIRMWARE3 | Firmware Version 3 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 3 slot is retrieved. |
| FIRMWARE4 | Firmware Version 4 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 4 slot is retrieved. |
| FIRMWARE5 | Firmware Version 5 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 5 slot is retrieved. |
| FIRMWARE6 | Firmware Version 6 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 6 slot is retrieved. |
| FIRMWARE7 | Firmware Version 7 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 7 slot is retrieved. |

| Target Field | OBIEE Field | Source Field |
|--------------|----------------------------------|---|
| FIRMWARE8 | Firmware Version 8 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 8 slot is retrieved. |
| FIRMWARE9 | Firmware Version 9 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 9 slot is retrieved. |
| FIRMWARE10 | Firmware Version 10 | W1_ASSET_IDENTIFIER.W1_ID_VALUE Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 10 slot is retrieved. |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |

| Target Field | OBIEE Field | Source Field |
|-----------------|-----------------------------------|--------------|
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| EFF_START_DTTM | Effective Start Date/Time | |
| EFF_END_DTTM | Effective End Date/Time | |
| JOB_NBR | Job Number | |

Utility Asset Dimension

The Utility Asset dimension extracts all assets defined in the Oracle Utilities Operational Device Management system. The dimension holds all generic asset information, such as the specification details, asset type, and asset class information.

Properties

| Property | Value |
|----------------------------|----------------------|
| Target Table | CD_UTIL_ASSET |
| Table Type | Dimension |
| SCD Type | Type 2 |
| Source System Driver Table | W1_ASSET |
| Stage Table | STG_CD_UTIL_ASSET |
| ODI Package | B1_PKG_CD_UTIL_ASSET |
| Source View | B1_D_UTIL_ASSET_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|----------------|--|--------------|
| UTIL_ASSET_KEY | Utility Asset Dimension Surrogate Key | |

| Target Field | OBIEE Field | Source Field |
|------------------------|------------------------------------|--|
| SRC_UTIL_ASSET_ID | Source Utility Asset ID | W1_ASSET.ASSET_ID |
| UTIL_ASSET_INFO | Utility Asset Information | |
| SPEC_CD | Specification Code | W1_ASSET.SPECIFICATION_CD |
| SPEC_DESCR | Specification Description | W1_SPECIFICATION_L.DESCR100 |
| MANUFACTURER_CD | Manufacturer Code | W1_SPECIFICATION.W1_MANUFACTURER_CD |
| MANUFACTURER_DESCR | Manufacturer Description | W1_MANUFACTURER_L.DESCR100 |
| MODEL | Model | W1_SPECIFICATION_IDENTIFIER.W1_ID_VALUE |
| | | Note: The identifier value is retrieved where the identifier type is “Model”. |
| UTIL_ASSET_TYPE_CD | Utility Asset Type Code | W1_ASSET.ASSET_TYPE_CD |
| UTIL_ASSET_TYPE_DESCR | Utility Asset Type Description | W1_ASSET_TYPE_L.DESCR100 |
| UTIL_ASSET_CLASS_CD | Utility Asset Class Code | W1_ASSET_TYPE.ASSET_CLASS_FLG |
| UTIL_ASSET_CLASS_DESCR | Utility Asset Class Description | CI_LOOKUP_VAL_L.DESCR_OVRD / CI_LOOKUP_VAL_L.DESCR |
| | | Note: If the override description is not available, the regular description is extracted. |
| UTIL_ASSET_CAT_CD | Utility Asset Category Code | W1_ASSET_TYPE.ASSET_CATEGORY_FLG |
| UTIL_ASSET_CAT_DESCR | Utility Asset Category Description | CI_LOOKUP_VAL_L.DESCR_OVRD / CI_LOOKUP_VAL_L.DESCR |
| | | Note: If the override description is not available, the regular description is extracted. |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |

| Target Field | OBIEE Field | Source Field |
|-----------------|-----------------------------------|------------------------|
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| EFF_START_DTTM | Effective Start Date/Time | |
| EFF_END_DTTM | Effective End Date/Time | |
| JOB_NBR | Job Number | |

Location Dimension

The Location dimension extracts data from Location entity in the Oracle Utilities Operational Device Management system. The location hierarchy is extracted up to five levels. Only those asset locations on which assets have been installed will be extracted.

Properties

| Property | Value |
|-------------------|-----------------|
| Target Table Name | CD_LOCATION |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | W1_ASSET_NODE |
| Stage Table Name | STG_CD_LOCATION |

| | |
|------------------|--------------------|
| ODI Package Name | B1_PKG_CD_LOCATION |
| ETL View Name | B1_D_LOCATION_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|---------------------------|----------------------------------|---|
| LOCATION_KEY | Location Dimension Surrogate Key | |
| SRC_LOCATION_ID | Source Location ID | W1_NODE.NODE_ID |
| LOCATION_INFO | Location Information | <p>For asset location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY ',' W1_NODE.STATE ',' W1_NODE.POSTAL</p> <p>For storage location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY</p> |
| LOCATION_TYPE_CD | Location Type Code | W1_NODE.NODE_TYPE_CD |
| LOCATION_TYPE_DESCR | Location Type Description | W1_NODE_TYPE_L.DESCR100 |
| LOCATION_CLASS_CD | Location Class Code | W1_NODE.LOCATION_CLASSES_FLG |
| LOCATION_CLASS_DESCR | Location Class Description | CI_LOOKUP_VAL_L.DESCR_OVRD / CI_LOOKUP_VAL_L.DESCR <p>Note: If the override description is not available, the regular description is extracted.</p> |
| LOCATION_TYPE_CLASS_CD | Location Type Class Code | W1_NODE_TYPE.NODE_CLASSES_FLG |
| LOCATION_TYPE_CLASS_DESCR | Location Type Class Description | CI_LOOKUP_VAL_L.DESCR_OVRD / CI_LOOKUP_VAL_L.DESCR <p>Note: If the override description is not available, the regular description is extracted.</p> |

| Target Field | OBIEE Field | Source Field |
|--------------------------------|-------------------------------------|---|
| LOCATION_CATEGORY | Location Category | <p>Note: Populated with A for Asset Location</p> <p>Populated with S for Storage Location</p> <p>Populated with O for Organization</p> |
| PARENT_LOCATION_LV L1_CD | Parent Location Level 1 Code | W1_NODE.NODE_ID |
| PARENT_LOCATION_LV L1_DESCR | Parent Location Level 1 Description | <p>For asset location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY ',' W1_NODE.STATE ',' W1_NODE.POSTAL</p> <p>For storage location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY</p> <p>For organization location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.DESCR100</p> |
| PARENT_LOCATION_LV L2_CD | Parent Location Level 2 Code | W1_NODE.NODE_ID |
| PARENT_LOCATION_LV L2_DESCR | Parent Location Level 2 Description | <p>For asset location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY ',' W1_NODE.STATE ',' W1_NODE.POSTAL</p> <p>For storage location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY</p> <p>For organization location: W1_NODE_TYPE_L.DESCR100 ',' W1_NODE.DESCR100</p> |

| Target Field | OBIEE Field | Source Field |
|--------------------------------|--|--|
| PARENT_LOCATION_LV L3_CD | Parent Location Level 3 Code | W1_NODE.NODE_ID |
| PARENT_LOCATION_LV L3_DESCR | Parent Location Level 3 Description | For asset location: W1_NODE_TYPE_L.DESCR1 00 ',' W1_NODE.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY ',' W1_NODE.STATE ',' W1_NODE.POSTAL For storage location: W1_NODE_TYPE_L.DESCR1 00 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY For organization location: W1_NODE_TYPE_L.DESCR1 00 ',' W1_NODE.DESCR100 |
| PARENT_LOCATION_LV L4_CD | Parent Location Level 4 Code | W1_NODE.NODE_ID |
| PARENT_LOCATION_LV L4_DESCR | Parent Location Level 4 Description | For asset location: W1_NODE_TYPE_L.DESCR1 00 ',' W1_NODE.DESCR100 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY ',' W1_NODE.STATE ',' W1_NODE.POSTAL For storage location: W1_NODE_TYPE_L.DESCR1 00 ',' W1_NODE.ADDRESS1 ',' W1_NODE.CITY For organization location: W1_NODE_TYPE_L.DESCR1 00 ',' W1_NODE.DESCR100 |
| PARENT_LOCATION_LV L5_CD | Parent Location Level 5 Code | W1_NODE.NODE_ID |

| Target Field | OBIEE Field | Source Field |
|--------------------------------|--|---|
| PARENT_LOCATION_LV L5_DESCR | Parent Location Level 5 Description | For asset location: W1_NODE_TYPE_L.DESCR1 00 ';' W1_NODE.DESCR100 ';' W1_NODE.ADDRESS1 ';' W1_NODE.CITY ';' W1_NODE.STATE ';' W1_NODE.POSTAL For storage location: W1_NODE_TYPE_L.DESCR1 00 ';' W1_NODE.ADDRESS1 ';' W1_NODE.CITY For organization location: W1_NODE_TYPE_L.DESCR1 00 ';' W1_NODE.DESCR100 |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |

| Target Field | OBIEE Field | Source Field |
|-----------------|-----------------------|------------------------|
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| UPDATE_DTTM | Update Date/Time | |
| JOB_NBR | Job Number | |

Address Dimension

The Address dimension extracts data from the Location/Node entity in the Oracle Utilities Operational Device Management system. The address constituents from the location are retrieved and stored in the target dimension.

Properties

| Property | Value |
|-------------------|----------------|
| Target Table Name | CD_ADDR |
| Table Type | Dimension |
| SCD Type | Type 2 |
| Driver Table Name | W1_NODE |
| Stage Table Name | STG_CD_ADDR |
| ODI Package Name | B1_PKG_CD_ADDR |
| ETL View Name | B1_D_ADDR_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|--------------|---------------------------------|---|
| ADDR_KEY | Address Dimension Surrogate Key | |
| SRC_ADDR_ID | Address ID | W1_NODE.NODE_ID |
| ADDR_INFO | Address | For Address location: W1_NODE.ADDRESS1 ',' W1_NODE.CITY ',' W1_NODE.STATE ',' W1_NODE.POSTAL ',' W1_NODE.COUNTRY |
| ADDR_LINE1 | Address Line 1 | W1_NODE.ADDRESS1 |
| ADDR_LINE2 | Address Line 2 | W1_NODE.ADDRESS2 |
| ADDR_LINE3 | Address Line 3 | W1_NODE.ADDRESS3 |
| ADDR_LINE4 | Address Line 4 | W1_NODE.ADDRESS4 |
| CITY | City | W1_NODE.CITY |

| Target Field | OBIEE Field | Source Field |
|---------------------|-----------------------------------|-------------------------|
| COUNTY | County | W1_NODE.COUNTY |
| POSTAL | Postal Code | W1_NODE.POSTAL |
| STATE_CD | State Code | W1_NODE.STATE |
| STATE_DESCR | State | CI_STATE_L.DESCR |
| COUNTRY_CD | Country Code | W1_NODE.COUNTRY |
| COUNTRY_DESCR | Country | CI_COUNTRY_L.DESCR |
| GEO_CODE | Geographical Code | W1_NODE.GEO_CODE |
| CROSS_STREET | Cross Street | W1_NODE.W1_CROSS_STREET |
| SUBURB | Suburb | W1_NODE.W1_SUBURB |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |

| Target Field | OBIEE Field | Source Field |
|----------------|---------------------------|--------------|
| EFF_START_DTTM | Effective Start Date/Time | |
| EFF_END_DTTM | Effective End Date/Time | |
| JOB_NBR | Job Number | |

Asset Disposition Dimension

The Asset Disposition dimension stores all possible dispositions that an asset entity can be in.

Properties

| Property | Value |
|-------------------|----------------------|
| Target Table Name | CD_ASSET_DISP |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | F1_EXT_LOOKUP_VAL_L |
| Stage Table Name | STG_CD_ASSET_DISP |
| ODI Package Name | B1_PKG_CD_ASSET_DISP |
| ETL View Name | B1_D_ASSET_DISP_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|------------------|--|--|
| ASSET_DISP_KEY | Asset Disposition Dimension Surrogate Key | |
| ASSET_DISP_CD | Asset Disposition Code | F1_EXT_LOOKUP_VAL_L.F1_EXT_LOOKUP_VALUE |
| ASSET_DISP_DESCR | Asset Disposition Description | F1_EXT_LOOKUP_VAL_L.DESCR_OVRD / F1_EXT_LOOKUP_VAL_L.DESCR |
| | | Note: If the override description is not available, the regular description is extracted. |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |

| Target Field | OBIEE Field | Source Field |
|-----------------|-----------------------------------|------------------------|
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| UPDATE_DTTM | Update Date/Time | |
| JOB_NBR | Job Number | |

Asset Age Dimension

The Asset Age dimension extracts the age buckets for an asset as configured in the source Oracle Utilities Operational Device Management system.

Properties

| Property | Value |
|-------------------|-------------------|
| Target Table Name | CD_ASSET_AGE |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | W1_BKT_CONFIG_VAL |
| Stage Table Name | STG_CD_ASSET_AGE |

| | |
|------------------|---------------------|
| ODI Package Name | B1_PKG_CD_ASSET_AGE |
| ETL View Name | B1_D_ASSET_AGE_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|--------------------|-----------------------------------|--|
| ASSET_AGE_KEY | Asset Age Dimension Surrogate Key | |
| ASSET_TYPE_CD | Asset Type Code | W1_BKT_CONFIG_REL_OBJ. PK_VALUE1 Note: For default buckets this column will be populated with "NA". |
| ASSET_AGE_ST_RANGE | Age Start Range | W1_BKT_CONFIG_VAL.STAR T_RANGE |
| ASSET_AGE_ED_RANGE | Age End Range | W1_BKT_CONFIG_VAL.END _RANGE |
| ASSET_AGE_DESCR | Asset Age Description | W1_BKT_CONFIG_VAL.LD ESCR |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |

| Target Field | OBIEE Field | Source Field |
|-----------------|-----------------------------------|------------------------|
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| UPDATE_DTTM | Update Date/Time | |
| JOB_NBR | Job Number | |

Note: The bucket dimension ELT job is configured to be initial load only. Any incremental changes to these buckets after the initial run will not be captured in BI. However, if there arises a need to reconfigure the buckets, then data should be truncated in the BI star schema tables and reloaded to reflect the changes. The bucket dimensions, along with the associated facts (Operational Device Snapshot and Accumulation), should be truncated and reloaded.

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics Administration Guide*.

Asset Install Age Dimension

The Asset Install Age dimension extracts the age buckets for an asset's installed age as configured in the source Oracle Utilities Operational Device Management system.

Properties

| Property | Value |
|-------------------|-----------------------------|
| Target Table Name | CD_ASSET_INSTALL_AGE |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | W1_BKT_CONFIG_VAL |
| Stage Table Name | STG_CD_ASSET_INSTALL_AGE |
| ODI Package Name | B1_PKG_CD_ASSET_INSTALL_AGE |
| ETL View Name | B1_D_ASSET_INSTALL_AGE_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|-----------------------|---|--------------|
| ASSET_INSTALL_AGE_KEY | Asset Install Age Dimension Surrogate Key | |

| Target Field | OBIEE Field | Source Field |
|-------------------------------|-----------------------------------|---|
| ASSET_TYPE_CD | Asset Type Code | W1_BKT_CONFIG_REL_OBJ. PK_VALUE1 |
| | | Note: For default buckets this column will be populated with "NA". |
| ASSET_INSTALL_AGE_START_RANGE | Asset Install Age Start Range | W1_BKT_CONFIG_VAL.START_RANGE |
| ASSET_INSTALL_AGE_END_RANGE | Asset Install Age End Range | W1_BKT_CONFIG_VAL.END_RANGE |
| ASSET_INSTALL_AGE_DESCRIPTION | Asset Install Age Description | W1_BKT_CONFIG_VAL.L.DESCR |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTMM | Data Load Date/Time | |
| UPDATE_DTMM | Update Date/Time | |

| Target Field | OBIEE Field | Source Field |
|--------------|-------------|--------------|
| JOB_NBR | Job Number | |

Note: The bucket dimension ELT job is configured to be initial load only. Any incremental changes to these buckets after the initial run will not be captured in BI. However, if there arises a need to reconfigure the buckets, then data should be truncated in the BI star schema tables and reloaded to reflect the changes. The bucket dimensions, along with the associated facts (Operational Device Snapshot and Accumulation), should be truncated and reloaded.

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics Administration Guide*.

Asset Instore Age Dimension

The Asset Inventory Age dimension is populated with the age ranges for the days since the asset was put in storage.

Properties

| Property | Value |
|-------------------|-----------------------------|
| Target Table Name | CD_ASSET_INSTORE_AGE |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | W1_BKT_CONFIG_VAL |
| Stage Table Name | STG_CD_ASSET_INSTORE_AGE |
| ODI Package Name | B1_PKG_CD_ASSET_INSTORE_AGE |
| ETL View Name | B1_D_ASSET_INSTORE_AGE_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|-------------------------------|--|-------------------------------------|
| ASSET_INSTORE_AGE_KEY | Asset Instore Age Dimension Surrogate Key | |
| ASSET_TYPE_CD | Asset Type Code | W1_BKT_CONFIG_REL_OBJ. PK_VALUE1 |
| ASSET_INSTORE_AGE_START_RANGE | Asset Instore Age Start Range | W1_BKT_CONFIG_VAL.STAR T_RANGE |
| ASSET_INSTORE_AGE_END_RANGE | Asset Instore Age End Range | W1_BKT_CONFIG_VAL.END _RANGE |

Note: For default buckets this column will be populated with "NA".

| Target Field | OBIEE Field | Source Field |
|------------------------------|-----------------------------------|---------------------------|
| ASSET_INSTORE_AGE_DESCRIPTOR | Asset Instore Age Description | W1_BKT_CONFIG_VAL_LD_ESCR |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| UPDATE_DTTM | Update Date/Time | |
| JOB_NBR | Job Number | |

Note: The bucket dimension ELT job is configured to be initial load only. Any incremental changes to these buckets after the initial run will not be captured in BI. However, if there arises a need to reconfigure the buckets, then data should be truncated in the BI star schema tables and reloaded to reflect the changes. The bucket dimensions, along with the associated facts (Operational Device Snapshot and Accumulation), should be truncated and reloaded.

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics Administration Guide*.

Service History Type Dimension

The Service History Type dimension extracts the service history type and its category details from the Oracle Utilities Operational Device Management system.

Properties

| Property | Value |
|-------------------|-----------------------------|
| Target Table Name | CD_SERVICE_HIST_TYPE |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | W1_SVC_HIST_TYPE |
| Stage Table Name | STG_CD_SERVICE_HIST_TYPE |
| ODI Package Name | B1_PKG_CD_SERVICE_HIST_TYPE |
| ETL View Name | B1_D_SERVICE_HIST_TYPE_VW |

Fields

| Target Field | OBIEE Field | Source Field |
|-------------------------------|---|--|
| SERVICE_HIST_TYPE_KEY | Service History Type Dimension Surrogate Key | |
| SERVICE_HIST_TYPE_CD | Service History Type Code | W1_SVC_HIST_TYPE.SVC_HIST_TYPE_CD |
| SERVICE_HIST_TYPE_DESCRIPTION | Service History Type Description | W1_SVC_HIST_TYPE.L.DESCR100 |
| SERVICE_HIST_CAT_CD | Service History Category Code | W1_SVC_HIST_TYPE.SVC_HIST_CATEGORY_FLG |
| SERVICE_HIST_CAT_DESCRIPTION | Service History Category Description | CI_LOOKUP_VAL.L.DESCR_OVRD / CI_LOOKUP_VAL.L.DESCR |
| | | Note: If the override description is not available, the regular description is extracted. |
| UDF1_CD | User Defined Field 1 Code | |
| UDF1_DESCR | User Defined Field 1 Description | |
| UDF2_CD | User Defined Field 2 Code | |
| UDF2_DESCR | User Defined Field 2 Description | |
| UDF3_CD | User Defined Field 3 Code | |
| UDF3_DESCR | User Defined Field 3 Description | |
| UDF4_CD | User Defined Field 4 Code | |

| Target Field | OBIEE Field | Source Field |
|-----------------|-----------------------------------|------------------------|
| UDF4_DESCR | User Defined Field 4 Description | |
| UDF5_CD | User Defined Field 5 Code | |
| UDF5_DESCR | User Defined Field 5 Description | |
| UDF6_CD | User Defined Field 6 Code | |
| UDF6_DESCR | User Defined Field 6 Description | |
| UDF7_CD | User Defined Field 7 Code | |
| UDF7_DESCR | User Defined Field 7 Description | |
| UDF8_CD | User Defined Field 8 Code | |
| UDF8_DESCR | User Defined Field 8 Description | |
| UDF9_CD | User Defined Field 9 Code | |
| UDF9_DESCR | User Defined Field 9 Description | |
| UDF10_CD | User Defined Field 10 Code | |
| UDF10_DESCR | User Defined Field 10 Description | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| UPDATE_DTTM | Update Date/Time | |
| JOB_NBR | Job Number | |

Asset Inspection Status Dimension

The Asset Inspection Status dimension is populated with all the possible outcomes for asset inspections. For example: whether it passed, failed, etc.

Properties

| Property | Value |
|-------------------|-----------------------------|
| Target Table Name | CD_ASSET_INSP_STATUS |
| Table Type | Dimension |
| SCD Type | Type 1 |
| Driver Table Name | CI_LOOKUP_VAL_L |
| Stage Table Name | STG_CD_ASSET_INSP_STATUS |
| ODI Package Name | B1_PKG_CD_ASSET_INSP_STATUS |
| ETL View Name | B1_D_ASSET_INSP_STATUS_VW |

Fields

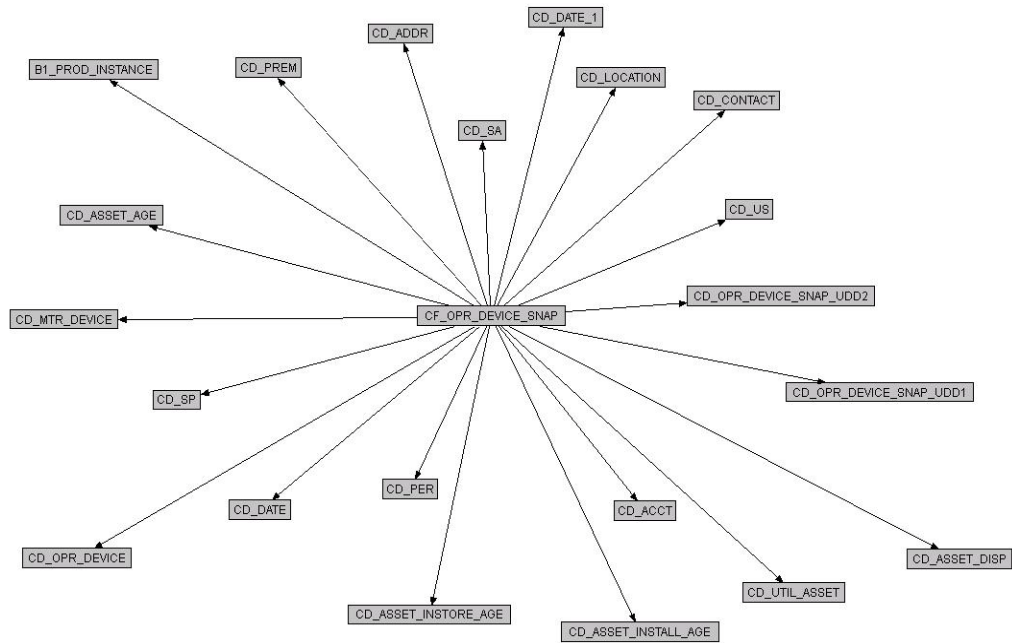
| Target Field | OBIEE Field | Source Field |
|-------------------------------|--|--|
| ASSET_INSP_STATUS_KEY | Asset Inspection Status Dimension Surrogate Key | |
| ASSET_INSP_STATUS_CD | Asset Inspection Status Code | CI_LOOKUP_VAL_L.FIELD_VALUE |
| ASSET_INSP_STATUS_DESCRIPTION | Asset Inspection Status Description | CI_LOOKUP_VAL_L.DESCR / CI_LOOKUP_VAL_L.DESCR_OVRD |
| | | Note: If the override description is not available, the regular description is extracted. |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID |
| DATA_LOAD_DTTM | Data Load Date/Time | |
| UPDATE_DTTM | Update Date/Time | |
| JOB_NBR | Job Number | |

Fact Tables

Operational Device Snapshot Fact

The Operational Device Snapshot fact provides a snapshot of operational devices (assets) in the Oracle Utilities Operational Device Management system. The fact calculates the ages for an asset, along with its failure and warranty status. The identification of operational devices will be based on the list of business objects (BOs) configured in the Master Configuration for BI extract parameters.

Entity Relationship Diagram



Properties

| Property | Value |
|------------------------|--|
| Target Table Name | CF_OPR_DEVICE_SNAP |
| Table Type | Fact |
| Fact Type | Snapshot |
| Driver Table | W1_ASSET |
| Stage Table Name | STG_CF_OPR_DEVICE_SNAP |
| ODI Package Name | B1_PKG_CF_OPR_DEVICE_SNAP |
| ETL View Name | B1_F_OPR_DEVICE_SNAP_VW |
| Materialized View Name | B1_OPR_DEVICE_SNAP_MON_MV1 B1_OPR_DEVICE_SNP_MON_TOPX_MV 1 |

Fields

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|---------------------|--------------------------------------|---|--|
| OPR_DEVICE_SNAP_KEY | Operational Device Snapshot Fact Key | | |
| SRC_ASSET_ID | Source Asset ID | W1_ASSET.ASSET_ID | |
| AGE | Age in Days | W1_ASSET_NODE.EF F_DTTM | Transformation Logic: This field is calculated as the difference, in days, between the effective date of the first asset disposition and the end date of the current snapshot. The value is stored in days. |
| INSTALL_AGE | Install Age in Days | W1_ASSET_NODE.AS SET_DPOS_FLG W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID | Transformation Logic: This field is populated only if the asset is currently installed. It is calculated as the difference between the effective date of the installed disposition and the end date of the current snapshot. The value is stored in days. |
| INSTORE_AGE | Instore Age in Days | W1_ASSET_NODE.AS SET_DPOS_FLG W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID | Transformation Logic: This field is populated only if the asset is currently in storage. It is calculated as the difference, in days, between the effective date of the in-store disposition and the end date of the current snapshot. The value is stored in days. |
| FAILED_ONCE_IND | Failed Once Indicator | F1_MST_CONFIG.MST _CONFIG_DATA W1_ASSET_NODE.FA ILURE_FLG W1_ASSET_NODE.EF F_DTTM | Transformation Logic: This indicator is set if the asset has failed at least once during the snapshot period. The asset failure condition to be considered will have to be defined in 'Extract Parameters' in the BI Configuration Portal available in the ODM system. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------------|---|--|--|
| WNTY_EXP_IND | Warranty Expired Indicator | | Transformation Logic: This indicator is set if the warranty date is earlier than or same as the end date of the snapshot period. |
| ASSET_DISP_START_KEY | Asset Disposition Start Dimension Surrogate Key | W1_ASSET_NODE.ASSET_DPOS_FLG W1_ASSET_NODE.EFFECTIVE_DTTM W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | Transformation Logic: This field is populated based on the asset disposition that is effective at the start of the snapshot period. If it is a component and its current disposition is “Attached”, its disposition will follow the disposition of the asset it is currently attached to. |
| ASSET_DISP_END_KEY | Asset Disposition End Dimension Surrogate Key | W1_ASSET_NODE.ASSET_DPOS_FLG W1_ASSET_NODE.EFFECTIVE_DTTM W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | Transformation Logic: This field is populated based on the asset disposition that will be effective at the end of the snapshot period. If it is a component and its current disposition is “Attached”, its disposition will follow the disposition of the asset it is currently attached to. |
| OPR_DEVICE_KEY | Operational Device Dimension Surrogate Key | W1_ASSET.ASSET_ID | |
| UTIL_ASSET_KEY | Utility Dimension Surrogate Key | W1_ASSET.ASSET_ID | |
| ATTACHED_TO_ASSET_KEY | Utility Asset Dimension Surrogate Key | W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | |
| LOCATION_KEY | Location Dimension Surrogate Key | W1_ASSET_NODE.NODE_ID W1_ASSET_NODE.EFFECTIVE_DTTM W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | Transformation Logic: This field is populated based on the location where the asset is at the end of the snapshot period. If it is a component and its current disposition is “Attached”, its location will be the location of the asset where it is attached. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------------|--|------------------------------------|--|
| ADDR_KEY | Address Dimension Surrogate Key | W1_ASSET_NODE.N ODE_ID | Transformation Logic: The source for this column will be the asset's location. |
| ASSET_AGE_KEY | Asset Age Dimension Surrogate Key | W1_ASSET.ASSET_TY PE_CD | Transformation Logic: This field is populated with the appropriate dimension key based on the matching age bucket record for asset's age. |
| ASSET_INSTALL_AGE_KEY | Asset Install Age Dimension Surrogate Key | W1_ASSET.ASSET_TY PE_CD | Transformation Logic: This field is populated with the appropriate dimension key based on the matching age bucket record for asset's install age. |
| ASSET_INSTORE_AGE_KEY | Asset Instore Age Dimension Surrogate Key | W1_ASSET.ASSET_TY PE_CD | Transformation Logic: This field is populated with the appropriate dimension key based on the matching age bucket record for asset's in-storage age. |
| SP_KEY | Service Point Dimension Surrogate Key | W1_NODE_IDENTIFI ER.W1_ID_VALUE | Transformation Logic: It is populated by deriving the MDM usage subscription that is linked to the MDM SP natural key stored in the ODM system. |
| MTR_DEVICE_KEY | Device Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| US_KEY | Usage Subscription Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| CONTACT_KEY | Contact Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|--------------------------|---|----------------------------------|---|
| PER_KEY | Person Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| ACCT_KEY | Account Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| SA_KEY | Service Agreement Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| PREM_KEY | Premise Dimension Surrogate Key | | Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| SNAP_TYPE_CD | Snapshot Frequency Type | | |
| DATE_KEY | Date Dimension Surrogate Key | | |
| SNAPSHOT_DT | Snapshot Date | | |
| WNTY_EXP_DATE_KEY | Warranty Expiration Date Dimension Surrogate Key | | |
| WNTY_EXP_TIME_KEY | Warranty Expiration Time Dimension Surrogate Key | | |
| WNTY_EXP_DTTM | Warranty Expiration Date/Time | W1_ASSET_CHAR.AD HOC_CHAR_VAL | Transformation Logic: This field is populated with the warranty expiration date/time of the asset, which is configured as a characteristic on the asset in ODM (characteristic type is "Warranty Expiration Date [W2-WEXD'T]"). |
| OPR_DEVICE_SNAP_UDD1_KEY | Operation Device Snapshot User Defined Dimension 1 Surrogate Key | | |

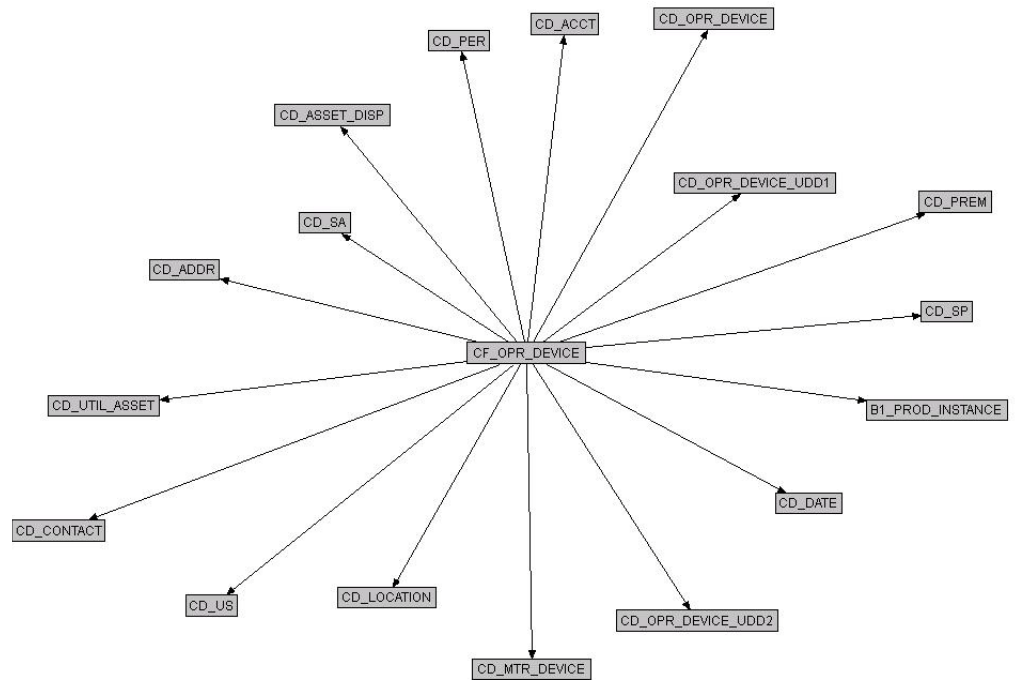
| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|--------------------------|--|---------------------|---|
| OPR_DEVICE_SNAP_UDD2_KEY | Operation Device Snapshot User Defined Dimension 2 Surrogate Key | | |
| UDM1 | User Defined Measure 1 | | |
| UDM2 | User Defined 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 | | |
| UDDGEN1 | User Defined Degenerate Dimension 1 | | |
| UDDGEN2 | User Defined Degenerate Dimension 2 | | |
| UDDGEN3 | User Defined Degenerate Dimension 3 | | |
| UDDGEN4 | User Defined Degenerate Dimension 4 | | |
| UDDGEN5 | User Defined Degenerate Dimension 5 | | |
| UDDGENL1 | User Defined Long Degenerate Dimension 1 | | |
| UDDGENL2 | User Defined Long Degenerate Dimension 2 | | |
| UDDGENL3 | User Defined Long Degenerate Dimension 3 | | |
| UDDGENL4 | User Defined Long Degenerate Dimension 4 | | |
| UDDGENL5 | User Defined Long Degenerate Dimension 5 | | |
| UDDFK1_KEY | User Defined Dimension Foreign Key 1 | | |
| UDDFK2_KEY | User Defined Dimension Foreign Key 2 | | |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------|---|----------------------------|--|
| UDDFK3_KEY | User Defined Dimension Foreign Key 3 | | |
| UDDFK4_KEY | User Defined Dimension Foreign Key 4 | | |
| UDDFK5_KEY | User Defined Dimension Foreign Key 5 | | |
| FACT_CNT | Fact Count | | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.E NV_ID | |
| JOB_NBR | Job Number | | |
| | Devices In Storage | | Calculation Logic: This is the number of devices that are currently in storage. |
| | Devices In Warranty | | Calculation Logic: This is the number of devices that are currently in warranty. |
| | Installed Devices | | Calculation Logic: This is the number of devices that are currently installed at customer locations. |
| | Repair | | Calculation Logic: This is the number of devices that are currently in repair. |
| | Retired Devices | | Calculation Logic: This is number of devices that are retired. |

Operational Device Fact

The Operational Device fact accumulates all operational devices (assets) from the Oracle Utilities Operational Device Management system. The fact also captures data about the most recent inspection pass and failure events.

Entity Relationship Diagram



Properties

| Property | Value |
|------------------------|----------------------------|
| Target Table Name | CF_OPR_DEVICE |
| Table Type | Fact |
| Fact Type | Accumulation |
| Driver Table | W1_ASSET |
| Stage Table Name | STG_CF_OPR_DEVICE |
| ODI Package Name | B1_PKG_CF_OPR_DEVICE |
| ETL View Name | B1_F_OPR_DEVICE_VW |
| Materialized View Name | B1_OPR_DEVICE_MON_MV1 |
| | B1_OPR_DEVICE_MON_TOPX_MV1 |

Fields

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|--------------------------|--|---|---|
| OPR_DEVICE_KEY | Operational Device Fact Key | | |
| SRC_ASSET_ID | Source Asset ID | W1_ASSET.ASSET_ID | |
| ASSET_DISP_KEY | Asset Disposition Dimension Surrogate Key | W1_ASSET_NODE.ASSET_DPOS_FLG W1_ASSET_NODE.EFF_DTTM W1_ASSET_NODE.ATTCH_TO_ASSET_ID | Transformation Logic: This field is populated based on the asset's current disposition. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to. |
| OPR_DEVICE_DIMENSION_KEY | Operational Device Dimension Surrogate Key | W1_ASSET.ASSET_ID | |
| UTIL_ASSET_KEY | Utility Asset Dimension Surrogate Key | W1_ASSET.ASSET_ID | |
| ATTACHED_TO_ASSET_KEY | Utility Asset Dimension Surrogate Key | W1_ASSET_NODE.ATTCH_TO_ASSET_ID | |
| LOCATION_KEY | Location Dimension Surrogate Key | W1_ASSET_NODE.NODE_ID W1_ASSET_NODE.EFF_DTTM W1_ASSET_NODE.ATTCH_TO_ASSET_ID | Transformation Logic: This field is populated based on the asset's current location. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to. |
| ADDR_KEY | Address Dimension Surrogate Key | W1_ASSET_NODE.NODE_ID | Transformation Logic: This field is populated based on the same logic used for the asset's location. There is no separate entity for address in the ODM system. The source for this column will be the asset's location. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|----------------|--|------------------------------------|---|
| SP_KEY | Service Point Dimension Surrogate Key | W1_NODE_IDENTIFI ER.W1_ID_VALUE | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated using the MDM SP natural key stored in the ODM system. |
| MTR_DEVICE_KEY | Device Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM device that is linked to the MDM SP natural key stored in the ODM system. |
| US_KEY | Usage Subscription Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM usage subscription that is linked to the MDM SP natural key stored in the ODM system. |
| CONTACT_KEY | Contact Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM contact that is linked to the MDM SP natural key stored in the ODM system. |
| PER_KEY | Person Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB person that is linked to the MDM SP natural key stored in the ODM. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------------|---|----------------------------------|--|
| ACCT_KEY | Account Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB account that is linked to the MDM SP natural key stored in the ODM system. |
| SA_KEY | Service Agreement Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB SA that is linked to the MDM SP natural key stored in the ODM system. |
| PREM_KEY | Premise Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB premise that is linked to the MDM SP natural key stored in the ODM system. |
| WNTY_EXP_DATE_KEY | Warranty Expiration Date Dimension Surrogate Key | | |
| WNTY_EXP_TIME_KEY | Warranty Expiration Time Dimension Surrogate Key | | |
| WNTY_EXP_DTTM | Warranty Expiration Date/Time | W1_ASSET_CHAR.AD HOC_CHAR_VAL | Transformation Logic: The warranty expiration date/time for an asset which will be configured as a characteristic value. |
| RCT_INS_PASS_DATE_KEY | Recent Inspection Pass Date Dimension Surrogate Key | | |
| RCT_INS_PASS_TIME_KEY | Recent Inspection Pass Time Dimension Surrogate Key | | |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------------|--|--|--|
| RCT_INS_PASS_DTTM | Recent Inspection Pass Date/Time | W1_SVC_HIST.ASSET_ID W1_SVC_HIST_TYPE. SVC_HIST_CATEGOR Y_FLG W1_SVC_HIST_CHAR. EFFDT W1_SVC_HIST_CHAR. CHAR_TYPE_CD W1_SVC_HIST_CHAR. CHAR_VAL | Transformation Logic: This field is populated with the effective date/time of the most recent service history with category of 'Inspection', and a passing 'Operational Status'. |
| RCT_INS_FAIL_DATE_KEY | Recent Inspection Fail Date Dimension Surrogate Key | | |
| RCT_INS_FAIL_TIME_KEY | Recent Inspection Fail Time Dimension Surrogate Key | | |
| RCT_INS_FAIL_DTTM | Recent Inspection Fail Date/Time | W1_SVC_HIST.ASSET_ID W1_SVC_HIST_TYPE. SVC_HIST_CATEGOR Y_FLG W1_SVC_HIST_CHAR. EFFDT W1_SVC_HIST_CHAR. CHAR_TYPE_CD W1_SVC_HIST_CHAR. CHAR_VAL | Transformation Logic: This field is populated with the effective date/time of the most recent service history with category of 'Inspection', and a failed 'Operational Status'. |
| OPR_DEVICE_UDD1_KEY | Operation Device Snapshot User Defined Dimension 1 Surrogate Key | | |
| OPR_DEVICE_UDD2_KEY | Operation Device Snapshot User Defined Dimension 2 Surrogate Key | | |
| UDM1 | User Defined Measure 1 | | |
| UDM2 | User Defined Measure 2 | | |
| UDM3 | User Defined Measure 3 | | |

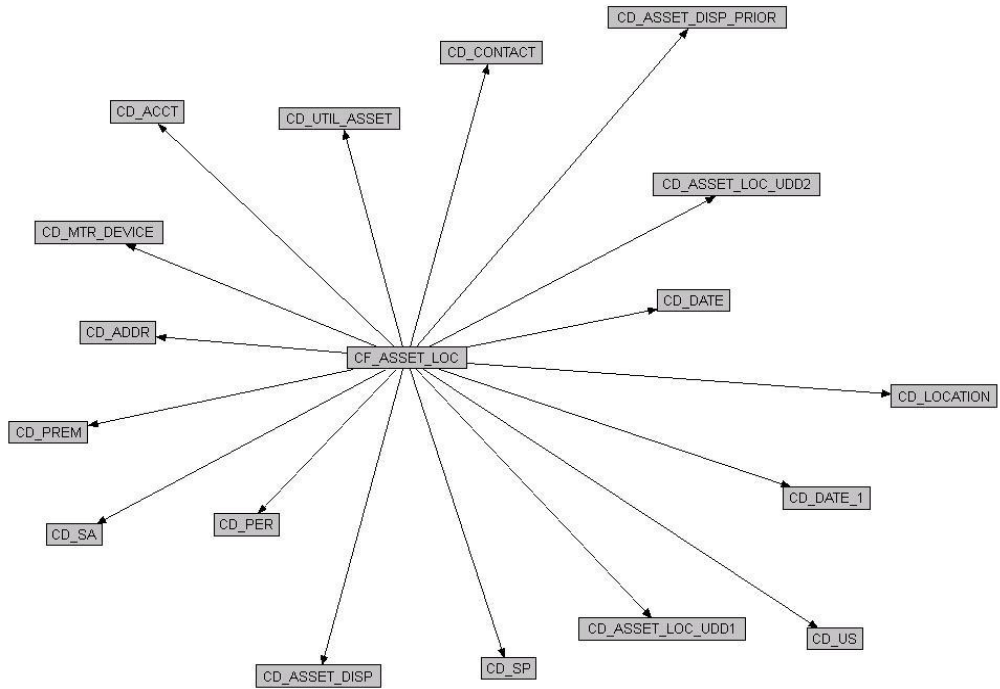
| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|---------------------|--|---------------------|---|
| UDM4 | User Defined Measure 4 | | |
| UDM5 | User Defined Measure 5 | | |
| UDM6 | User Defined Measure 6 | | |
| UDM7 | User Defined Measure 7 | | |
| UDM8 | User Defined Measure 8 | | |
| UDM9 | User Defined Measure 9 | | |
| UDM10 | User Defined Measure 10 | | |
| UDDGEN1 | User Defined Degenerate Dimension 1 | | |
| UDDGEN2 | User Defined Degenerate Dimension 2 | | |
| UDDGEN3 | User Defined Degenerate Dimension 3 | | |
| UDDGEN4 | User Defined Degenerate Dimension 4 | | |
| UDDGEN5 | User Defined Degenerate Dimension 5 | | |
| UDDGENL1 | User Defined Long Degenerate Dimension 1 | | |
| UDDGENL2 | User Defined Long Degenerate Dimension 2 | | |
| UDDGENL3 | User Defined Long Degenerate Dimension 3 | | |
| UDDGENL4 | User Defined Long Degenerate Dimension 4 | | |
| UDDGENL5 | User Defined Long Degenerate Dimension 5 | | |
| UDDFK1_KEY | User Defined Dimension Foreign Key 1 | | |
| UDDFK2_KEY | User Defined Dimension Foreign Key 2 | | |
| UDDFK3_KEY | User Defined Dimension Foreign Key 3 | | |
| UDDFK4_KEY | User Defined Dimension Foreign Key 4 | | |
| UDDFK5_KEY | User Defined Dimension Foreign Key 5 | | |
| FACT_CNT | Fact Count | | |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|---------------------|-----------------------|----------------------------|--|
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.E NV_ID | |
| JOB_NBR | Job Number | | |
| | Installed | | Calculation Logic: This is the number of devices that are installed at customer locations. |

Asset Location Fact

The Asset Location fact is populated with the asset dispositions of all assets from the Oracle Utilities Operational Device Management system. The assets are captured along their life cycle, when they move through various dispositions. The measures captured in this fact include the time spent in prior disposition, an indicator for failure, and the time since last failure.

Entity Relationship Diagram



Properties

| Property | Value |
|------------------------|----------------------|
| Target Table Name | CF_ASSET_LOC |
| Table Type | Fact |
| Fact Type | Accumulation |
| Driver Table | W1_ASSET_NODE |
| Stage Table Name | STG_CF_ASSET_LOC |
| ODI Package Name | B1_PKG_CF_ASSET_LOC |
| ETL View Name | B1_F_ASSET_LOC_VW |
| Materialized View Name | B1_ASSET_LOC_MON_MV1 |

Fields

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|----------------|---|--|--|
| ASSET_LOC_KEY | Operational Device Snapshot Fact Key | | |
| SRC_ASSET_ID | Source Asset ID | W1_ASSET_NODE.ASSET_ID | |
| PRIOR_DISP_DUR | Days in Prior Disposition | | Transformation Logic: This field is populated as the difference (in days) between the day when the asset entered current disposition and the day when it entered the previous disposition. |
| FAILED_IND | Failed Indicator | F1_MST_CONFIG.MST_CONFIG_DATA W1_ASSET_NODE.FAILURE_FLG | Transformation Logic: This indicator is set to 1 if the asset has a failure when it moved to this disposition. The definition of an asset's failure is configured via "Asset Failure Parameters" in the BI Extract Parameters in ODM. |
| DUR_LAST_FAIL | Months Since Last Failure | F1_MST_CONFIG.MST_CONFIG_DATA W1_ASSET_NODE.FAILURE_FLG W1_ASSET_NODE.EFFECTIVE_DTTM | Transformation Logic: This is only populated if the asset disposition was marked with failure. It is calculated as the difference (in months) since the last failure (or if there is no prior failure, it should be calculated from the earliest disposition). |
| ASSET_DISP_KEY | Asset Disposition Dimension Surrogate Key | W1_ASSET_NODE.ASSET_DPOS_FLG W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | Transformation Logic: This field is populated based on the asset's current disposition. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------------|---|------------------------------------|--|
| PRIOR_ASSET_DISP_KEY | Prior Disposition Dimension Surrogate Key | | Transformation Logic: This field is populated based on the prior disposition of the asset. If it is a component and its current disposition is “Attached”, its disposition will follow the disposition of the asset it is currently attached to. |
| UTIL_ASSET_KEY | Utility Asset Dimension Surrogate Key | W1_ASSET_NODE.ASSET_ID | |
| ATTACHED_TO_ASSET_KEY | Utility Asset Dimension Surrogate Key | W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | |
| LOCATION_KEY | Location Dimension Surrogate Key | W1_ASSET_NODE.CURRENT_LOCATION_ID | Transformation Logic: This field is populated based on the asset’s current location. If it is a component and its current disposition is “Attached”, its disposition will follow the disposition of the asset it is currently attached to. |
| PRIOR_LOCATION_KEY | Prior Location Dimension Surrogate Key | W1_ASSET_NODE.PRIOR_LOCATION_ID | Transformation Logic: This field is populated based on the asset’s prior location. If it is a component and its current disposition is “Attached”, its disposition will follow the disposition of the asset it is currently attached to. |
| ADDR_KEY | Address Dimension Surrogate Key | W1_ASSET_NODE.CURRENT_LOCATION_ID | Transformation Logic: The source for this column will be the asset's current location. |
| SP_KEY | Service Point Dimension Surrogate Key | W1_NODE_IDENTIFIER.W1_ID_VALUE | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated using the MDM SP natural key stored in the ODM system. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|----------------|--|--------------|---|
| MTR_DEVICE_KEY | Device Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM device that is linked to the MDM SP natural key stored in the ODM system. |
| US_KEY | Usage Subscription Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM usage subscription that is linked to the MDM SP natural key stored in the ODM system. |
| CONTACT_KEY | Contact Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM contact that is linked to the MDM SP natural key stored in the ODM system. |
| PER_KEY | Person Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB person that is linked to the MDM SP natural key stored in the ODM system. |
| ACCT_KEY | Account Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB account that is linked to the MDM SP natural key stored in the ODM system. |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|---------------------|---|----------------------------|--|
| SA_KEY | Service Agreement Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB SA that is linked to the MDM SP natural key stored in the ODM system. |
| PREM_KEY | Premise Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB premise that is linked to the MDM SP natural key stored in the ODM system. |
| DISP_DATE_KEY | Disposition Date Dimension Surrogate Key | | |
| DISP_TIME_KEY | Disposition Time Dimension Surrogate Key | | |
| DISP_DTTM | Disposition Date/Time | W1_ASSET_NODE.EF F_DTTM | Transformation Logic: This is the disposition date/time of the asset's current disposition. |
| PRIOR_DISP_DATE_KEY | Prior Disposition Date Dimension Surrogate Key | | |
| PRIOR_DISP_TIME_KEY | Prior Disposition Time Dimension Surrogate Key | | |
| PRIOR_DISP_DTTM | Prior Disposition Date/ Time | W1_ASSET_NODE.EF F_DTTM | Transformation Logic: This is the disposition date/time of the asset's prior disposition. |
| ASSET_LOC_UDD1_KEY | Asset Location User Defined Dimension 1 Surrogate Key | | |
| ASSET_LOC_UDD2_KEY | Asset Location User Defined Dimension 2 Surrogate Key | | |
| UDM1 | User Defined Measure 1 | | |

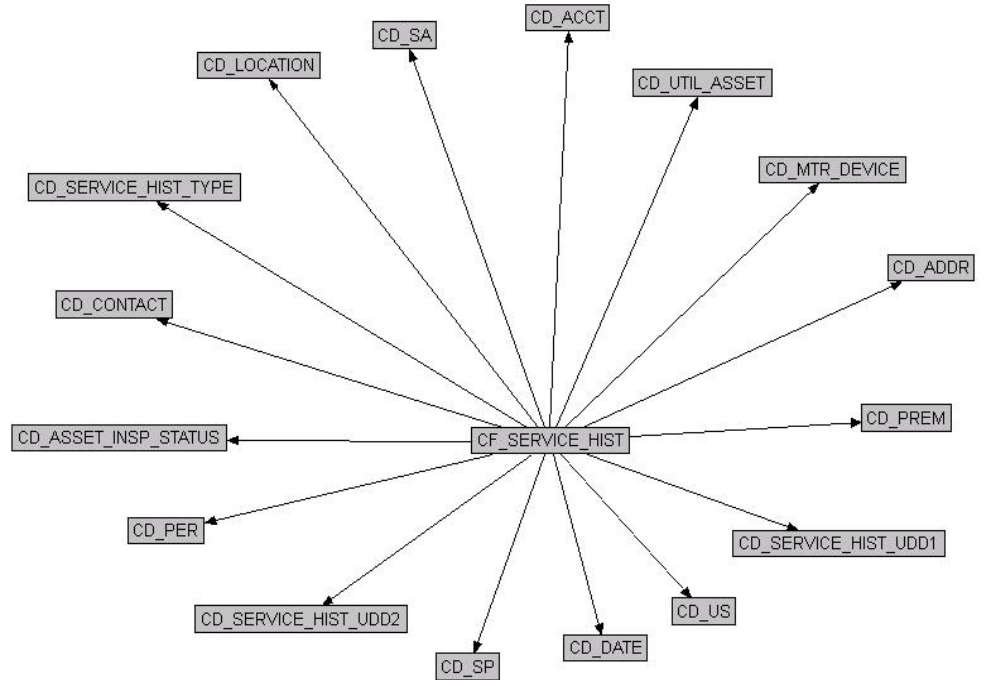
| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|---------------------|--|---------------------|---|
| UDM2 | User Defined Measure 2 | | |
| UDM3 | User Defined Measure 3 | | |
| UDM4 | User Defined Measure 4 | | |
| UDM5 | User Defined Measure 5 | | |
| UDM6 | User 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 Dimension 1 | | |
| UDDGEN2 | User Defined Degenerate Dimension 2 | | |
| UDDGEN3 | User Defined Degenerate Dimension 3 | | |
| UDDGEN4 | User Defined Degenerate Dimension 4 | | |
| UDDGEN5 | User Defined Degenerate Dimension 5 | | |
| UDDGENL1 | User Defined Long Degenerate Dimension 1 | | |
| UDDGENL2 | User Defined Long Degenerate Dimension 2 | | |
| UDDGENL3 | User Defined Long Degenerate Dimension 3 | | |
| UDDGENL4 | User Defined Long Degenerate Dimension 4 | | |
| UDDGENL5 | User Defined Long Degenerate Dimension 5 | | |
| UDDFK1_KEY | User Defined Dimension Foreign Key 1 | | |
| UDDFK2_KEY | User Defined Dimension Foreign Key 2 | | |
| UDDFK3_KEY | User Defined Dimension Foreign Key 3 | | |
| UDDFK4_KEY | User Defined Dimension Foreign Key 4 | | |

| Target Field | OBIEE Field | Source Field | Transformation / Calculation Logic |
|-----------------|---|----------------------------|--|
| UDDFK5_KEY | User Defined Dimension Foreign Key 5 | | |
| FACT_CNT | Fact Count | | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.E NV_ID | |
| JOB_NBR | Job Number | | |
| | Installed | | Calculation Logic: This is the number of devices that are installed at customer locations. |
| | Received Devices | | Calculation Logic: This is the number of devices that are in receipt. These devices are tested for usability before installing them at customer locations. |
| | Rejections | | Calculation Logic: This is the number of devices that are rejected during an inspection. |

Service History Fact

The Service History fact accumulates the details of all service history entries created in the source Oracle Utilities Operational Device Management system.

Entity Relationship Diagram



Properties

| Property | Value |
|------------------------|-------------------------|
| Target Table Name | CF_SERVICE_HIST |
| Table Type | Fact |
| Fact Type | Accumulation |
| Driver Table | W1_SVC_HIST |
| Stage Table Name | STG_CF_SERVICE_HIST |
| ODI Package Name | B1_PKG_CF_SERVICE_HIST |
| ETL View Name | B1_F_SERVICE_HIST_VW |
| Materialized View Name | B1_SERVICE_HIST_MON_MV1 |

Fields

| Target Field | OBIEE Field | Source Field | Transformation/ Calculation Logic |
|------------------|--------------------------|--------------|--------------------------------------|
| SERVICE_HIST_KEY | Service History Fact Key | | |

| Target Field | OBIEE Field | Source Field | Transformation/ Calculation Logic |
|-----------------------|---|--|---|
| SRC_SERVICE_HIST_ID | Source Service History ID | W1_SVC_HIST.SVC_HIST_ID | |
| SERVICE_HIST_TYPE_KEY | Service History Type Dimension Surrogate Key | W1_SVC_HIST.SVC_HIST_TYPE_CD | |
| OPR_DEVICE_KEY | Operational Device Dimension Surrogate Key | W1_SVC_HIST.ASSET_ID W1_SVC_HIST.EFF_DTTM | |
| UTIL_ASSET_KEY | Utility Asset Dimension Surrogate Key | W1_SVC_HIST.ASSET_ID W1_SVC_HIST.EFF_DTTM | |
| LOCATION_KEY | Location Dimension Surrogate Key | W1_SVC_HIST.EFF_DTTM W1_ASSET_NODE.NODE_ID W1_ASSET_NODE.EFF_DTTM W1_ASSET_NODE.ATTCH_TO_ASSET_ID | Transformation Logic: This field is populated based on the current location of the asset associated with the Service History. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to. |
| ADDR_KEY | Address Dimension Surrogate Key | W1_ASSET_NODE.NODE_ID | Transformation Logic: The source for this column will be the asset's location. |
| ASSET_INSP_STATUS_KEY | Asset Inspection Status Dimension Surrogate Key | W1_SVC_HIST_TYPE.SVC_HIST_CATEGORY_FLG W1_SVC_HIST_CHAR.CHAR_TYPE_CD W1_SVC_HIST_CHAR.CHAR_VAL | Transformation Logic: Only populated for Service Histories of Inspection Category. This is populated based on the characteristic value configured for the 'Operational Status' characteristic type. If no value is configured, then the default value of 'NA' will be mapped. |

| Target Field | OBIEE Field | Source Field | Transformation/ Calculation Logic |
|----------------|--|------------------------------------|---|
| SP_KEY | Service Point Dimension Surrogate Key | W1_NODE_IDENTIFI ER.W1_ID_VALUE | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated using the MDM SP natural key stored in the ODM system. |
| MTR_DEVICE_KEY | Device Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM device linked to the MDM SP natural key stored in the ODM system. |
| US_KEY | Usage Subscription Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM usage subscription linked to the MDM SP natural key stored in the ODM system. |
| CONTACT_KEY | Contact Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated by deriving the MDM contact linked to the MDM SP natural key stored in the ODM system. |
| PER_KEY | Person Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB person linked to the MDM SP natural key stored in the ODM system. |

| Target Field | OBIEE Field | Source Field | Transformation/ Calculation Logic |
|---------------------------|--|--------------------------|--|
| ACCT_KEY | Account Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB account linked to the MDM SP natural key stored in the ODM system. |
| SA_KEY | Service Agreement Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB SA linked to the MDM SP natural key stored in the ODM system. |
| PREM_KEY | Premise Dimension Surrogate Key | | Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB premise linked to the MDM SP natural key stored in the ODM system. |
| SERVICE_HIST_DATE _KEY | Service History Date Dimension Surrogate Key | W1_SVC_HIST.EFF_D TTM | |
| SERVICE_HIST_TIME _KEY | Service History Time Dimension Surrogate Key | W1_SVC_HIST.EFF_D TTM | |
| SERVICE_HIST_DTT M | Service History Date/ Time | W1_SVC_HIST.EFF_D TTM | |
| SERVICE_HIST_UDD1 _KEY | Service History User Defined Dimension 1 Surrogate Key | | |
| SERVICE_HIST_UDD2 _KEY | Service History User Defined Dimension 2 Surrogate Key | | |
| UDM1 | User Defined Measure 1 | | |
| UDM2 | User Defined Measure 2 | | |
| UDM3 | User Defined Measure 3 | | |
| UDM4 | User Defined Measure 4 | | |

| Target Field | OBIEE Field | Source Field | Transformation/ Calculation Logic |
|---------------------|---|----------------------------|--|
| 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 Dimension 1 | | |
| UDDGEN2 | User Defined Degenerate Dimension 2 | | |
| UDDGEN3 | User Defined Degenerate Dimension 3 | | |
| UDDGEN4 | User Defined Degenerate Dimension 4 | | |
| UDDGEN5 | User Defined Degenerate Dimension 5 | | |
| UDDGENL1 | User Defined Long Degenerate Dimension 1 | | |
| UDDGENL2 | User Defined Long Degenerate Dimension 2 | | |
| UDDGENL3 | User Defined Long Degenerate Dimension 3 | | |
| UDDGENL4 | User Defined Long Degenerate Dimension 4 | | |
| UDDGENL5 | User Defined Long Degenerate Dimension 5 | | |
| UDDFK1_KEY | User Defined Dimension Foreign Key 1 | | |
| UDDFK2_KEY | User Defined Dimension Foreign Key 2 | | |
| UDDFK3_KEY | User Defined Dimension Foreign Key 3 | | |
| UDDFK4_KEY | User Defined Dimension Foreign Key 4 | | |
| UDDFK5_KEY | User Defined Dimension Foreign Key 5 | | |
| FACT_CNT | Fact Count | | |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.E NV_ID | |

| Target Field | OBIEE Field | Source Field | Transformation/ Calculation Logic |
|--------------|-------------------|--------------|--|
| JOB_NBR | Job Number | | |
| | Total Inspections | | Calculation Logic: This is the number of inspections performed on the devices. |

Chapter 3

Configuring Oracle Utilities Operational Device Management

To enable proper data extracts for Oracle Utilities Extractors and Schema, we need to define some parameters in the Oracle Utilities Operational Device Management application. This chapter provides information on the steps to be taken to enable this configuration.

- **BI Configuration Portal**

BI Configuration Portal

The BI Configuration portal holds information on all the BI-oriented configuration tasks. It is a display-only portal that gives a bird's eye view of how much configuration has been set up, and also provides links and guidelines for the areas that need configuration, at the minimum, to successfully run the BI ELT processes from Oracle Utilities Analytics (OUA).

To access the configuration portal in Oracle Utilities Operational Device Management:

1. Go to the **Home** page.
2. Select **Menu > Admin Menu > B > BI Configuration**.

Use the BI Configuration portal to perform the following tasks:

- **BI-Oriented Master Configuration**
- **Bucket Configuration**
- **BI-Oriented Extendable Lookups**

Note: These configurations must be done before starting the ELT (Extract, Load, and Transform) processes on the OUA data warehouse.

BI-Oriented Master Configuration

This section lists every master configuration BO that was created for Oracle Utilities Extractors and Schema and guides you during the configuration. Click the link in the **Master Configuration** zone to navigate to the **Extendable Lookup Maintenance** portal where the lookup values are configured.

| BI-Oriented Master Configuration | |
|----------------------------------|-------------------------------------|
| Business Object | Description |
| 1 W1-BIExtractParameters | BI Extract Parameters Configuration |

Extract Parameters

While extracting the source application data into the BI data warehouse, often there is a need to base the extraction on certain user-defined parameters. For example: To extract only the Operational Device records from the Asset table in Oracle Utilities Operational Device Management, it is necessary to identify the business objects that are used to create operational devices.

Once this data has been setup by the end user, the ELT process can then make use of this information to selectively extract data from the source application and populate it into the warehouse.

The extract parameter master configuration should be configured with a list of extract parameter values. The types of parameters to be configured are as follows:

- **Firmware Parameters:** Holds the firmware identifier types that will be used in retrieving and extracting the appropriate firmware versions of the asset. The Operational Device dimension in the Business Intelligence data warehouse has allocated 10 slots for storing an asset's firmware versions.

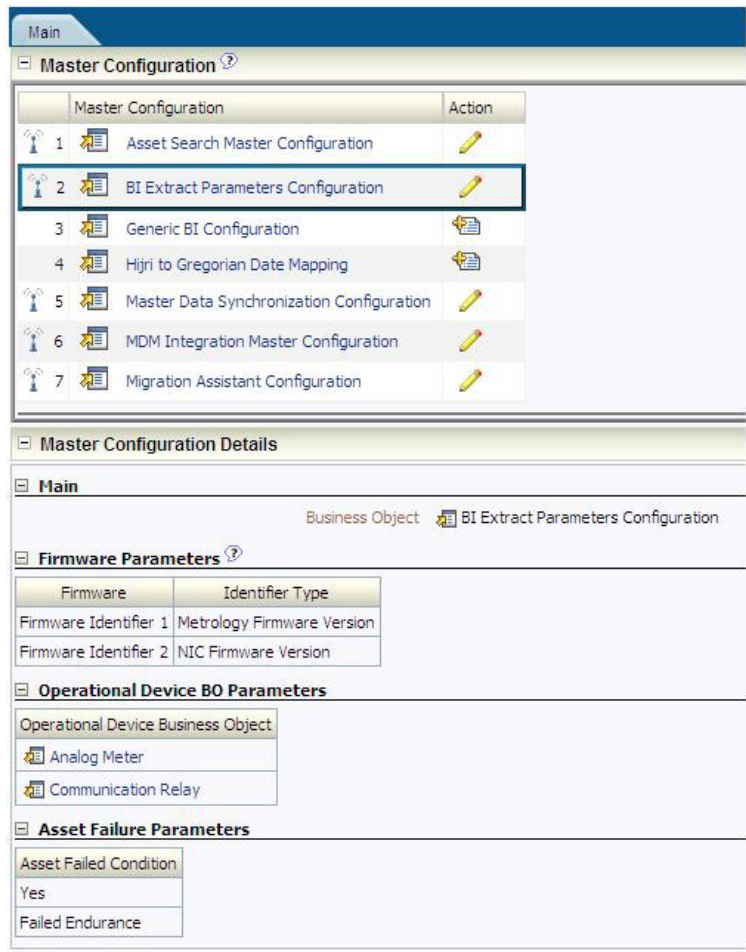
Use this firmware parameter configuration to specify the type of firmware versions that should be extracted into each of the columns.

- **Operation Device BO Parameters:** Holds the business object names that are used to identify the operational devices during the extraction process. The Operational Device Snapshot and Operation Device Accumulation facts and the Operational Device dimension in the Business Intelligence data warehouse are designed to hold only the operational device data.

Use this operational device parameter configuration to specify the business objects that will be used to identify the assets that should be extracted into the above mentioned star schema tables.

- **Asset Failure Parameters:** Holds the failure condition codes to be considered for identifying asset failures during the extraction process. The Operational Device Snapshot and Asset Location facts in the Business Intelligence data warehouse have specific columns that indicate an asset's failure.

Use this asset failure parameter configuration to specify the conditions that should be considered for marking an asset's failure.



Bucket Configuration

Several key performance indicators in BI look at measurement values (for example: the age of an asset in Oracle Utilities Operational Device Management) and classify the value into an age range. Analysts can use these metrics to review the overall asset ages classified into different groupings, or buckets, such as Less Than 6 Months, 6 - 12 Months, or Older Than a Year.

Defining Age Buckets

Use the **Bucket Configuration** portal in Oracle Utilities Operational Device Management to define any one of these types of age buckets:

- Asset Age
- Asset Installation Age
- Asset In Storage Age

These buckets can be defined for a specific asset type or as a default set of buckets that is applicable to all assets that do not have any specific buckets defined on the asset type.

Click the link on the **Bucket Configuration** zone to navigate to the **Bucket Configuration Maintenance** portal where the bucket values can be configured.

| Type | Information | Add |
|------------------|--|-----|
| Asset Type | Analog Residential Meter Type | |
| Age | Analog Residential Age Buckets | |
| Installation Age | Analog Residential Install Age Buckets | |
| In Storage Age | Analog Residential Instore Age Buckets | |
| Default | | |
| Age | Asset Age Default Buckets | |
| Installation Age | Asset Install Age Default Buckets | |
| In Storage Age | Asset In Storage Age Default Buckets | |

Note: The bucket dimension ELT job is configured to be initial load only. Any incremental changes to these buckets after the initial run will not be captured in BI. However, if there arises a need to reconfigure the buckets, then data should be truncated in the BI star schema tables and reloaded to reflect the changes. The bucket dimensions, along with the associated facts (Operational Device Snapshot and Accumulation), should be truncated and reloaded.

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics Administration Guide*.

Asset Age Buckets

The Asset Age bucket configuration defines various bucket ranges that are used to classify how long an asset has been in the system. See the **Bucket Definition Considerations** section for various rules to be followed while defining the buckets.

| Sequence | Start Range | End Range | Description |
|----------|-------------|-----------|--------------------------|
| 10 | 0 | 365 | One Year Old |
| 20 | 365 | 1,825 | One to Five Years Old |
| 30 | 1,825 | 99,999 | More than Five Years Old |

This data is extracted onto the Asset Age dimension in the Business Intelligence data warehouse. This is referenced in the Operational Device Snapshot fact to categorize an asset's age into one of these buckets.

Asset Installation Age Buckets

The Asset Installation Age bucket configuration defines various bucket ranges that are used to classify how long an asset has been installed on the field. See the **Bucket Definition Considerations** section for various rules to be followed while defining the buckets.

| Sequence | Start Range | End Range | Description |
|----------|-------------|-----------|----------------|
| 10 | 0 | 100 | 0 - 100 Days |
| 20 | 100 | 200 | 100 - 200 Days |
| 30 | 200 | 99,999 | > 200 Days |

This data is extracted onto the Asset Install Age dimension in the Business Intelligence data warehouse. This is referenced in the Operational Device Snapshot fact to categorize an asset's install age into one of these buckets.

Asset In Storage Age Buckets

The Asset In Storage Age Buckets configuration defines various bucket ranges that are used to classify how long an asset has been available in the storerooms. See the **Bucket Definition Considerations** section for various rules to be followed while defining the buckets.

| Sequence | Start Range | End Range | Description |
|----------|-------------|-----------|---------------------------|
| 10 | 0 | 30 | Recently Arrived In Store |
| 20 | 30 | 365 | First Year of Storage |
| 30 | 365 | 99,999 | Long Term Storage |

This data is extracted onto the Asset Instore Age dimension in the Business Intelligence data warehouse. This is referenced in the Operational Device Snapshot fact to categorize an asset's instore age into one of these buckets.

Bucket Definition Considerations

To define the age bucket ranges follow these rules:

- At least one bucket has the start range as 0.
- At least one bucket has the end range as 99999.
- No overlapping between buckets. For example: 0-10, 5-20 is an incorrect way to define buckets.
- No gap between buckets. For example: 0-10, 15-20 or 0-10, 11-15 is an incorrect way to define buckets.

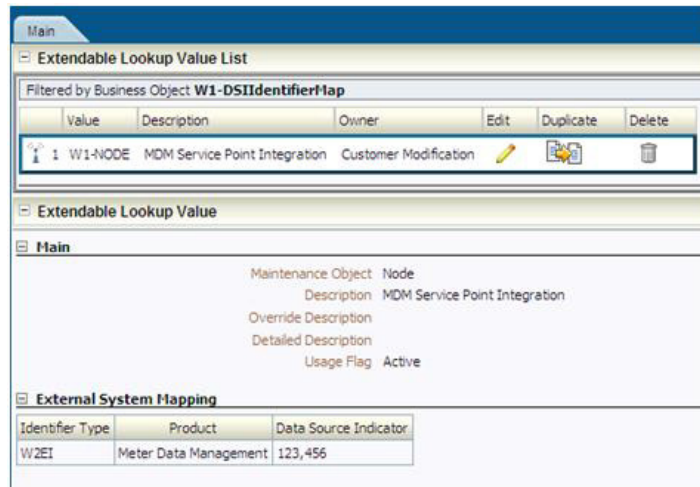
BI-Oriented Extendable Lookups

This section lists all the extendable lookup BOs that were created for Business Intelligence, and guides you to set up the lookup values. Click the link on the **Extendable Lookup** zone to navigate to the **Extendable Lookup Maintenance** portal where the lookup values are configured.

| Business Object | Description |
|------------------------|--------------------|
| 1 W1-DSIIIdentifierMap | DSI Identifier Map |

DSI Identifier Mapping

The data source indicator (DSI) identifier mapping defines the integration points of Oracle Utilities Operational Device Management with other Oracle Utilities products (such as Oracle Utilities Meter Data Management). This information is pulled into the BI data warehouse to be used by the ELT processes. During the actual ELT, Oracle Utilities Operational Device Management facts are joined with Oracle Utilities Meter Data Management dimensions using the DSI identifier mapping information.



The Business Intelligence data warehouse uses Service Point integration between Oracle Utilities Operational Device Management with Oracle Utilities Meter Data Management to join Oracle Utilities Operational Device Management facts and Oracle Utilities Meter Data Management / Oracle Utilities Customer Care and Billing dimensions. Use the DSI identifier mapping to configure the following:

- **Maintenance Object:** The maintenance object of the entity being integrated between Oracle Utilities Operational Device Management and the external system.

Note: In the OUASA 2.4.1 release, the ELT processes will extract DSI mapping for 'Node' maintenance object from the source Oracle Utilities Operational Device Management system.

- **External System Mapping:** Configure the following items under this group:
 - **Identifier Type:** The identifier type code used to identify the external identifier number from the integrating system.
 - **Product:** The product to which Oracle Utilities Operational Device Management is being integrated with.
 - **Data Source Indicator:** The unique identifier of the integrating system. This is the environment ID of the Oracle Utilities Meter Data Management system. It can be identified from the Oracle Utilities Meter Data Management system using the below query.

```
select ENV_ID from F1_INSTALLATION;
```