

**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.

## Documentation Accessibility

For information about configuring and using accessibility features for Oracle Utilities Analytics, see the documentation at [http://docs.oracle.com/cd/E23943\\_01/bi.1111/e10544/appaccess.htm#BIEUG2756](http://docs.oracle.com/cd/E23943_01/bi.1111/e10544/appaccess.htm#BIEUG2756).

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/us/corporate/accessibility/index.html>.

### Access to Oracle Support

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## Related Documents

For more information, see the following documents:

- *Oracle Utilities Analytics Release Notes*
- *Oracle Utilities Analytics Getting Started Guide*
- *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 Operational Device Management Documentation Library

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## Conventions

The following notational conventions are used in this document:

| <b>Notation</b> | <b>Indicates</b>   |
|-----------------|--|
| <b>boldface</b> | Graphical user interface elements associated with an action, terms defined in text, or terms defined 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

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## Overview

This guide provides the data mapping information from the Oracle Utilities Extractors and Schema for Oracle Utilities Operational Device Management source system to the Oracle Utilities Extractors and Schema target product, along with the rules of data transformation.

### Terminologies

This section describes the terminology used for data maps included in the 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     | <b>Type 1</b> - Existing records are updated directly.<br><br><b>Type 2</b> - Existing records are deactivated and changes are captured by inserting new effective records. The existing records are deactivated by assigning an effective end date of the current date. The new records will have effective start date of the current date and effective end date of a significantly future date. |

| Property                       | Value  |
|--------------------------------|--|
| Fact Type                      | Whether this is a snapshot or transactional fact table.<br><br><b>Snapshot</b> - Captures a snapshot view of the data as available in the source system during that period (monthly or weekly). Each snapshot's data is stored independently.<br><br><b>Accumulation</b> - Data from the source system is accumulated periodically. Changes from source system will be merged with the existing data. Multiple copies of the same data will not be maintained. |
| Source System Driver Table     | Name of the table in source database on which the data is primarily based.   |
| Oracle Data Integrator 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                       | Resides in the replication layer and fetches the base values from the replication tables as a starting point for further transformations to be done by the Oracle Data Integrator interfaces.  |
| Materialized View              | Names of the materialized views delivered with the product for a specific fact table.<br><br>These materialized views are designed to support all of the OBIEE answers delivered with the product. Refreshing these materialized views will be taken care by separate ETL jobs.  |

## Fields

The Fields table lists the individual properties of each field in the fact or dimension table. It includes the following columns:

| Property             | Value   |
|----------------------|---|
| Target Field         | Name of the column in the fact or dimension table present in the data warehouse. The extracted/transformed data is loaded here. |
| Description          | Description of the target field   |
| Source Field         | Name of the field from the source application used to load the target field either directly or after transformation.            |
| Transformation Logic | Specifies the details of how the data from the source field is transformed before being populated into the target field.        |

## Field Categories

The Field Categories table lists the categories under which the fields in a particular fact or dimension are grouped. The categories presented are as below:

| Category      | Details   |
|---------------|---|
| Surrogate Key | The primary key on the fact/dimension table maintained within the data warehouse. |

| <b>Category</b>         | <b>Details</b>   |
|-------------------------|--|
| Natural Keys            | <p>The set of columns from the source system define the granularity of the fact or dimension table. The natural key columns from the source along with certain other data load attributes can be used to uniquely identify a record in the table.</p> <p>The additional columns needed for the identification depend on the type of the table as listed below:</p> <ul style="list-style-type: none"> <li>• SCD Type 1 Dimension - Data Source Indicator</li> <li>• SCD Type 2 Dimension - Effective Start Date, Effective End Date, Data Source Indicator</li> <li>• Accumulation Fact - Data Source Indicator</li> <li>• Snapshot Fact - Snapshot Date, Data Source Indicator</li> </ul> |
| Attributes              | Hold descriptive data from the source system and are typically available in dimension tables.  |
| Measures                | Hold numerical values based data that is calculated from the source system data and are typically available on fact tables.  |
| Degenerate Dimensions   | Hold descriptive data from the source system and are typically available in fact tables. These cannot be included into any of the available dimensions.  |
| Foreign Keys            | Foreign key references on the fact tables to the dimension tables.   |
| User Defined Attributes | Additional fields available to customers for extending the star schemas. These fields will not be populated out of the box. Customers need to customize the ETL and populate these fields.   |
| Data Load Attributes    | Hold the date/time information, job number details, etc, related to the ETL processes, that are needed for audit purposes.   |





# Chapter 2

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## 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 tables:

- [Dimensions](#)
- [Shared Dimensions](#)
- [User Defined Dimensions](#)
- [Facts](#)

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# Dimensions

## 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  |
| ODI Package Name  | B1_PKG_CD_ASSET_DISP |
| ETL View Name     | B1_D_ASSET_DISP_VW   |

### Fields

| Target Field                   | Description                      | Source Field   | Transformation Logic  |
|--------------------------------|----------------------------------|--|---|
| <b>Surrogate Key</b>           |                                  |  |   |
| ASSET_DISP_KEY                 | Asset Disposition Dimension Key  |  | This field is populated from the B1_ASSET_DISP_SEQ sequence.  |
| <b>Natural Keys</b>            |                                  |  |   |
| ASSET_DISP_CD                  | Asset Disposition Code           | F1_EXT_LOOKUP_VAL_L.F1_EXT_LOOKUP_VAL_LUE  |   |
| <b>Attributes</b>              |                                  |  |   |
| ASSET_DISP_DESCR               | Asset Disposition Description    | F1_EXT_LOOKUP_VAL_L.DESCR_OVRD<br>F1_EXT_LOOKUP_VAL_L.DESCR<br>F1_EXT_LOOKUP_VAL_L.LANGUAGE_CD | This field is populated with the description of the asset disposition from Lookup Language table for ASSET_DISP_FLG lookup field.<br>If an override description is not available, the regular description is extracted. |
| <b>User Defined Attributes</b> |                                  |  |   |
| UDF1_CD                        | User Defined Field 1 Code        |  |   |
| UDF1_DESCR                     | User Defined Field 1 Description |  |   |
| UDF2_CD                        | User Defined Field 2 Code        |  |   |

| <b>Target Field</b>         | <b>Description</b>                   | <b>Source Field</b>        | <b>Transformation Logic</b>  |
|-----------------------------|--------------------------------------|----------------------------|--|
| UDF2_DESCR                  | User Defined Field 2<br>Description  |                            |  |
| UDF3_CD                     | User Defined Field 3 Code            |                            |  |
| UDF3_DESCR                  | User Defined Field 3<br>Description  |                            |  |
| UDF4_CD                     | User Defined Field 4 Code            |                            |  |
| UDF4_DESCR                  | User Defined Field 4<br>Description  |                            |  |
| UDF5_CD                     | User Defined Field 5 Code            |                            |  |
| UDF5_DESCR                  | User Defined Field 5<br>Description  |                            |  |
| UDF6_CD                     | User Defined Field 6 Code            |                            |  |
| UDF6_DESCR                  | User Defined Field 6<br>Description  |                            |  |
| UDF7_CD                     | User Defined Field 7 Code            |                            |  |
| UDF7_DESCR                  | User Defined Field 7<br>Description  |                            |  |
| UDF8_CD                     | User Defined Field 8 Code            |                            |  |
| UDF8_DESCR                  | User Defined Field 8<br>Description  |                            |  |
| UDF9_CD                     | User Defined Field 9 Code            |                            |  |
| UDF9_DESCR                  | User Defined Field 9<br>Description  |                            |  |
| UDF10_CD                    | User Defined Field 10 Code           |                            |  |
| UDF10_DESCR                 | User Defined Field 10<br>Description |                            |  |
| <b>Data Load Attributes</b> |                                      |                            |  |
| DATA_LOAD_DTTM              | Data Load Date/Time                  |                            | This field is populated with the load timestamp value.   |
| UPDATE_DTTM                 | Update Date/Time                     |                            |  |
| DATA_SOURCE_IND             | Data Source Indicator                | CI_INSTALLATION.ENV<br>_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |

| Target Field | Description | Source Field | Transformation Logic   |
|--------------|-------------|--------------|--|
| JOB_NBR      | Job Number  |              | This field is populated with the ODI job execution session 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   |
| ODI Package Name  | B1_PKG_CD_ASSET_AGE |
| ETL View Name     | B1_D_ASSET_AGE_VW   |

### Fields

| Target Field         | Description             | Source Field   | Transformation Logic   |
|----------------------|-------------------------|--|--|
| <b>Surrogate Key</b> |                         |  |  |
| ASSET_AGE_KEY        | Asset Age Dimension Key |  | This field is populated from the B1_ASSET_AGE_SEQ sequence.  |
| <b>Natural Keys</b>  |                         |  |  |
| ASSET_TYPE_CD        | Asset Type Code         | W1_BKT_CONFIG_REL_OBJ.PK_VALUE1                              |  |
| <b>Attributes</b>    |                         |  |  |
| ASSET_AGE_DESCR      | Asset Age Description   | W1_BKT_CONFIG_VAL_L.DESCR<br>W1_BKT_CONFIG_VAL_L.LANGUAGE_CD | This field is populated with the description of the asset age from Lookup Language table for ASSET_AGE_FLG lookup field.<br><br>If an override description is not available, the regular description is extracted. |

| <b>Target Field</b> | <b>Description</b> | <b>Source Field</b>               | <b>Transformation Logic</b>   |
|---------------------|--------------------|-----------------------------------|---|
| ASSET_AGE_ST_RANGE  | Age Start Range    | W1_BKT_CONFIG_VAL.<br>START_RANGE | This field is populated based on the bucket ranges defined for the business object W1-WAssetAgeBuckets. |
| ASSET_AGE_ED_RANGE  | Age End Range      | W1_BKT_CONFIG_VAL.<br>END_RANGE   | This field is populated based on the bucket ranges defined for the business object W1-WAssetAgeBuckets. |

### **User Defined Attributes**

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

| Target Field                | Description           | Source Field           | Transformation Logic   |
|-----------------------------|-----------------------|------------------------|--|
| <b>Data Load Attributes</b> |                       |                        |  |
| DATA_LOAD_DTTM              | Data Load Date/Time   |                        | This field is populated with the load timestamp value.   |
| UPDATE_DTTM                 | Update Date/Time      |                        |  |
| DATA_SOURCE_IND             | Data Source Indicator | CI_INSTALLATION.ENV_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |
| JOB_NBR                     | Job Number            |                        | This field is populated with the ODI job execution session 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           |
| ODI Package Name  | B1_PKG_CD_ASSET_INSTALL_AGE |
| ETL View Name     | B1_D_ASSET_INSTALL_AGE_VW   |

## Fields

| Target Field                   | Description                      | Source Field   | Transformation Logic   |
|--------------------------------|----------------------------------|--|--|
| <b>Surrogate Key</b>           |                                  |  |  |
| ASSET_INSTALL_AGE_KEY          | Asset Install Age Dimension Key  |  | This field is populated from the B1_ASSET_INSTALL_AGE_SEQ sequence.  |
| <b>Natural Keys</b>            |                                  |  |  |
| ASSET_TYPE_CD                  | Asset Type Code                  | W1_BKT_CONFIG_REL_OBJ.PK_VALUE1                                  |  |
| <b>Attributes</b>              |                                  |  |  |
| ASSET_INSTALL_AGE_DESCR        | Asset Install Age Description    | W1_BKT_CONFIG_VAL_L.DESCR<br><br>W1_BKT_CONFIG_VAL_L.LANGUAGE_CD | This field is populated with the description of the asset install age from the Lookup Language table for ASSET_INSTALL_AGE_FLG lookup field.<br><br>If an override description is not available, the regular description is extracted. |
| ASSET_INSTALL_AGE_ST_RANGE     | Asset Install Age Start Range    | W1_BKT_CONFIG_VAL.START_RANGE                                    | This field is populated based on the bucket ranges defined for the business object W1-WAssetAgeBuckets.  |
| ASSET_INSTALL_AGE_ED_RANGE     | Asset Install Age End Range      | W1_BKT_CONFIG_VAL.END_RANGE                                      | This field is populated based on the bucket ranges defined for the business object W1-WAssetAgeBuckets.  |
| <b>User Defined Attributes</b> |                                  |  |  |
| 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 |  |  |



| Target Field | Description                       | Source Field | Transformation Logic |
|--------------|-----------------------------------|--------------|----------------------|
| 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 Load Attributes

|                 |                       |                        |  |
|-----------------|-----------------------|------------------------|--|
| DATA_LOAD_DTTM  | Data Load Date/Time   |                        | This field is populated with the load timestamp value.   |
| UPDATE_DTTM     | Update Date/Time      |                        |  |
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |
| JOB_NBR         | Job Number            |                        | This field is populated with the ODI job execution session 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           |
| ODI Package Name  | B1_PKG_CD_ASSET_INSTORE_AGE |
| ETL View Name     | B1_D_ASSET_INSTORE_AGE_VW   |

### Fields

| Target Field                  | Description                     | Source Field   | Transformation Logic   |
|-------------------------------|---------------------------------|--|--|
| <b>Surrogate Key</b>          |                                 |  |  |
| ASSET_INSTORE_AGE_KEY         | Asset Instore Age Dimension Key |  | This field is populated from the B1_ASSET_INSTORE_AGE_SEQ sequence.  |
| <b>Natural Keys</b>           |                                 |  |  |
| ASSET_TYPE_CD                 | Asset Type Code                 | W1_BKT_CONFIG_REL_OBJ.PK_VALUE1                              |  |
| <b>Attributes</b>             |                                 |  |  |
| ASSET_INSTORE_AGE_DESCR       | Asset Instore Age Description   | W1_BKT_CONFIG_VAL_L.DESCR<br>W1_BKT_CONFIG_VAL_L.LANGUAGE_CD | This field is populated with the description of the asset instore age from the Lookup Language table for ASSET_INSTORE_AGE_FLG lookup field.<br><br>If an override description is not available, the regular description is extracted. |
| ASSET_INSTORE_AGE_START_RANGE | Asset Instore Age Start Range   | W1_BKT_CONFIG_VAL.L.START_RANGE                              | This field is populated based on the bucket ranges defined for the business object W1-WAssetAgeBuckets.  |
| ASSET_INSTORE_AGE_END_RANGE   | Asset Instore Age End Range     | W1_BKT_CONFIG_VAL.L.END_RANGE                                | This field is populated based on the bucket ranges defined for the business object W1-WAssetAgeBuckets.  |

| <b>Target Field</b>            | <b>Description</b>                | <b>Source Field</b> | <b>Transformation Logic</b>                            |
|--------------------------------|-----------------------------------|---------------------|--|
| <b>User Defined Attributes</b> |                                   |                     |  |
| 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 |                     |  |
| <b>Data Load Attributes</b>    |                                   |                     |  |
| DATA_LOAD_DTTM                 | Data Load Date/Time               |                     | This field is populated with the load timestamp value. |
| UPDATE_DTTM                    | Update Date/Time                  |                     |  |

| Target Field    | Description           | Source Field           | Transformation Logic   |
|-----------------|-----------------------|------------------------|--|
| DATA_SOURCE_IND | Data Source Indicator | CI_INSTALLATION.ENV_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |
| JOB_NBR         | Job Number            |                        | This field is populated with the ODI job execution session 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*.

## 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             |
| ODI Package                | B1_PKG_CD_OPR_DEVICE |
| ETL View                   | B1_D_OPR_DEVICE_VW   |

### Fields

| Target Field         | Description                      | Source Field | Transformation Logic   |
|----------------------|----------------------------------|--------------|--|
| <b>Surrogate Key</b> |                                  |              |  |
| OPR_DEVICE_KEY       | Operational Device Dimension Key |              | This field is populated from the B1_OPR_DEVICE_SEQ sequence. |

| Target Field        | Description        | Source Field                        | Transformation Logic   |
|---------------------|--------------------|-------------------------------------|--|
| <b>Natural Keys</b> |                    |                                     |  |
| SRC_ASSET_ID        | Source Asset ID    |                                     | This field is populated with only those assets whose BO name (BUS_OBJ_CD) is as configured in the BI config table.   |
| <b>Attributes</b>   |                    |                                     |  |
| FIRMWARE1           | Firmware Version 1 | W1_ASSET_IDENTIFIER<br>.W1_ID_VALUE | 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<br>.W1_ID_VALUE | 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. |
| FIRMWARE3           | Firmware Version 3 | W1_ASSET_IDENTIFIER<br>.W1_ID_VALUE | 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<br>.W1_ID_VALUE | 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<br>.W1_ID_VALUE | 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. |

| <b>Target Field</b> | <b>Description</b>  | <b>Source Field</b>                 | <b>Transformation Logic</b>   |
|---------------------|---------------------|-------------------------------------|---|
| FIRMWARE6           | Firmware Version 6  | W1_ASSET_IDENTIFIER<br>.W1_ID_VALUE | 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<br>.W1_ID_VALUE | 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.  |
| FIRMWARE8           | Firmware Version 8  | W1_ASSET_IDENTIFIER<br>.W1_ID_VALUE | 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<br>.W1_ID_VALUE | 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<br>.W1_ID_VALUE | 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. |

#### **User Defined Attributes**

|            |                                  |
|------------|----------------------------------|
| 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        |

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

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## Shared Dimensions

Shared dimensions are used in the star schemas of other source products as well. The other products also populate these shared dimensions with their data. The data source indicator (DSI) column plays a vital role in identifying the records belonging to a specific source product.

### 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               | CD_ADDR        |
| Table Type                 | Dimension      |
| SCD Type                   | Type 2         |
| Source System Driver Table | W1_NODE        |
| ODI Package                | B1_PKG_CD_ADDR |
| ETL View                   | B1_D_ADDR_VW   |

#### Fields

| Target Field         | Description       | Source Field  | Transformation Logic  |
|----------------------|-------------------|---|---|
| <b>Surrogate Key</b> |                   |   |   |
| ADDR_KEY             | Address Dimension |   | This field is populated from the SPL_ADDR_SEQ sequence.   |
| <b>Natural Keys</b>  |                   |   |   |
| SRC_ADDR_ID          | Address ID        |   |   |
| <b>Attributes</b>    |                   |   |   |
| ADDR_INFO            | Address           | W1_NODE.ADDRESS1<br>W1_NODE.CITY<br>W1_NODE.STATE<br>W1_NODE.POSTAL | This field is populated from the W1_NODE table based on the concatenation of the address, city, state, and postal code. |
| 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  |   |



| <b>Target Field</b>            | <b>Description</b>                  | <b>Source Field</b>         | <b>Transformation Logic</b> |
|--------------------------------|-------------------------------------|-----------------------------|-----------------------------|
| CITY                           | City                                | W1_NODE.CITY                |                             |
| COUNTY                         | County                              | W1_NODE.COUNTY              |                             |
| POSTAL                         | Postal Code                         | W1_NODE.POSTAL              |                             |
| STATE_CD                       | State Code                          | W1_NODE.STATE               |                             |
| STATE_DESCR                    | State Description                   | CI_STATE_L.DESCR            |                             |
| COUNTRY_CD                     | Country Code                        | W1_NODE.COUNTRY             |                             |
| COUNTRY_DESCR                  | Country Description                 | CI_COUNTRY_L.DESCR          |                             |
| CROSS_STREET                   | Cross Street                        | W1_NODE.W1_CROSS_S<br>TREET |                             |
| SUBURB                         | Suburb                              | W1_NODE.W1_SUBURB           |                             |
| GEO_CODE                       | Geographical Code                   | W1_NODE.GEO_CODE            |                             |
| <b>User Defined Attributes</b> |                                     |                             |                             |
| UDF1_CD                        | User Defined Field 1 Code           |                             |                             |
| UDF1_DESCR                     | User Defined Field 1<br>Description |                             |                             |
| UDF2_CD                        | User Defined Field 2 Code           |                             |                             |
| UDF2_DESCR                     | User Defined Field 2<br>Description |                             |                             |
| UDF3_CD                        | User Defined Field 3 Code           |                             |                             |
| UDF3_DESCR                     | User Defined Field 3<br>Description |                             |                             |
| UDF4_CD                        | User Defined Field 4 Code           |                             |                             |
| UDF4_DESCR                     | User Defined Field 4<br>Description |                             |                             |
| UDF5_CD                        | User Defined Field 5 Code           |                             |                             |
| UDF5_DESCR                     | User Defined Field 5<br>Description |                             |                             |
| UDF6_CD                        | User Defined Field 6 Code           |                             |                             |
| UDF6_DESCR                     | User Defined Field 6<br>Description |                             |                             |
| UDF7_CD                        | User Defined Field 7 Code           |                             |                             |
| UDF7_DESCR                     | User Defined Field 7<br>Description |                             |                             |
| UDF8_CD                        | User Defined Field 8 Code           |                             |                             |
| UDF8_DESCR                     | User Defined Field 8<br>Description |                             |                             |

| <b>Target Field</b>         | <b>Description</b>                | <b>Source Field</b>    | <b>Transformation Logic</b>  |
|-----------------------------|-----------------------------------|------------------------|--|
| 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 |                        |  |
| UDF11_CD                    | User Defined Field 11 Code        |                        |  |
| UDF11_DESCR                 | User Defined Field 11 Description |                        |  |
| UDF12_CD                    | User Defined Field 12 Code        |                        |  |
| UDF12_DESCR                 | User Defined Field 12 Description |                        |  |
| UDF13_CD                    | User Defined Field 13 Code        |                        |  |
| UDF13_DESCR                 | User Defined Field 13 Description |                        |  |
| UDF14_CD                    | User Defined Field 14 Code        |                        |  |
| UDF14_DESCR                 | User Defined Field 14 Description |                        |  |
| UDF15_CD                    | User Defined Field 15 Code        |                        |  |
| UDF15_DESCR                 | User Defined Field 15 Description |                        |  |
| UDF16_CD                    | User Defined Field 16 Code        |                        |  |
| UDF16_DESCR                 | User Defined Field 16 Description |                        |  |
| <b>Data Load Attributes</b> |                                   |                        |  |
| EFF_START_DTTM              | Effective Start Date/Time         |                        |  |
| EFF_END_DTTM                | Effective End Date/Time           |                        |  |
| DATA_LOAD_DTTM              | Data Load Date/Time               |                        | This field is populated with the load timestamp value.   |
| DATA_SOURCE_IND             | Data Source Indicator             | CI_INSTALLATION.ENV_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |

| Target Field | Description | Source Field | Transformation Logic   |
|--------------|-------------|--------------|--|
| JOB_NBR      | Job Number  |              | This field is populated with the ODI job execution session number. |

## Asset Dimension

The Asset dimension extracts all assets defined in the 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             |
| ODI Package                | B1_PKG_CD_UTIL_ASSET |
| ETL View                   | B1_D_UTIL_ASSET_VW   |

### Fields

| Target Field         | Description               | Source Field                    | Transformation Logic   |
|----------------------|---------------------------|---------------------------------|--|
| <b>Surrogate Key</b> |                           |                                 |  |
| UTIL_ASSET_KEY       | Utility Asset Dimension   |                                 | This field is populated from the B1_UTIL_ASSET_SEQ sequence.   |
| <b>Natural Keys</b>  |                           |                                 |  |
| SRC_UTIL_ASSET_ID    | Source Utility Asset ID   | W1_ASSET.ASSET_ID               |  |
| <b>Attributes</b>    |                           |                                 |  |
| UTIL_ASSET_INFO      | Utility Asset Information | W1_ASSET.IDENTIFIER.W1_ID_VALUE | This field is populated with the badge number retrieved based on the Asset ID populated.             |
| UTIL_ASSET_DESCR     | Utility Asset Description | W1_ASSET.DESCRLONG              | This field is populated with the first 254 characters from the respective column in the Asset table. |
| SPEC_CD              | Specification Code        | W1_ASSET.SPECIFICATION_CD       |  |
| SPEC_DESCR           | Specification Description | W1_SPECIFICATION_L.DESCR100     |  |

| Target Field           | Description                        | Source Field  | Transformation Logic  |
|------------------------|------------------------------------|---|---|
| MANUFACTURER_CD        | Manufacturer Code                  | W1_SPECIFICATION.<br>W1_MANUFACTURER_CD                         |   |
| MANUFACTURER_DESCR     | Manufacturer Description           | W1_MANUFACTURER_L.<br>.DESCR100                                 |   |
| MODEL                  | Model                              | W1_SPECIFICATION_ID<br>ENTIFIER.W1_ID_VALU<br>E                 | This field is populated based on the specification code on the asset and where the specification identifier flag is W1MD.   |
| UTIL_ASSET_TYPE_CD     | Utility Asset Type Code            | W1_ASSET.ASSET_TYPE<br>_CD                                      |   |
| UTIL_ASSET_TYPE_DESCR  | Utility Asset Type Description     | W1_ASSET_TYPE_L.DES<br>CR100                                    |   |
| UTIL_ASSET_CLASS_CD    | Utility Asset Class Code           | W1_ASSET_TYPE.ASSET<br>_CLASS_FLG                               |   |
| UTIL_ASSET_CLASS_DESCR | Utility Asset Class Description    | CI_LOOKUP_VAL_L.DE<br>SCR_OVRD<br><br>CI_LOOKUP_VAL_L.DE<br>SCR | This field is populated with the description from the Lookup Language table for the lookup field ASSET_CLASS_FLG.<br><br>If an override description is not available, regular description is extracted. |
| UTIL_ASSET_CAT_CD      | Utility Asset Category Code        | W1_ASSET_TYPE.ASSET<br>_CAT_FLG                                 |   |
| UTIL_ASSET_CAT_DESCR   | Utility Asset Category Description | CI_LOOKUP_VAL_L.DE<br>SCR_OVRD<br><br>CI_LOOKUP_VAL_L.DE<br>SCR | This field is populated with the description from the Lookup Language table for the lookup field ASSET_CAT_FLG.<br><br>If an override description is not available, regular description is extracted.   |
| UTIL_ASSET_COND_SCORE  | Asset Condition Score              | W1_ASSET.CONDITION<br>_RATING                                   |   |
| UTIL_ASSET_CONF_RAT    | Confidence Rating                  | W1_ASSET.CONFIDENC<br>E_RATING                                  |   |

| Target Field                   | Description                                 | Source Field                      | Transformation Logic   |
|--------------------------------|---|-----------------------------------|--|
| COND_SCORE_BKT_ST_RANGE        | Asset Condition Score<br>Bucket Start Range | F1_BKT_CONFIG_VAL.BKT_START_RANGE | This field is populated with the start range of the condition score bucket for which this asset's condition score falls into. It goes hand in hand with the Asset Condition Score Bucket End Range to constitute the actual bucket range the asset's score falls into.<br><br><b>Note:</b> For details about how the buckets are configured, see <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> . |
| COND_SCORE_BKT_ED_RANGE        | Asset Condition Score<br>Bucket End Range   | F1_BKT_CONFIG_VAL.BKT_END_RANGE   | This field is populated with the end range of the condition score bucket for which this asset's condition score falls into. It goes hand in hand with the Asset Condition Score Bucket Start Range to constitute the actual bucket range the asset's score falls into.<br><br><b>Note:</b> For details about how the buckets are configured, see <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> . |
| COND_SCORE_BKT_DESCR           | Asset Condition Score<br>Bucket Description | F1_BKT_CONFIG_VAL.L.DESCR         | This field is populated with the description of the condition score bucket for which this asset's condition score falls into.<br><br><b>Note:</b> For details about how the buckets are configured, see <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> .  |
| <b>User Defined Attributes</b> |   |                                   |  |
| UDF1_CD                        | User Defined Field 1 Code                   |                                   |  |
| UDF1_DESCR                     | User Defined Field 1<br>Description         |                                   |  |
| UDF2_CD                        | User Defined Field 2 Code                   |                                   |  |

| <b>Target Field</b>         | <b>Description</b>                   | <b>Source Field</b>        | <b>Transformation Logic</b>  |
|-----------------------------|--------------------------------------|----------------------------|--|
| UDF2_DESCR                  | User Defined Field 2<br>Description  |                            |  |
| UDF3_CD                     | User Defined Field 3 Code            |                            |  |
| UDF3_DESCR                  | User Defined Field 3<br>Description  |                            |  |
| UDF4_CD                     | User Defined Field 4 Code            |                            |  |
| UDF4_DESCR                  | User Defined Field 4<br>Description  |                            |  |
| UDF5_CD                     | User Defined Field 5 Code            |                            |  |
| UDF5_DESCR                  | User Defined Field 5<br>Description  |                            |  |
| UDF6_CD                     | User Defined Field 6 Code            |                            |  |
| UDF6_DESCR                  | User Defined Field 6<br>Description  |                            |  |
| UDF7_CD                     | User Defined Field 7 Code            |                            |  |
| UDF7_DESCR                  | User Defined Field 7<br>Description  |                            |  |
| UDF8_CD                     | User Defined Field 8 Code            |                            |  |
| UDF8_DESCR                  | User Defined Field 8<br>Description  |                            |  |
| UDF9_CD                     | User Defined Field 9 Code            |                            |  |
| UDF9_DESCR                  | User Defined Field 9<br>Description  |                            |  |
| UDF10_CD                    | User Defined Field 10 Code           |                            |  |
| UDF10_DESCR                 | User Defined Field 10<br>Description |                            |  |
| <b>Data Load Attributes</b> |                                      |                            |  |
| EFF_START_DTTM              | Effective Start Date/Time            |                            |  |
| EFF_END_DTTM                | Effective End Date/Time              |                            |  |
| DATA_LOAD_DTTM              | Data Load Date/Time                  |                            | This field is populated with the load timestamp value.   |
| DATA_SOURCE_IND             | Data Source Indicator                | CI_INSTALLATION.ENV<br>_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |

| Target Field | Description | Source Field | Transformation Logic   |
|--------------|-------------|--------------|--|
| JOB_NBR      | Job Number  |              | This field is populated with the ODI job execution session 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               | CD_ASSET_INSP_STATUS        |
| Table Type                 | Dimension                   |
| SCD Type                   | Type 1                      |
| Source System Driver Table | CI_LOOKUP_VAL_L             |
| ODI Package                | B1_PKG_CD_ASSET_INSP_STATUS |
| ETL View                   | B1_D_ASSET_INSP_STATUS_VW   |

### Fields

| Target Field            | Description                                     | Source Field  | Transformation Logic   |
|-------------------------|---|---|--|
| <b>Surrogate Key</b>    |   |   |  |
| ASSET_INSP_STATUS_KEY   | Asset Inspection Status Dimension Surrogate Key |   | This field is populated from the B1_ASSET_INSP_STATUS_SEQ sequence.  |
| <b>Natural Keys</b>     |   |   |  |
| ASSET_INSP_STATUS_CD    | Asset Inspection Status Code                    | CI_LOOKUP_VAL_L.FIELD_VALUE                         | This field is populated with the lookup value for the lookup field INSPECTION_INDICATOR_FLG.   |
| <b>Attributes</b>       |   |   |  |
| ASSET_INSP_STATUS_DESCR | Asset Inspection Status Description             | CI_LOOKUP_VAL_L.DESCR<br>CI_LOOKUP_VAL_L.DESCR_OVRD | This field is populated with the description from Lookup Language table for the ASSET_INSP_STATUS_FLG lookup field.<br><br>If override description is not available, regular description is extracted. |

| <b>Target Field</b>            | <b>Description</b>                | <b>Source Field</b> | <b>Transformation Logic</b>                            |
|--------------------------------|-----------------------------------|---------------------|--|
| <b>User Defined Attributes</b> |                                   |                     |  |
| 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 |                     |  |
| <b>Data Load Attributes</b>    |                                   |                     |  |
| UPDATE_DTTM                    | Update Date and Time              |                     |  |
| DATA_LOAD_DTTM                 | Data Load Date/Time               |                     | This field is populated with the load timestamp value. |



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

## Location Dimension

The Location dimension extracts data from the Location entity in Oracle Utilities Work and Asset Management system. The location hierarchy is extracted up to 10 levels.

### Properties

| Property                   | Value              |
|----------------------------|--------------------|
| Target Table               | CD_LOCATION        |
| Table Type                 | Dimension          |
| SCD Type                   | Type 2             |
| Source System Driver Table | W1_NODE            |
| ODI Package                | B1_PKG_CD_LOCATION |
| ETL View                   | B1_D_LOCATION_VW   |

### Fields

| Target Field         | Description                      | Source Field     | Transformation Logic   |
|----------------------|----------------------------------|------------------|--|
| <b>Surrogate Key</b> |                                  |                  |  |
| LOCATION_KEY         | Location Dimension Surrogate Key |                  | This field is populated from the B1_LOCATION_SEQ sequence.                               |
| <b>Natural Keys</b>  |                                  |                  |  |
| SRC_LOCATION_ID      | Source Location ID               | W1_NODE.NODE_ID  |  |
| <b>Attributes</b>    |                                  |                  |  |
| LOCATION_INFO        | Location Information             | W1_NODE.DESCR100 | <b>Note:</b> This field can be customized to override the value provided out-of-the-box. |

| Target Field              | Description                     | Source Field  | Transformation Logic   |
|---------------------------|---------------------------------|---|--|
| 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_CLASS_FLG                              |  |
| LOCATION_CLASS_DESCR      | Location Class Description      | CI_LOOKUP_VAL_L.DESCR_OVRD<br><br>CI_LOOKUP_VAL_L.DESCR | This field is populated with the description from the Lookup Language table for the lookup field LOCATION_CLASS_FLG.<br><br>If an override description is not available, regular description is extracted                  |
| LOCATION_TYPE_CLASS_CD    | Location Type Class Code        | W1_NODE_TYPE.NODE_CLASS_FLG                             |  |
| LOCATION_TYPE_CLASS_DESCR | Location Type Class Description | CI_LOOKUP_VAL_L.DESCR_OVRD<br><br>CI_LOOKUP_VAL_L.DESCR | This field is populated with the description from the Lookup Language table for the lookup field NODE_CLASS_FLG.<br><br>If an override description is not available, regular description is extracted.                     |
| LOCATION_CATEGORY         | Location Category               |   | This field is populated with: <ul style="list-style-type: none"> <li>• A - if the location is an Asset Location</li> <li>• S - if the location is a Storeroom</li> <li>• O - if the location is an Organization</li> </ul> |
| CRITICALITY_VAL           | Asset Criticality Flag          | W1_NODE.CRITICALITY_FLG                                 | This field is populated with the location's actual criticality.  |

| Target Field             | Description                          | Source Field                      | Transformation Logic  |
|--------------------------|--------------------------------------|-----------------------------------|---|
| CRITICALITY_BKT_ST_RANGE | Asset Criticality Bucket Start Range | F1_BKT_CONFIG_VAL.BKT_START_RANGE | <p>This field is populated with the start range of the criticality bucket for which this asset's criticality falls into. It goes hand in hand with the Asset Criticality Bucket End Range to constitute the actual bucket range the asset's criticality falls into.</p> <p><b>Note:</b> See <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> for details about how to configure the buckets.</p> |
| CRITICALITY_BKT_ED_RANGE | Asset Criticality Bucket End Range   | F1_BKT_CONFIG_VAL.BKT_END_RANGE   | <p>This field is populated with the end range of the criticality bucket for which this asset's criticality falls into. It goes hand in hand with the Asset Criticality Bucket Start Range to constitute the actual bucket range the asset's criticality falls into.</p> <p><b>Note:</b> See <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> for details about how to configure the buckets.</p> |
| CRITICALITY_BKT_DESCR    | Asset Criticality Bucket Description | F1_BKT_CONFIG_VAL.L.DESCR         | <p>This field is populated with the description of the criticality bucket for which the location's criticality falls into.</p> <p><b>Note:</b> See <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> for details about how to configure the buckets.</p>  |

| Target Field               | Description                               | Source Field  | Transformation Logic  |
|----------------------------|---|---|---|
| CRITICALITY_CAT_CD         | Location Criticality Category Code        | F1_BKT_CONFIG_VAL.BKT_VAL_TYPE_CD                         | <p>This field is populated with the category of the Criticality Bucket for which this location's criticality falls into.</p> <p>Examples of criticality category are 'Critical', 'High', 'Medium', and 'Low'.</p> <p><b>Note:</b> See <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> for details about how to configure the buckets.</p> |
| CRITICALITY_CAT_DESCR      | Location Criticality Category Description | CI_LOOKUP_VAL_L.DE SCR_OVRD<br><br>CI_LOOKUP_VAL_L.DE SCR | <p>This field is populated with the description from the Lookup Language table for the lookup field CRIT_CAT_FLG. If override description is not available, regular description is extracted</p> <p><b>Note:</b> See <b>Configuring Source</b> in the <i>Oracle Utilities Analytics Administration Guide</i> for details about how to configure the buckets.</p>                  |
| ENV_RATING                 | Environment Rating                        |   | <p>This field is populated with the Environment Rating retrieved from the location's characteristic of type "Environment Rating (W1-ENVRT)".</p>  |
| RCM_SYSTEM_CD              | RCM System Code                           | W1_NODE.RCM_SYSTEM_FLG                                    |   |
| RCM_SYSTEM_DESCR           | RCM System Description                    |   | <p>If an override description is not available, regular description is extracted.</p>   |
| PARENT_LOCATION_LVL1_CD    | Parent Location Level 1 Code              | W1_NODE.PARENT_NO DE_ID                                   | <p>This field is populated with the location ID of the parent of the current location.</p>  |
| PARENT_LOCATION_LVL1_DESCR | Parent Location Level 1 Description       | W1_NODE.DESCR100  | <p>This field is populated with the description of parent 1 location.</p>   |
| PARENT_LOCATION_LVL2_CD    | Parent Location Level 2 Code              | W1_NODE.PARENT_NO DE_ID                                   | <p>This field is populated with the location ID of the parent of the current location.</p>  |

| <b>Target Field</b>            | <b>Description</b>                     | <b>Source Field</b>        | <b>Transformation Logic</b>   |
|--------------------------------|--|----------------------------|---|
| PARENT_LOCATION_LV<br>L2_DESCR | Parent Location Level 2<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 2 location.                  |
| PARENT_LOCATION_LV<br>L3_CD    | Parent Location Level 3<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L3_DESCR | Parent Location Level 3<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 3 location.                  |
| PARENT_LOCATION_LV<br>L4_CD    | Parent Location Level 4<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L4_DESCR | Parent Location Level 4<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 4 location.                  |
| PARENT_LOCATION_LV<br>L5_CD    | Parent Location Level 5<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L5_DESCR | Parent Location Level 5<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 5 location.                  |
| PARENT_LOCATION_LV<br>L6_CD    | Parent Location Level 6<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L6_DESCR | Parent Location Level 6<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 6 location.                  |
| PARENT_LOCATION_LV<br>L7_CD    | Parent Location Level 7<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L7_DESCR | Parent Location Level 7<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 7 location.                  |
| PARENT_LOCATION_LV<br>L8_CD    | Parent Location Level 8<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L8_DESCR | Parent Location Level 8<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 8 location.                  |
| PARENT_LOCATION_LV<br>L9_CD    | Parent Location Level 9<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the location ID of the parent of the current location. |
| PARENT_LOCATION_LV<br>L9_DESCR | Parent Location Level 9<br>Description | W1_NODE.DESCR100           | This field is populated with the description of parent 9 location.                  |

| <b>Target Field</b>             | <b>Description</b>                      | <b>Source Field</b>        | <b>Transformation Logic</b>   |
|---------------------------------|---|----------------------------|---|
| PARENT_LOCATION_LV<br>L10_CD    | Parent Location Level 10<br>Code        | W1_NODE.PARENT_NO<br>DE_ID | This field is populated with the<br>location ID of the parent of<br>the current location. |
| PARENT_LOCATION_LV<br>L10_DESCR | Parent Location Level 10<br>Description | W1_NODE.DESCR100           | This field is populated with the<br>description of parent 10<br>location.                 |
| <b>User Defined Attributes</b>  |   |                            |   |
| UDF1_CD                         | User Defined Field 1 Code               |                            |   |
| UDF1_DESCR                      | User Defined Field 1<br>Description     |                            |   |
| UDF2_CD                         | User Defined Field 2 Code               |                            |   |
| UDF2_DESCR                      | User Defined Field 2<br>Description     |                            |   |
| UDF3_CD                         | User Defined Field 3 Code               |                            |   |
| UDF3_DESCR                      | User Defined Field 3<br>Description     |                            |   |
| UDF4_CD                         | User Defined Field 4 Code               |                            |   |
| UDF4_DESCR                      | User Defined Field 4<br>Description     |                            |   |
| UDF5_CD                         | User Defined Field 5 Code               |                            |   |
| UDF5_DESCR                      | User Defined Field 5<br>Description     |                            |   |
| UDF6_CD                         | User Defined Field 6 Code               |                            |   |
| UDF6_DESCR                      | User Defined Field 6<br>Description     |                            |   |
| UDF7_CD                         | User Defined Field 7 Code               |                            |   |
| UDF7_DESCR                      | User Defined Field 7<br>Description     |                            |   |
| UDF8_CD                         | User Defined Field 8 Code               |                            |   |
| UDF8_DESCR                      | User Defined Field 8<br>Description     |                            |   |
| UDF9_CD                         | User Defined Field 9 Code               |                            |   |
| UDF9_DESCR                      | User Defined Field 9<br>Description     |                            |   |
| UDF10_CD                        | User Defined Field 10 Code              |                            |   |
| UDF10_DESCR                     | User Defined Field 10<br>Description    |                            |   |

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

## Service History Type Dimension

The Service History Type dimension extracts the service history types and the respective category details from the source system.

### Properties

| Property                   | Value                       |
|----------------------------|-----------------------------|
| Target Table               | CD_SERVICE_HIST_TYPE        |
| Table Type                 | Dimension                   |
| SCD Type                   | Type 1                      |
| Source System Driver Table | W1_SVC_HIST_TYPE            |
| ODI Package                | B1_PKG_CD_SERVICE_HIST_TYPE |
| ETL View                   | B1_D_SERVICE_HIST_TYPE_VW   |

### Fields

| Target Field          | Description                                  | Source Field | Transformation Logic  |
|-----------------------|--|--------------|---|
| <b>Surrogate Key</b>  |  |              |   |
| SERVICE_HIST_TYPE_KEY | Service History Type Dimension Surrogate Key |              | This field is populated from the B1_SERVICE_HIST_TYPE_SEQ sequence. |

| Target Field                   | Description                          | Source Field  | Transformation Logic  |
|--------------------------------|--------------------------------------|---|---|
| <b>Natural Keys</b>            |                                      |   |   |
| SERVICE_HIST_TYPE_CD           | Service History Type Code            | W1_SVC_HIST_TYPE.SVC_HIST_TYPE_CD                       |   |
| <b>Attributes</b>              |                                      |   |   |
| SERVICE_HIST_TYPE_DESCR        | Service History Type Description     | W1_SVC_HIST_TYPE.LDESCR100                              |   |
| SERVICE_HIST_CAT_CD            | Service History Category Code        | W1_SVC_HIST_TYPE.SVC_HIST_CATEGORY_FLG                  |   |
| SERVICE_HIST_CAT_DESCR         | Service History Category Description | CL_LOOKUP_VAL_L.DESCR_OVRD<br><br>CL_LOOKUP_VAL_L.DESCR | This field is populated with description from the Lookup Language table for the SVC_HIST_CATEGORY_FLG lookup field.<br><br>If an override description is not available, regular description is extracted. |
| <b>User Defined Attributes</b> |                                      |   |   |
| 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            |   |   |



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

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## User Defined Dimensions

A user defined dimension (UDD) is a means of extension for an existing fact. These dimensions have a foreign key reference to a fact; however no out-of-box ETL is delivered. Customers can define an ODI ETL process to populate these dimensions with the source data as per their requirement. Each fact is provided with two such user defined dimensions. For details about extending using UDDs, see the *Oracle Utilities Analytics Developer's Guide*.

All user defined dimensions have the same structure. The only technical difference is the column name of the primary key, which follows the pattern of using the fact for which it is linked to.

Below is the structure of the **Fields** table which is common for all user defined dimensions.

### Fields

| Target Field   | Description  |
|--|--|
| <b>Surrogate Key</b>   |  |
| <Fact_name_prefix>_UDDn_KEY  | <Fact name> User Defined Dimension n Dimension Surrogate Key                 |
| For example: The surrogate key for Asset Location UDD is<br>ASSET_LOC_UDD1_KEY | For example: Asset Location User Defined Dimension 1 Dimension Surrogate Key |
| <b>Natural Keys</b>  |  |
| UDD1_CD  | User Defined Dimension 1 Code  |
| <b>Attributes</b>  |  |
| UDD1_DESCR   | User Defined Dimension 1 Description   |
| <b>User Defined Attributes</b>   |  |
| 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   |
| UDL1_CD  | User Defined Field Long 1 Code   |
| UDL1_DESCR   | User Defined Field Long 1 Description  |
| UDL2_CD  | User Defined Field Long 2 Code   |
| UDL2_DESCR   | User Defined Field Long 2 Description  |

| Target Field                | Description                           |
|-----------------------------|---------------------------------------|
| UDL3_CD                     | User Defined Field Long 3 Code        |
| UDL3_DESCR                  | User Defined Field Long 3 Description |
| UDL4_CD                     | User Defined Field Long 4 Code        |
| UDL4_DESCR                  | User Defined Field Long 4 Description |
| UDL5_CD                     | User Defined Field Long 5 Code        |
| UDL5_DESCR                  | User Defined Field Long 5 Description |
| COMMENT1                    | Comment 1                             |
| COMMENT2                    | Comment 2                             |
| COMMENT3                    | Comment 3                             |
| COMMENT4                    | Comment 4                             |
| COMMENT5                    | Comment 5                             |
| <b>Data Load Attributes</b> |                                       |
| EFF_START_DTTM              | Effective Start Date/Time             |
| EFF_END_DTTM                | Effective End Date/Time               |
| DATA_LOAD_DTTM              | Data Load Date/Time                   |
| DATA_SOURCE_IND             | Data Source Indicator                 |
| JOB_NBR                     | Job Number                            |

## Asset Location UDD1 Dimension

| Property     | Value             |
|--------------|-------------------|
| Target Table | CD_ASSET_LOC_UDD1 |
| Table Type   | Dimension         |
| SCD Type     | Type 2            |

## Asset Location UDD2 Dimension

| Property     | Value             |
|--------------|-------------------|
| Target Table | CD_ASSET_LOC_UDD2 |
| Table Type   | Dimension         |
| SCD Type     | Type 2            |

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## Asset Location UDD2 Dimension

| Property     | Value             |
|--------------|-------------------|
| Target Table | CD_ASSET_LOC_UDD2 |
| Table Type   | Dimension         |
| SCD Type     | Type 2            |

## Operational Device UDD1 Dimension

| Property     | Value              |
|--------------|--------------------|
| Target Table | CD_OPR_DEVICE_UDD1 |
| Table Type   | Dimension          |
| SCD Type     | Type 2             |

## Operational Device UDD2 Dimension

| Property     | Value              |
|--------------|--------------------|
| Target Table | CD_OPR_DEVICE_UDD2 |
| Table Type   | Dimension          |
| SCD Type     | Type 2             |

## Operational Device Snapshot UDD1 Dimension

| Property     | Value                   |
|--------------|-------------------------|
| Target Table | CD_OPR_DEVICE_SNAP_UDD1 |
| Table Type   | Dimension               |
| SCD Type     | Type 2                  |

## Operational Device Snapshot UDD2 Dimension

| Property     | Value                   |
|--------------|-------------------------|
| Target Table | CD_OPR_DEVICE_SNAP_UDD2 |
| Table Type   | Dimension               |
| SCD Type     | Type 2                  |

---

## Service History UDD1 Dimension

| <b>Property</b> | <b>Value</b>         |
|-----------------|----------------------|
| Target Table    | CD_SERVICE_HIST_UDD1 |
| Table Type      | Dimension            |
| SCD Type        | Type 2               |

## Service History UDD2 Dimension

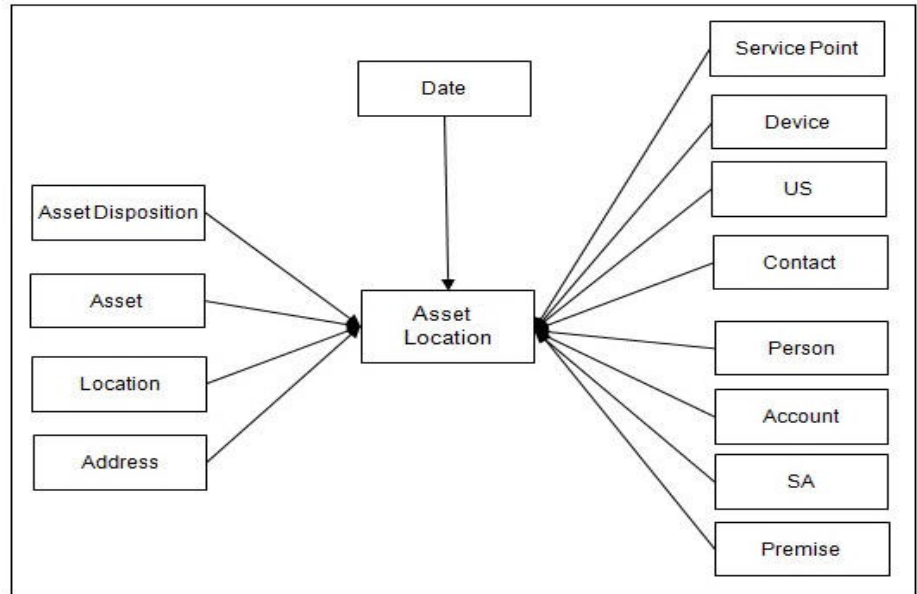
| <b>Property</b> | <b>Value</b>         |
|-----------------|----------------------|
| Target Table    | CD_SERVICE_HIST_UDD2 |
| Table Type      | Dimension            |
| SCD Type        | Type 2               |

# Facts

## 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         |
| Source System Driver Table | W1_ASSET_NODE        |
| 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 Logic  |
|------------------------------|--|--|---|
| <b>Surrogate Key</b>         |  |  |   |
| ASSET_LOC_KEY                | Operational Device<br>Snapshot Fact Surrogate<br>Key |  | This field is populated from the B1_ASSET_LOC_SEQ sequence.   |
| <b>Natural Keys</b>          |  |  |   |
| SRC_ASSET_ID                 | Source Asset ID                                      | W1_ASSET_NODE.ASSET_ID   |   |
| <b>Measures</b>              |  |  |   |
| PRIOR_DISP_DUR               | Days in Prior Disposition                            |  | 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.  |
| DUR_LAST_FAIL                | Months Since Last Failure                            | F1_MST_CONFIG.MST_CONFIG_DATA<br><br>W1_ASSET_NODE.FAILURE_FLG<br><br>W1_ASSET_NODE.EFF_DTTM | This field is only populated if the asset disposition was marked with failure.<br><br>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). |
| FACT_CNT                     | Count  |  | This field is populated with the standard value of '1'.   |
|                              | Installed  |  | This is the number of devices that are installed at customer locations.   |
|                              | Received Devices                                     |  | This is the number of devices that are in receipt. These devices are tested for usability before installing them at customer locations.   |
|                              | Rejections   |  | This is the number of devices that are rejected during an inspection.   |
| <b>Degenerate Dimensions</b> |  |  |   |
| FAILED_IND                   | Failed Indicator                                     | F1_MST_CONFIG.MST_CONFIG_DATA<br><br>W1_ASSET_NODE.FAILURE_FLG                               | 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.                                       |

| <b>Target Field</b>   | <b>OBIEE Field</b>                        | <b>Source Field</b>  | <b>Transformation Logic</b>  |
|-----------------------|---|--|--|
| DISP_DTTM             | Disposition Date/Time                     | W1_ASSET_NODE.EFF_DTTM   | This is the disposition date/time of the asset's current disposition.  |
| PRIOR_DISP_DTTM       | Prior Disposition Date/Time               | W1_ASSET_NODE.EFF_DTTM   | This is the disposition date/time of the asset's prior disposition.  |
| <b>Foreign Keys</b>   |   |  |  |
| ASSET_DISP_KEY        | Asset Disposition Dimension Surrogate Key | W1_ASSET_NODE.ASSET_DPOS_FLG<br>W1_ASSET_NODE.ATTACHED_TO_ASSET_ID | 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.    |
| PRIOR_ASSET_DISP_KEY  | Prior Disposition Dimension Surrogate Key |  | 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.NODE_ID  | 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.NODE_ID  | 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.NODE_ID  | 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                                     | This field is populated only for joint ODM-MDM integration. It is populated using the MDM SP natural key stored in the ODM system.   |



| <b>Target Field</b> | <b>OBIEE Field</b>                            | <b>Source Field</b> | <b>Transformation Logic</b>   |
|---------------------|---|---------------------|---|
| MTR_DEVICE_KEY      | Device Dimension<br>Surrogate Key             |                     | 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<br>Dimension Surrogate Key |                     | 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<br>Surrogate Key            |                     | 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<br>Surrogate Key             |                     | 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<br>Surrogate Key            |                     | 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<br>Dimension Surrogate Key  |                     | 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<br>Surrogate Key            |                     | 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<br>Dimension Surrogate Key   |                     |   |
| DISP_TIME_KEY       | Disposition Time<br>Dimension Surrogate Key   |                     |   |

| <b>Target Field</b>            | <b>OBIEE Field</b>  | <b>Source Field</b> | <b>Transformation Logic</b> |
|--------------------------------|---|---------------------|-----------------------------|
| PRIOR_DISP_DATE_KEY            | Prior Disposition Date<br>Dimension Surrogate Key           |                     |                             |
| PRIOR_DISP_TIME_KEY            | Prior Disposition Time<br>Dimension Surrogate Key           |                     |                             |
| ASSET_LOC_UDD1_KEY             | Asset Location User<br>Defined Dimension 1<br>Surrogate Key |                     |                             |
| ASSET_LOC_UDD2_KEY             | Asset Location User<br>Defined Dimension 2<br>Surrogate Key |                     |                             |
| <b>User Defined Attributes</b> |   |                     |                             |
| 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                 |                     |                             |
| UDDGENL3                       | User Defined Long<br>Degenerate Dimension 3                 |                     |                             |
| UDDGENL4                       | User Defined Long<br>Degenerate Dimension 4                 |                     |                             |

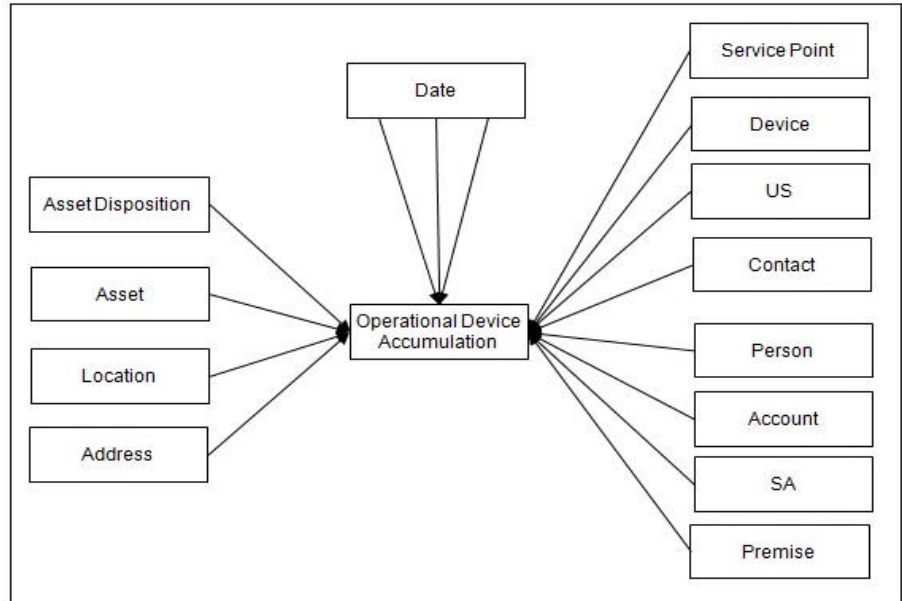
| <b>Target Field</b>         | <b>OBIEE Field</b>                          | <b>Source Field</b>        | <b>Transformation Logic</b>   |
|-----------------------------|---|----------------------------|---|
| UDDGENL5                    | User Defined Long<br>Degenerate Dimension 5 |                            |   |
| 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     |                            |   |
| <b>Data Load Attributes</b> |   |                            |   |
| DATA_SOURCE_IND             | Data Source Indicator                       | CI_INSTALLATION.ENV<br>_ID | <p>This field is populated with the DSI value on the source product instance configuration.</p> <p>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system.</p> |
| JOB_NBR                     | Job Number                                  |                            | This field is populated with the ODI job execution session number.  |

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## 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                   |
| 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 Logic   |
|------------------------------|-------------------------------------|--|--|
| <b>Surrogate Key</b>         |                                     |  |  |
| OPR_DEVICE_KEY               | Operational Device<br>Surrogate Key |  | This field is populated from the B1_OPR_DEVICE_ACCUM_SEQ sequence.   |
| <b>Natural Keys</b>          |                                     |  |  |
| SRC_ASSET_ID                 | Source Asset ID                     | W1_ASSET.ASSET_ID  |  |
| <b>Measures</b>              |                                     |  |  |
| FACT_CNT                     | Count                               |  | This field is populated with the standard value of '1'.  |
|                              | Installed                           |  | This is the number of devices that are installed at customer locations.  |
| <b>Degenerate Dimensions</b> |                                     |  |  |
| WNTY_EXP_DTTM                | Warranty Expiration Date/<br>Time   | W1_ASSET_CHAR.ADH<br>OC_CHAR_VAL   | The warranty expiration date/time for an asset which will be configured as a characteristic value.   |
| RCT_INS_PASS_DTTM            | Recent Inspection Pass<br>Date/Time | W1_SVC_HIST.ASSET_ID<br><br>W1_SVC_HIST_TYPE.SV<br>C_HIST_CATEGORY_FLG<br><br>W1_SVC_HIST_CHAR.EF<br>FDT<br><br>W1_SVC_HIST_CHAR.C<br>HAR_TYPE_CD<br><br>W1_SVC_HIST_CHAR.C<br>HAR_VAL | This field is populated with the effective date/time of the most recent service history with category of 'Inspection', and a passing 'Operational Status'. |

| Target Field          | OBIEE Field                                | Source Field   | Transformation Logic   |
|-----------------------|--|--|--|
| RCT_INS_FAIL_DTTM     | Recent Inspection Fail Date/Time           | W1_SVC_HIST.ASSET_ID<br><br>W1_SVC_HIST_TYPE.SV<br>C_HIST_CATEGORY_FL<br>G<br><br>W1_SVC_HIST_CHAR.EF<br>FDT<br><br>W1_SVC_HIST_CHAR.C<br>HAR_TYPE_CD<br><br>W1_SVC_HIST_CHAR.C<br>HAR_VAL | This field is populated with the effective date/time of the most recent service history with category of 'Inspection', and a failed 'Operational Status'.  |
| <b>Foreign Keys</b>   |  |  |  |
| ASSET_DISP_KEY        | Asset Disposition Dimension Surrogate Key  | W1_ASSET_NODE.ASSE<br>T_DPOS_FLG<br><br>W1_ASSET_NODE.EFF_<br>DTTM<br><br>W1_ASSET_NODE.ATTC<br>H_TO_ASSET_ID  | This field is populated based on the asset's current disposition.<br><br>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_D_KEY      | Operational Device Dimension Surrogate Key | W1_ASSET.ASSET_ID  |  |
| UTIL_ASSET_KEY        | Utility Asset Dimension Surrogate Key      | W1_ASSET.ASSET_ID  | This field is populated with the foreign key of the Utility Asset dimension based on the asset associated.   |
| ATTACHED_TO_ASSET_KEY | Utility Asset Dimension Surrogate Key      | W1_ASSET_NODE.ATTC<br>H_TO_ASSET_ID  |  |
| LOCATION_KEY          | Location Dimension Surrogate Key           | W1_ASSET_NODE.NOD<br>E_ID<br><br>W1_ASSET_NODE.EFF_<br>DTTM<br><br>W1_ASSET_NODE.ATTC<br>H_TO_ASSET_ID   | This field is populated based on the asset's current location.<br><br>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.NOD<br>E_ID  | 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.                             |

| <b>Target Field</b> | <b>OBIEE Field</b>                            | <b>Source Field</b>                | <b>Transformation Logic</b>   |
|---------------------|---|------------------------------------|---|
| SP_KEY              | Service Point Dimension<br>Surrogate Key      | W1_NODE_IDENTIFIE<br>R.W1_ID_VALUE | 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<br>Surrogate Key             |                                    | 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<br>Dimension Surrogate Key |                                    | 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<br>Surrogate Key            |                                    | 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<br>Surrogate Key             |                                    | 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.                |
| ACCT_KEY            | Account Dimension<br>Surrogate Key            |                                    | 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<br>Dimension Surrogate Key  |                                    | 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<br>Surrogate Key            |                                    | 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.        |

| <b>Target Field</b>            | <b>OBIEE Field</b>   | <b>Source Field</b> | <b>Transformation Logic</b> |
|--------------------------------|--|---------------------|-----------------------------|
| WNTY_EXP_DATE_KEY              | Warranty Expiration Date<br>Dimension Surrogate Key                    |                     |                             |
| WNTY_EXP_TIME_KEY              | Warranty Expiration Time<br>Dimension Surrogate Key                    |                     |                             |
| RCT_INS_PASS_DATE_KEY          | Recent Inspection Pass Date<br>Dimension Surrogate Key                 |                     |                             |
| RCT_INS_PASS_TIME_KEY          | Recent Inspection Pass<br>Time Dimension Surrogate<br>Key              |                     |                             |
| RCT_INS_FAIL_DATE_KEY          | Recent Inspection Fail Date<br>Dimension Surrogate Key                 |                     |                             |
| RCT_INS_FAIL_TIME_KEY          | Recent Inspection Fail Time<br>Dimension Surrogate Key                 |                     |                             |
| OPR_DEVICE_UDD1_KEY            | Operation Device Snapshot<br>User Defined Dimension 1<br>Surrogate Key |                     |                             |
| OPR_DEVICE_UDD2_KEY            | Operation Device Snapshot<br>User Defined Dimension 2<br>Surrogate Key |                     |                             |
| <b>User Defined Attributes</b> |  |                     |                             |
| 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                                 |                     |                             |

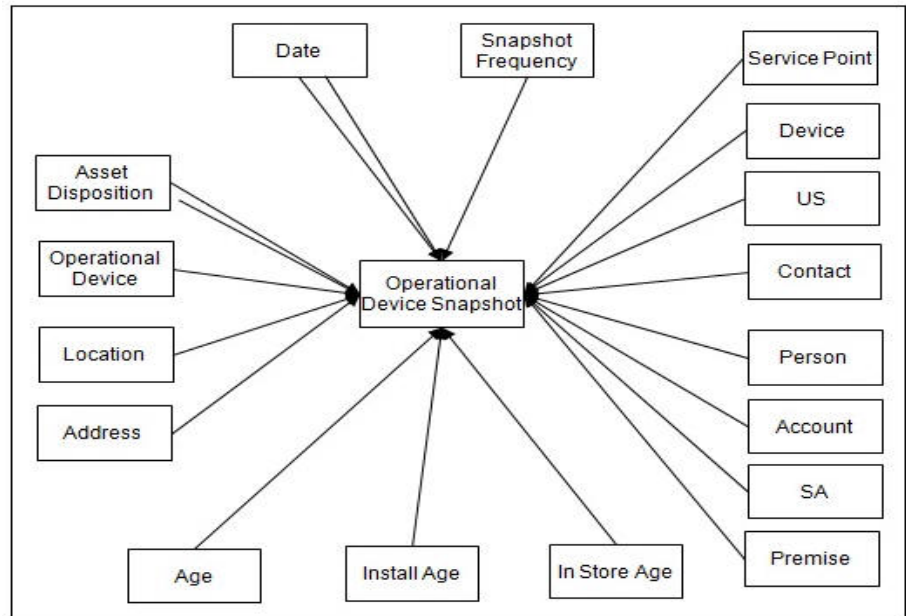


| <b>Target Field</b>         | <b>OBIEE Field</b>                       | <b>Source Field</b>    | <b>Transformation Logic</b>   |
|-----------------------------|--|------------------------|---|
| UDDGEN5                     | User Defined Degenerate Dimension 5      |                        |   |
| 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     |                        |   |
| <b>Data Load Attributes</b> |  |                        |   |
| DATA_SOURCE_IND             | Data Source Indicator                    | CI_INSTALLATION.ENV_ID | <p>This field is populated with the DSI value on the source product instance configuration.</p> <p>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system.</p> |
| JOB_NBR                     | Job Number                               |                        | This field is populated with the ODI job execution session number.  |

## 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   |
| 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<br>B1_OPR_DEVICE_SNP_MON_TOPX_MV<br>1 |

## Fields

| Target Field         | OBIEE Field                          | Source Field  | Transformation Logic  |
|----------------------|--------------------------------------|---|---|
| <b>Surrogate Key</b> |                                      |   |   |
| OPR_DEVICE_SNAP_KEY  | Operational Device Snapshot Fact Key |   |   |
| <b>Natural Keys</b>  |                                      |   |   |
| SRC_ASSET_ID         | Source Asset ID                      | W1_ASSET.ASSET_ID   |   |
| <b>Measures</b>      |                                      |   |   |
| AGE                  | Age in Days                          | W1_ASSET_NODE.EFF_DTTM  | 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.ASSET_DPOS_FLG<br>W1_ASSET_NODE.EFF_DTTM<br>W1_ASSET_NODE.ATTCH_TO_ASSET_ID | 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.ASSET_DPOS_FLG<br>W1_ASSET_NODE.EFF_DTTM<br>W1_ASSET_NODE.ATTCH_TO_ASSET_ID | 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. |
| FACT_CNT             | Count                                |   | This field is populated with the standard value of '1'.   |
|                      | Devices In Storage                   |   | This is the number of devices that are currently in storage.  |
|                      | Devices In Warranty                  |   | This is the number of devices that are currently in warranty.   |
|                      | Installed Devices                    |   | This is the number of devices that are currently installed at customer locations.   |
|                      | Repair                               |   | This is the number of devices that are currently in repair.   |
|                      | Retired Devices                      |   | This is number of devices that are retired.   |

| Target Field                 | OBIEE Field                                     | Source Field  | Transformation Logic   |
|------------------------------|---|---|--|
| <b>Degenerate Dimensions</b> |   |   |  |
| FAILED_ONCE_IND              | Failed Once Indicator                           | F1_MST_CONFIG.MST_CONFIG_DATA<br><br>W1_ASSET_NODE.FAILURE_FLG<br><br>W1_ASSET_NODE.EFF_DTTM      | 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.                       |
| WNTY_EXP_IND                 | Warranty Expired Indicator                      |   | This indicator is set if the warranty date is earlier than or same as the end date of the snapshot period.   |
| SNAP_TYPE_CD                 | Snapshot Frequency Type                         |   |  |
| SNAPSHOT_DT                  | Snapshot Date                                   |   |  |
| WNTY_EXP_DTTM                | Warranty Expiration Date/Time                   | W1_ASSET_CHAR.ADH_OC_CHAR_VAL   | 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-WEXDT]").   |
| <b>Foreign Keys</b>          |   |   |  |
| ASSET_DISP_START_KEY         | Asset Disposition Start Dimension Surrogate Key | W1_ASSET_NODE.ASSET_DPOS_FLG<br><br>W1_ASSET_NODE.EFF_DTTM<br><br>W1_ASSET_NODE.ATTCH_TO_ASSET_ID | 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<br><br>W1_ASSET_NODE.EFF_DTTM<br><br>W1_ASSET_NODE.ATTCH_TO_ASSET_ID | 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   | This field is populated with the foreign key of the Asset table based on the asset associated.   |

| Target Field          | OBIEE Field                                   | Source Field  | Transformation Logic   |
|-----------------------|---|---|--|
| UTIL_ASSET_KEY        | Utility Asset Dimension<br>Surrogate Key      | W1_ASSET.ASSET_ID   | This field is populated with the foreign key of the Asset table based on the asset associated.   |
| ATTACHED_TO_ASSET_KEY | Utility Asset Dimension<br>Surrogate Key      | W1_ASSET_NODE.ATTC<br>H_TO_ASSET_ID   |  |
| LOCATION_KEY          | Location Dimension<br>Surrogate Key           | W1_ASSET_NODE.NOD<br>E_ID<br><br>W1_ASSET_NODE.EFF_<br>DTM<br><br>W1_ASSET_NODE.ATTC<br>H_TO_ASSET_ID | 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. |
| ADDR_KEY              | Address Dimension<br>Surrogate Key            | W1_ASSET_NODE.NOD<br>E_ID   | The source for this column will be the asset's location.   |
| ASSET_AGE_KEY         | Asset Age Dimension<br>Surrogate Key          | W1_ASSET.ASSET_TYPE<br>_CD  | 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<br>Surrogate Key  | W1_ASSET.ASSET_TYPE<br>_CD  | 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<br>Dimension Surrogate Key  | W1_ASSET.ASSET_TYPE<br>_CD  | 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<br>Surrogate Key      | W1_NODE_IDENTIFIE<br>R.W1_ID_VALUE  | This field 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<br>Surrogate Key             |   | This field is populated only if the ODM-MDM integration exists for the Service Point entity.   |
| US_KEY                | Usage Subscription<br>Dimension Surrogate Key |   | This field is populated only if the ODM-MDM integration exists for the Service Point entity.   |
| CONTACT_KEY           | Contact Dimension<br>Surrogate Key            |   | This field is populated only if the ODM-MDM integration exists for the Service Point entity.   |

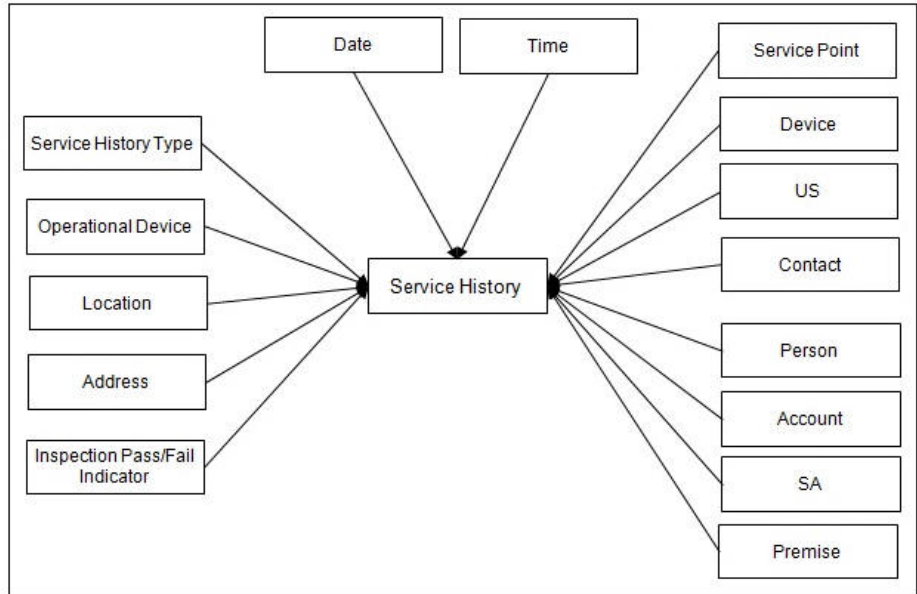
| <b>Target Field</b>            | <b>OBIEE Field</b>   | <b>Source Field</b> | <b>Transformation Logic</b>  |
|--------------------------------|--|---------------------|--|
| PER_KEY                        | Person Dimension<br>Surrogate Key                                      |                     | This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| ACCT_KEY                       | Account Dimension<br>Surrogate Key                                     |                     | This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| SA_KEY                         | Service Agreement<br>Dimension Surrogate Key                           |                     | This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| PREM_KEY                       | Premise Dimension<br>Surrogate Key                                     |                     | This field is populated only if the ODM-MDM integration exists for the Service Point entity. |
| DATE_KEY                       | Date Dimension Surrogate<br>Key  |                     |  |
| WNTY_EXP_DATE_KEY              | Warranty Expiration Date<br>Dimension Surrogate Key                    |                     |  |
| WNTY_EXP_TIME_KEY              | Warranty Expiration Time<br>Dimension Surrogate Key                    |                     |  |
| OPR_DEVICE_SNAP_UD<br>D1_KEY   | Operation Device Snapshot<br>User Defined Dimension 1<br>Surrogate Key |                     |  |
| OPR_DEVICE_SNAP_UD<br>D2_KEY   | Operation Device Snapshot<br>User Defined Dimension 2<br>Surrogate Key |                     |  |
| <b>User Defined Attributes</b> |  |                     |  |
| 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                                 |                     |  |

| Target Field                | OBIEE Field                              | Source Field           | Transformation Logic  |
|-----------------------------|--|------------------------|---|
| 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     |                        |   |
| <b>Data Load Attributes</b> |  |                        |   |
| DATA_SOURCE_IND             | Data Source Indicator                    | CI_INSTALLATION.ENV_ID | <p>This field is populated with the DSI value on the source product instance configuration.</p> <p>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system.</p> |
| JOB_NBR                     | Job Number                               |                        | This field is populated with the ODI job execution session number.  |

## Service History Fact

The Service History fact accumulates the maintenance, inspection, failure, and downtime service histories created in the Oracle Utilities Work and Asset Management source system.

### Entity Relationship Diagram



### Properties

| Property                   | Value  |
|----------------------------|--|
| Target Table Name          | CF_SERVICE_HIST  |
| Table Type                 | Fact   |
| Fact Type                  | Accumulation   |
| Source System Driver Table | W1_SVC_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<br>B1_SERVICE_HIST_MON_MV2<br>B1_SERVICE_HIST_MON_TOPX_MV1<br>B1_SERVICE_HIST_MON_TOPX_MV2 |



## Fields

| Target Field           | Description                 | Source Field            | Transformation Logic  |
|------------------------|-----------------------------|-------------------------|---|
| <b>Surrogate Key</b>   |                             |                         |   |
| SERVICE_HIST_KEY       | Service History Fact Key    |                         | This field is populated from the B1_SERVICE_HIST_SEQ sequence.  |
| <b>Natural Keys</b>    |                             |                         |   |
| SRC_SERVICE_HIST_ID    | Source Service History ID   | W1_SVC_HIST.SVC_HIST_ID |   |
| <b>Measures</b>        |                             |                         |   |
| PLANNED_DOWNTIME_DUR   | Planned Downtime Duration   |                         | <p>This field is populated with the planned downtime duration if the service history is categorized as Downtime or Failure.</p> <p>If it's a Failure, the downtime information is retrieved from its corresponding downtime Service History. The service history is planned if it has a characteristic of type Downtime Reason with a value of Planned.</p> |
| UNPLANNED_DOWNTIME_DUR | Unplanned Downtime Duration |                         | <p>This field is populated with the planned downtime duration if the service history is categorized as Downtime or Failure.</p> <p>If it's a Failure, the downtime information is retrieved from its corresponding downtime Service History. The service history is planned if it has a characteristic of type Downtime Reason with a value of Planned.</p> |
| COST                   | Cost                        |                         | This field is populated with the cost incurred for the service history's activity taking into consideration the cost distribution of the service history's asset in the activity.   |
| FACT_CNT               | Count                       |                         | This field is populated with the standard value of '1'.   |

| Target Field                 | Description  | Source Field             | Transformation Logic   |
|------------------------------|--|--------------------------|--|
| <b>Degenerate Dimensions</b> |  |                          |  |
| SERVICE_HIST_END_DT_TM       | Service History End Date/Time                      | W1_SVC_HIST.END_DT_TM    |  |
| SERVICE_HIST_START_DT_TM     | Service History Start Date/Time                    | W1_SVC_HIST.BO_DATA_AREA | <b>Note:</b> This field is populated only for Downtime service histories.  |
| SERVICE_HIST_DT_TM           | Service History Date/Time                          | W1_SVC_HIST.EFF_DT_TM    |  |
| <b>Foreign Keys</b>          |  |                          |  |
| SERVICE_HIST_END_DT_KEY      | Service History End Date Dimension Surrogate Key   | W1_SVC_HIST.END_DT_TM    | This field is populated with the foreign key of the Service History End Date dimension based on the end date of the service history.                     |
| SERVICE_HIST_END_TM_KEY      | Service History End Time Dimension Surrogate Key   | W1_SVC_HIST.END_DT_TM    | This field is populated with the foreign key of the Service History End Time dimension based on the end time of the service history.                     |
| SERVICE_HIST_START_DT_KEY    | Service History Start Date Dimension Surrogate Key | W1_SVC_HIST.BO_DATA_AREA | This field is populated with the foreign key of the Service History Start Date dimension based on the start date of the service history.                 |
| SERVICE_HIST_START_TM_KEY    | Service History Start Time Dimension Surrogate Key | W1_SVC_HIST.BO_DATA_AREA | This field is populated with the foreign key of the Service History Start Time dimension based on the start time of the service history.                 |
| SERVICE_HIST_D_KEY           | Service History Dimension Surrogate Key            |                          | This field is populated with the foreign key of the Service History dimension based on the asset associated with the service history.                    |
| WO_KEY                       | Work Order Dimension Surrogate Key                 | W1_ACTIVITY.WO_ID        | This field is populated with the foreign key of the Work Order dimension based on the work order ID of the activity associated with the service history. |
| WO_ACTIVITY_KEY              | Work Order Activity Dimension Surrogate Key        | W1_SVC_HIST.ACT_ID       | This field is populated with the Work Order Activity dimension based on the activity associated with the service history.                                |

| Target Field          | Description                                  | Source Field   | Transformation Logic   |
|-----------------------|--|--|--|
| OWNING_ORG_KEY        | Owning Organization Dimension Surrogate Key  | W1_SVC_HIST.OWNING_ACCESS_GRP_CD   | This field is populated from the Owning Organization dimension based on the owning access group.   |
| W_PLANNER_KEY         | Planner Dimension Surrogate Key              | W1_ACTIVITY.PLANNE_R_CD  | This field is populated with the foreign key from the Planner dimension based on the planner code associated with the activity.  |
| CREW_KEY              | Crew Dimension Surrogate Key                 |  | This field is populated with the foreign key from the Crew dimension based on the crew ID associated with the activity.  |
| SERVICE_HIST_TYPE_KEY | Service History Type Dimension Surrogate Key | W1_SVC_HIST.SVC_HIST_TYPE_CD   | This field is populated with the foreign key from the Service History Type dimension based on the service history type code associated with the service history.   |
| OPR_DEVICE_KEY        | Operational Device Dimension Surrogate Key   | W1_SVC_HIST.ASSET_ID<br>W1_SVC_HIST.EFF_DTTM   | This field is populated from the Operational Device table.<br><br><b>Note:</b> It is always populated with '0'.  |
| UTIL_ASSET_KEY        | Utility Asset Dimension Surrogate Key        | W1_SVC_HIST.ASSET_ID<br>W1_SVC_HIST.EFF_DTTM   | This field is populated with the foreign key of the Utility Asset dimension based on the asset associated with this activity.  |
| LOCATION_KEY          | Location Dimension Surrogate Key             | W1_SVC_HIST.EFF_DTTM<br>W1_ASSET_NODE.NODE_ID<br>W1_ASSET_NODE.EFF_DTTM<br>W1_ASSET_NODE.ATTCH_TO_ASSET_ID | This field is populated based on the current location of the asset associated with the Service History.<br><br>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  | The source for this column will be the asset's location.   |

| Target Field          | Description                                     | Source Field   | Transformation Logic  |
|-----------------------|---|--|---|
| ASSET_INSP_STATUS_KEY | Asset Inspection Status Dimension Surrogate Key | W1_SVC_HIST_TYPE.SV<br>C_HIST_CATEGORY_FL<br>G<br><br>W1_SVC_HIST_CHAR.C<br>HAR_TYPE_CD<br><br>W1_SVC_HIST_CHAR.C<br>HAR_VAL | This field is populated only for Service Histories of Inspection Category. It is populated based on the characteristic value configured for the 'Operational Status' characteristic type.<br><br>If no value is configured, then the default value of 'NA' is mapped. |
| SP_KEY                | Service Point Dimension Surrogate Key           | W1_NODE_IDENTIFIE<br>R.W1_ID_VALUE   | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| MTR_DEVICE_KEY        | Device Dimension Surrogate Key                  |  | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| US_KEY                | Usage Subscription Dimension Surrogate Key      |  | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| CONTACT_KEY           | Contact Dimension Surrogate Key                 |  | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| PER_KEY               | Person Dimension Surrogate Key                  |  | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| ACCT_KEY              | Account Dimension Surrogate Key                 |  | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| SA_KEY                | Service Agreement Dimension Surrogate Key       |  | This field is populated based on the service agreement ID stored on the task as part of MWM-MDM integration.  |
| PREM_KEY              | Premise Dimension Surrogate Key                 |  | This field is not used for Oracle Utilities Work and Asset Management source product.   |
| SERVICE_HIST_DATE_KEY | Service History Date Dimension Surrogate Key    |  | This field is populated with the foreign key of the Date dimension based on date associated with the service history.   |
| SERVICE_HIST_TIME_KEY | Service History Time Dimension Surrogate Key    |  | This field is populated with the foreign key of the Time dimension based on time associated with the service history.   |

| Target Field                   | Description  | Source Field | Transformation Logic |
|--------------------------------|--|--------------|----------------------|
| SERVICE_HIST_UDD1_KEY          | Service History User<br>Defined Dimension 1<br>Surrogate Key |              |                      |
| SERVICE_HIST_UDD2_KEY          | Service History User<br>Defined Dimension 2<br>Surrogate Key |              |                      |
| <b>User Defined Attributes</b> |  |              |                      |
| 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                  |              |                      |
| 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                      |              |                      |

| <b>Target Field</b>         | <b>Description</b>                      | <b>Source Field</b>        | <b>Transformation Logic</b>  |
|-----------------------------|---|----------------------------|--|
| 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 |                            |  |
| <b>Data Load Attributes</b> |   |                            |  |
| DATA_SOURCE_IND             | Data Source Indicator                   | CI_INSTALLATION.ENV<br>_ID | This field is populated with the DSI value on the source product instance configuration.<br><br>The table is populated as part of the initial setup and the DSI value is extracted from the environment ID of the source system. |
| JOB_NBR                     | Job Number                              |                            | This field is populated with the ODI job execution session number.   |

