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

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

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## **Preface**

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

## **Audience**

The guide is intended for all implementers of Oracle Utilities Extractors and Schema for Oracle Utilities Operational Device Management.

## **Related Documents**

For more information, see the following documents:

- Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics
   Dashboards Installation Guide
- Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics
   Dashboards Quick Install Guide
- Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics
   Dashboards Release Notes
- Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics
   Dashboards User's Guide
- Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics
  Dashboards Administration Guide

#### See Also:

Oracle Utilities Operational Device Management Documentation Library

## **Notational Conventions**

The following notational conventions are used in this document:

Notation	Indicates
boldface	Graphical user interface elements associated with an action, terms defined in text, or terms defines in the glossary
italic	Book titles, emphasis, or placeholder variables for which you supply particular values

Notation	Indicates
monospace	Commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter

## **Chapter 1**

## **Overview**

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

## **Terminologies**

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

#### <Table Name>

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

#### **Properties**

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

Property	Value
Target Table	Name of the table in the target schema (BI data warehouse) into which data is loaded
Table Type	Fact or dimension
SCD Type	1 - Existing records are updated directly 2 - Existing records are inactivated by putting the current date as the effective end date and new records are inserted from the replication tables. The new record will have the start date as the current date and an open end date.
Fact Type	Whether this is a snapshot or transactional fact table
Source System Driver Table	Name of the table in source database from which data is extracted
Stage Table	Name of the table in the staging schema (BI data warehouse) that can be used to query the data records generated from the ETL view

Property	Value
ODI Package	Name of the ODI package that needs be executed to extract data from the source application and populate a specific target table in the data warehouse
Source View	Name of the view in the data warehouse that has the logic for retrieval and transformation of the source data
Materialized View	Names of the materialized views delivered with the product for a specific fact table.
	These materialized views are designed to support all of the OBIEE answers delivered with the product. Refreshing these materialized views will be taken care as part of the ETL processes.

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

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

## **Chapter 2**

# Data Maps for Oracle Utilities Operational Device Management

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

- Dimension Tables
- Fact Tables

## **Dimension Tables**

## **Operational Device Dimension**

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

## **Properties**

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

Target Field	OBIEE Field	Source Field
OPR_DEVICE_KEY	Operational Device Dimension Surrogate Key	
SRC_ASSET_ID	Source Asset ID	W1_ASSET.ASSET_ID
FIRMWARE1	Firmware Version 1	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 1 slot is retrieved.
FIRMWARE2	Firmware Version 2	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 2 slot is retrieved.

Target Field	OBIEE Field	Source Field
FIRMWARE3	Firmware Version 3	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 3 slot is retrieved.
FIRMWARE4	Firmware Version 4	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 4 slot is retrieved.
FIRMWARE5	Firmware Version 5	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		<b>Note</b> : The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 5 slot is retrieved.
FIRMWARE6	Firmware Version 6	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 6 slot is retrieved.
FIRMWARE7	Firmware Version 7	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 7 slot is retrieved.

Target Field	OBIEE Field	Source Field
FIRMWARE8	Firmware Version 8	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 8 slot is retrieved.
FIRMWARE9	Firmware Version 9	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 9 slot is retrieved.
FIRMWARE10	Firmware Version 10	W1_ASSET_IDENTIFIER.W1_ ID_VALUE
		Note: The identifier value is retrieved based on the firmware Identifier Type configured in the Master Configuration for BI extract parameters. The Identifier Type configured for firmware 10 slot is retrieved.
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	
UDF3_DESCR	User Defined Field 3 Description	
UDF4_CD	User Defined Field 4 Code	
UDF4_DESCR	User Defined Field 4 Description	
UDF5_CD	User Defined Field 5 Code	
UDF5_DESCR	User Defined Field 5 Description	
UDF6_CD	User Defined Field 6 Code	
UDF6_DESCR	User Defined Field 6 Description	
UDF7_CD	User Defined Field 7 Code	

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

## **Utility Asset Dimension**

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

## **Properties**

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

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

Target Field	OBIEE Field	Source Field
SRC_UTIL_ASSET_ID	Source Utility Asset ID	W1_ASSET.ASSET_ID
UTIL_ASSET_INFO	Utility Asset Information	
SPEC_CD	Specification Code	W1_ASSET.SPECIFICATION_ CD
SPEC_DESCR	Specification Description	W1_SPECIFICATION_L.DESC R100
MANUFACTURER_CD	Manufacturer Code	W1_SPECIFICATION.W1_MA NUFACTURER_CD
MANUFACTURER_DESCR	Manufacturer Description	W1_MANUFACTURER_L.DES CR100
MODEL	Model	W1_SPECIFICATION_IDENT IFIER.W1_ID_VALUE
		<b>Note</b> : The identifier value is retrieved where the identifier type is "Model".
UTIL_ASSET_TYPE_CD	Utility Asset Type Code	W1_ASSET.ASSET_TYPE_CD
UTIL_ASSET_TYPE_DESC R	Utility Asset Type Description	W1_ASSET_TYPE_L.DESCR10 0
UTIL_ASSET_CLASS_CD	Utility Asset Class Code	W1_ASSET_TYPE.ASSET_CL ASS_FLG
UTIL_ASSET_CLASS_DES CR	Utility Asset Class Description	CI_LOOKUP_VAL_L.DESCR_ OVRD / CI_LOOKUP_VAL_L.DESCR
		<b>Note</b> : If the override description is not available, the regular description is extracted.
UTIL_ASSET_CAT_CD	Utility Asset Category Code	W1_ASSET_TYPE.ASSET_CA T_FLG
UTIL_ASSET_CAT_DESCR	Utility Asset Category Description	CI_LOOKUP_VAL_L.DESCR_ OVRD / CI_LOOKUP_VAL_L.DESCR
		<b>Note</b> : If the override description is not available, the regular description is extracted.
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	

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

## **Location Dimension**

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

## **Properties**

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

ODI Package Name	B1_PKG_CD_LOCATION
ETL View Name	B1_D_LOCATION_VW

Target Field	OBIEE Field	Source Field
LOCATION_KEY	Location Dimension Surrogate Key	
SRC_LOCATION_ID	Source Location ID	W1_NODE.NODE_ID
LOCATION_INFO	Location Information	For asset location:  W1_NODE_TYPE_L.DESCR1  00    ','     W1_NODE.DESCR100    ','     W1_NODE.ADDRESS1   ','     W1_NODE.CITY    ','     W1_NODE.STATE    ','     W1_NODE.POSTAL
		For storage location: W1_NODE_TYPE_L.DESCR1 00    ','    W1_NODE.ADDRESS1    ','    W1_NODE.CITY
LOCATION_TYPE_CD	Location Type Code	W1_NODE.NODE_TYPE_CD
LOCATION_TYPE_DESC R	Location Type Description	W1_NODE_TYPE_L.DESCR1 00
LOCATION_CLASS_CD	Location Class Code	W1_NODE.LOCATION_CLAS S_FLG
LOCATION_CLASS_DESC R	Location Class Description	CI_LOOKUP_VAL_L.DESCR_ OVRD / CI_LOOKUP_VAL_L.DESCR
		<b>Note</b> : If the override description is not available, the regular description is extracted.
LOCATION_TYPE_CLASS _CD	Location Type Class Code	W1_NODE_TYPE.NODE_CL ASS_FLG
LOCATION_TYPE_CLASS _DESCR	Location Type Class Description	CI_LOOKUP_VAL_L.DESCR_ OVRD / CI_LOOKUP_VAL_L.DESCR
		<b>Note</b> : If the override description is not available, the regular description is extracted.

Target Field	OBIEE Field	Source Field
LOCATION_CATEGORY	Location Category	Note: Populated with A for Asset Location
		Populated with S for Storage Location
		Populated with O for Organization
PARENT_LOCATION_LV L1_CD	Parent Location Level 1 Code	W1_NODE.NODE_ID
PARENT_LOCATION_LV L1_DESCR	Parent Location Level 1 Description	For asset location:  W1_NODE_TYPE_L.DESCR1  00   ','    W1_NODE.DESCR100   ','   W1_NODE.ADDRESS1  ','   W1_NODE.CITY   ','    W1_NODE.STATE   ','    W1_NODE.POSTAL  For storage location:  W1_NODE_TYPE_L.DESCR1  00   ','    W1_NODE.ADDRESS1   ','   W1_NODE.CITY  For organization location:
		W1_NODE_TYPE_L.DESCR1 00    ','    W1_NODE.DESCR100
PARENT_LOCATION_LV L2_CD	Parent Location Level 2 Code	W1_NODE.NODE_ID
PARENT_LOCATION_LV L2_DESCR	Parent Location Level 2 Description	For asset location:  W1_NODE_TYPE_L.DESCR1  00   ','    W1_NODE.DESCR100   ','    W1_NODE.ADDRESS1  ','     W1_NODE.CITY   ','    W1_NODE.STATE   ','    W1_NODE.POSTAL
		For storage location: W1_NODE_TYPE_L.DESCR1 00    ','    W1_NODE.ADDRESS1    ','    W1_NODE.CITY
		For organization location: W1_NODE_TYPE_L.DESCR1 00    ','    W1_NODE.DESCR100

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

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

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

## **Address Dimension**

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

## **Properties**

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

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

Target Field	OBIEE Field	Source Field
COUNTY	County	W1_NODE.COUNTY
POSTAL	Postal Code	W1_NODE.POSTAL
STATE_CD	State Code	W1_NODE.STATE
STATE_DESCR	State	CI_STATE_L.DESCR
COUNTRY_CD	Country Code	W1_NODE.COUNTRY
COUNTRY_DESCR	Country	CI_COUNTRY_L.DESCR
GEO_CODE	Geographical Code	W1_NODE.GEO_CODE
CROSS_STREET	Cross Street	W1_NODE.W1_CROSS_STRE ET
SUBURB	Suburb	W1_NODE.W1_SUBURB
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	
UDF3_DESCR	User Defined Field 3 Description	
UDF4_CD	User Defined Field 4 Code	
UDF4_DESCR	User Defined Field 4 Description	
UDF5_CD	User Defined Field 5 Code	
UDF5_DESCR	User Defined Field 5 Description	
UDF6_CD	User Defined Field 6 Code	
UDF6_DESCR	User Defined Field 6 Description	
UDF7_CD	User Defined Field 7 Code	
UDF7_DESCR	User Defined Field 7 Description	
UDF8_CD	User Defined Field 8 Code	
UDF8_DESCR	User Defined Field 8 Description	
UDF9_CD	User Defined Field 9 Code	
UDF9_DESCR	User Defined Field 9 Description	
UDF10_CD	User Defined Field 10 Code	
UDF10_DESCR	User Defined Field 10 Description	
DATA_SOURCE_IND	Data Source Indicator	CI_INSTALLATION.ENV_ID
DATA_LOAD_DTTM	Data Load Date/Time	

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

## **Asset Disposition Dimension**

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

## **Properties**

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

Target Field	OBIEE Field	Source Field
ASSET_DISP_KEY	Asset Disposition Dimension Surrogate Key	
ASSET_DISP_CD	Asset Disposition Code	F1_EXT_LOOKUP_VAL_L.F1 _EXT_LOOKUP_VALUE
ASSET_DISP_DESCR	Asset Disposition Description	F1_EXT_LOOKUP_VAL_L.DE SCR_OVRD / F1_EXT_LOOKUP_VAL_L.DE SCR  Note: If the override description is not available, the regular description is extracted.
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	

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

## **Asset Age Dimension**

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

## **Properties**

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

ODI Package Name	B1_PKG_CD_ASSET_AGE
ETL View Name	B1_D_ASSET_AGE_VW

Target Field	OBIEE Field	Source Field
ASSET_AGE_KEY	Asset Age Dimension Surrogate Key	
ASSET_TYPE_CD	Asset Type Code	W1_BKT_CONFIG_REL_OBJ. PK_VALUE1
		<b>Note</b> : For default buckets this column will be populated with "NA".
ASSET_AGE_ST_RANGE	Age Start Range	W1_BKT_CONFIG_VAL.STAR T_RANGE
ASSET_AGE_ED_RANGE	Age End Range	W1_BKT_CONFIG_VAL.END _RANGE
ASSET_AGE_DESCR	Asset Age Description	W1_BKT_CONFIG_VAL_L.D ESCR
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	
UDF3_DESCR	User Defined Field 3 Description	
UDF4_CD	User Defined Field 4 Code	
UDF4_DESCR	User Defined Field 4 Description	
UDF5_CD	User Defined Field 5 Code	
UDF5_DESCR	User Defined Field 5 Description	
UDF6_CD	User Defined Field 6 Code	
UDF6_DESCR	User Defined Field 6 Description	
UDF7_CD	User Defined Field 7 Code	
UDF7_DESCR	User Defined Field 7 Description	
UDF8_CD	User Defined Field 8 Code	
UDF8_DESCR	User Defined Field 8 Description	
UDF9_CD	User Defined Field 9 Code	
UDF9_DESCR	User Defined Field 9 Description	

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

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

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Administration Guide.* 

## **Asset Install Age Dimension**

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

#### **Properties**

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

Target Field	OBIEE Field	Source Field
ASSET_INSTALL_AGE_K EY	Asset Install Age Dimension Surrogate Key	

Target Field	OBIEE Field	Source Field
ASSET_TYPE_CD	Asset Type Code	W1_BKT_CONFIG_REL_OBJ. PK_VALUE1
		<b>Note</b> : For default buckets this column will be populated with "NA".
ASSET_INSTALL_AGE_ST _RANGE	Asset Install Age Start Range	W1_BKT_CONFIG_VAL.STAR T_RANGE
ASSET_INSTALL_AGE_E D_RANGE	Asset Install Age End Range	W1_BKT_CONFIG_VAL.END _RANGE
ASSET_INSTALL_AGE_D ESCR	Asset Install Age Description	W1_BKT_CONFIG_VAL_L.D ESCR
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	
UDF3_DESCR	User Defined Field 3 Description	
UDF4_CD	User Defined Field 4 Code	
UDF4_DESCR	User Defined Field 4 Description	
UDF5_CD	User Defined Field 5 Code	
UDF5_DESCR	User Defined Field 5 Description	
UDF6_CD	User Defined Field 6 Code	
UDF6_DESCR	User Defined Field 6 Description	
UDF7_CD	User Defined Field 7 Code	
UDF7_DESCR	User Defined Field 7 Description	
UDF8_CD	User Defined Field 8 Code	
UDF8_DESCR	User Defined Field 8 Description	
UDF9_CD	User Defined Field 9 Code	
UDF9_DESCR	User Defined Field 9 Description	
UDF10_CD	User Defined Field 10 Code	
UDF10_DESCR	User Defined Field 10 Description	
DATA_SOURCE_IND	Data Source Indicator	CI_INSTALLATION.ENV_ID
DATA_LOAD_DTTM	Data Load Date/Time	
UPDATE_DTTM	Update Date/Time	

Target Field	OBIEE Field	Source Field
JOB_NBR	Job Number	

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

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Administration Guide.* 

## **Asset Instore Age Dimension**

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

#### **Properties**

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

Target Field	OBIEE Field	Source Field
ASSET_INSTORE_AGE_K EY	Asset Instore Age Dimension Surrogate Key	
ASSET_TYPE_CD	Asset Type Code	W1_BKT_CONFIG_REL_OBJ. PK_VALUE1
		<b>Note</b> : For default buckets this column will be populated with "NA".
ASSET_INSTORE_AGE_S T_RANGE	Asset Instore Age Start Range	W1_BKT_CONFIG_VAL.STAR T_RANGE
ASSET_INSTORE_AGE_E D_RANGE	Asset Instore Age End Range	W1_BKT_CONFIG_VAL.END _RANGE

Target Field	OBIEE Field	Source Field
ASSET_INSTORE_AGE_D ESCR	Asset Instore Age Description	W1_BKT_CONFIG_VAL_L.D ESCR
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	
UDF3_DESCR	User Defined Field 3 Description	
UDF4_CD	User Defined Field 4 Code	
UDF4_DESCR	User Defined Field 4 Description	
UDF5_CD	User Defined Field 5 Code	
UDF5_DESCR	User Defined Field 5 Description	
UDF6_CD	User Defined Field 6 Code	
UDF6_DESCR	User Defined Field 6 Description	
UDF7_CD	User Defined Field 7 Code	
UDF7_DESCR	User Defined Field 7 Description	
UDF8_CD	User Defined Field 8 Code	
UDF8_DESCR	User Defined Field 8 Description	
UDF9_CD	User Defined Field 9 Code	
UDF9_DESCR	User Defined Field 9 Description	
UDF10_CD	User Defined Field 10 Code	
UDF10_DESCR	User Defined Field 10 Description	
DATA_SOURCE_IND	Data Source Indicator	CI_INSTALLATION.ENV_ID
DATA_LOAD_DTTM	Data Load Date/Time	
UPDATE_DTTM	Update Date/Time	
JOB_NBR	Job Number	

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

For details about reloading the data, see the **Data Reload** section in *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Administration Guide*.

## **Service History Type Dimension**

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

## **Properties**

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

Target Field	OBIEE Field	Source Field
SERVICE_HIST_TYPE_KE Y	Service History Type Dimension Surrogate Key	
SERVICE_HIST_TYPE_CD	Service History Type Code	W1_SVC_HIST_TYPE.SVC_HI ST_TYPE_CD
SERVICE_HIST_TYPE_DE SCR	Service History Type Description	W1_SVC_HIST_TYPE_L.DESC R100
SERVICE_HIST_CAT_CD	Service History Category Code	W1_SVC_HIST_TYPE.SVC_HI ST_CATEGORY_FLG
SERVICE_HIST_CAT_DES CR	Service History Category Description	CI_LOOKUP_VAL_L.DESCR_ OVRD / CI_LOOKUP_VAL_L.DESCR
		<b>Note</b> : If the override description is not available, the regular description is extracted.
UDF1_CD	User Defined Field 1 Code	
UDF1_DESCR	User Defined Field 1 Description	
UDF2_CD	User Defined Field 2 Code	
UDF2_DESCR	User Defined Field 2 Description	
UDF3_CD	User Defined Field 3 Code	
UDF3_DESCR	User Defined Field 3 Description	
UDF4_CD	User Defined Field 4 Code	

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

## **Asset Inspection Status Dimension**

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

## **Properties**

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

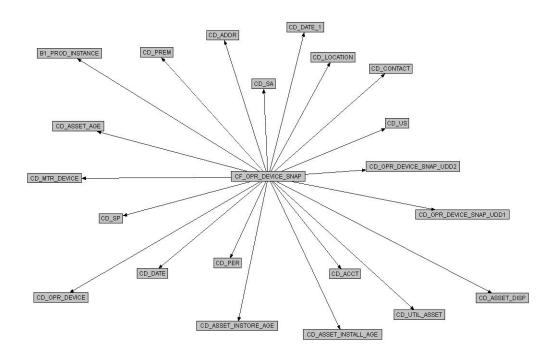
Target Field	OBIEE Field	Source Field
ASSET_INSP_STATUS_KE Y	Asset Inspection Status Dimension Surrogate Key	
ASSET_INSP_STATUS_CD	Asset Inspection Status Code	CI_LOOKUP_VAL_L.FIELD_ VALUE
ASSET_INSP_STATUS_DE SCR	Asset Inspection Status Description	CI_LOOKUP_VAL_L.DESCR / CI_LOOKUP_VAL_L.DESCR_ OVRD
		<b>Note</b> : If the override description is not available, the regular description is extracted.
DATA_SOURCE_IND	Data Source Indicator	CI_INSTALLATION.ENV_ID
DATA_LOAD_DTTM	Data Load Date/Time	
UPDATE_DTTM	Update Date/Time	
JOB_NBR	Job Number	

## **Fact Tables**

## **Operational Device Snapshot Fact**

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

#### **Entity Relationship Diagram**



#### **Properties**

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

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

Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
WNTY_EXP_IND	Warranty Expired Indicator		Transformation Logic: This indicator is set if the warranty date is earlier than or same as the end date of the snapshot period.
ASSET_DISP_START_ KEY	Asset Disposition Start Dimension Surrogate Key	W1_ASSET_NODE.AS SET_DPOS_FLG W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID	Transformation Logic: This field is populated based on the asset disposition that is effective at the start of the snapshot period. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
ASSET_DISP_END_K EY	Asset Disposition End Dimension Surrogate Key	W1_ASSET_NODE.AS SET_DPOS_FLG W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID	Transformation Logic: This field is populated based on the asset disposition that will be effective at the end of the snapshot period. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
OPR_DEVICE_KEY	Operational Device Dimension Surrogate Key	W1_ASSET.ASSET_ID	
UTIL_ASSET_KEY	Utility Dimension Surrogate Key	W1_ASSET.ASSET_ID	
ATTACHED_TO_ASS ET_KEY	Utility Asset Dimension Surrogate Key	W1_ASSET_NODE.AT TCH_TO_ASSET_ID	
LOCATION_KEY	Location Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID	Transformation Logic: This field is populated based on the location where the asset is at the end of the snapshot period. If it is a component and its current disposition is "Attached", its location will be the location of the asset where it is attached.

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

Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
PER_KEY	Person Dimension Surrogate Key		Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity.
ACCT_KEY	Account Dimension Surrogate Key		Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity.
SA_KEY	Service Agreement Dimension Surrogate Key		Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity.
PREM_KEY	Premise Dimension Surrogate Key		Transformation Logic: This field is populated only if the ODM-MDM integration exists for the Service Point entity.
SNAP_TYPE_CD	Snapshot Frequency Type		
DATE_KEY	Date Dimension Surrogate Key		
SNAPSHOT_DT	Snapshot Date		
WNTY_EXP_DATE_K EY	Warranty Expiration Date Dimension Surrogate Key		
WNTY_EXP_TIME_K EY	Warranty Expiration Time Dimension Surrogate Key		
WNTY_EXP_DTTM	Warranty Expiration Date/Time	W1_ASSET_CHAR.AD HOC_CHAR_VAL	Transformation Logic: This field is populated with the warranty expiration date/time of the asset, which is configured as a characteristic on the asset in ODM (characteristic type is "Warranty Expiration Date [W2-WEXDT]").
OPR_DEVICE_SNAP_ UDD1_KEY	Operation Device Snapshot User Defined Dimension 1 Surrogate Key		

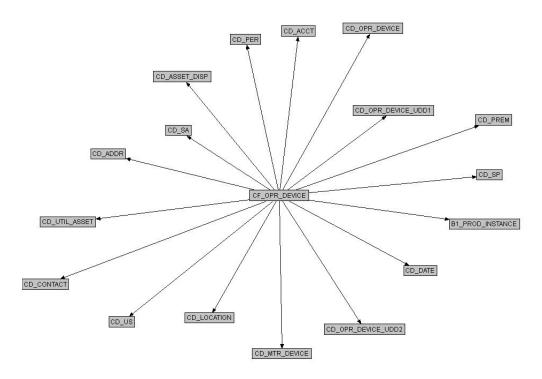
Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
OPR_DEVICE_SNAP_ UDD2_KEY	Operation Device Snapshot User Defined Dimension 2 Surrogate Key		
UDM1	User Defined Measure 1		
UDM2	User Defined Measure 2		
UDM3	User Defined Measure 3		
UDM4	User Defined Measure 4		
UDM5	User Defined Measure 5		
UDM6	User Defined Measure 6		
UDM7	User Defined Measure 7		
UDM8	User Defined Measure 8		
UDM9	User Defined Measure 9		
UDM10	User Defined Measure 10		
UDDGEN1	User Defined Degenerate Dimension 1		
UDDGEN2	User Defined Degenerate Dimension 2		
UDDGEN3	User Defined Degenerate Dimension 3		
UDDGEN4	User Defined Degenerate Dimension 4		
UDDGEN5	User Defined Degenerate Dimension 5		
UDDGENL1	User Defined Long Degenerate Dimension 1		
UDDGENL2	User Defined Long Degenerate Dimension 2		
UDDGENL3	User Defined Long Degenerate Dimension 3		
UDDGENL4	User Defined Long Degenerate Dimension 4		
UDDGENL5	User Defined Long Degenerate Dimension 5		
UDDFK1_KEY	User Defined Dimension Foreign Key 1		
UDDFK2_KEY	User Defined Dimension Foreign Key 2		

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

# **Operational Device Fact**

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

### **Entity Relationship Diagram**



### **Properties**

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

# Fields

Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
OPR_DEVICE_KEY	Operational Device Fact Key		
SRC_ASSET_ID	Source Asset ID	W1_ASSET.ASSET_ID	
ASSET_DISP_KEY	Asset Disposition Dimension Surrogate Key	W1_ASSET_NODE.AS SET_DPOS_FLG W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID	Transformation Logic: This field is populated based on the asset's current disposition. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
OPR_DEVICE_D_KE Y	Operational Device Dimension Surrogate Key	W1_ASSET.ASSET_ID	
UTIL_ASSET_KEY	Utility Asset Dimension Surrogate Key	W1_ASSET.ASSET_ID	
ATTACHED_TO_ASS ET_KEY	Utility Asset Dimension Surrogate Key	W1_ASSET_NODE.AT TCH_TO_ASSET_ID	
LOCATION_KEY	Location Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID W1_ASSET_NODE.EF F_DTTM W1_ASSET_NODE.AT TCH_TO_ASSET_ID	Transformation Logic: This field is populated based on the asset's current location. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
ADDR_KEY	Address Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID	Transformation Logic: This field is populated based on the same logic used for the asset's location. There is no separate entity for address in the ODM system. The source for this column will be the asset's location.

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

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

Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
RCT_INS_PASS_DTTM	Recent Inspection Pass Date/Time	W1_SVC_HIST.ASSET_ ID	Transformation Logic: This field is populated with the effective date/time of the most recent service history with category of 'Inspection', and a passing 'Operational Status'.
		W1_SVC_HIST_TYPE. SVC_HIST_CATEGOR Y_FLG	
		W1_SVC_HIST_CHAR. EFFDT	
		W1_SVC_HIST_CHAR. CHAR_TYPE_CD	
		W1_SVC_HIST_CHAR. CHAR_VAL	
RCT_INS_FAIL_DATE _KEY	Recent Inspection Fail Date Dimension Surrogate Key		
RCT_INS_FAIL_TIME _KEY	Recent Inspection Fail Time Dimension Surrogate Key		
RCT_INS_FAIL_DTTM	Recent Inspection Fail Date/Time	W1_SVC_HIST.ASSET_ ID	Transformation Logic: This field is populated with the effective date/time of the most recent service history with category of 'Inspection', and a failed 'Operational Status'.
		W1_SVC_HIST_TYPE. SVC_HIST_CATEGOR Y_FLG	
		W1_SVC_HIST_CHAR. EFFDT	
		W1_SVC_HIST_CHAR. CHAR_TYPE_CD	
		W1_SVC_HIST_CHAR. CHAR_VAL	
OPR_DEVICE_UDD1_ KEY	Operation Device Snapshot User Defined Dimension 1 Surrogate Key		
OPR_DEVICE_UDD2_ KEY	Operation Device Snapshot User Defined Dimension 2 Surrogate Key		
UDM1	User Defined Measure 1		
UDM2	User Defined Measure 2		
UDM3	User Defined Measure 3		

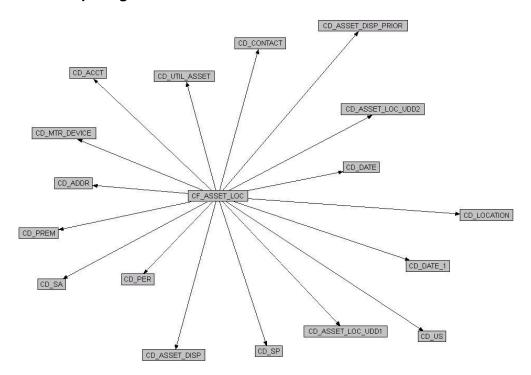
Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
UDM4	User Defined Measure 4		
UDM5	User Defined Measure 5		
UDM6	User Defined Measure 6		
UDM7	User Defined Measure 7		
UDM8	User Defined Measure 8		
UDM9	User Defined Measure 9		
UDM10	User Defined Measure 10		
UDDGEN1	User Defined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

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

### **Asset Location Fact**

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

### **Entity Relationship Diagram**



### **Properties**

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

# Fields

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

Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
PRIOR_ASSET_DISP_ KEY	Prior Disposition Dimension Surrogate Key		Transformation Logic: This field is populated based on the prior disposition of the asset. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
UTIL_ASSET_KEY	Utility Asset Dimension Surrogate Key	W1_ASSET_NODE.AS SET_ID	
ATTACHED_TO_ASS ET_KEY	Utility Asset Dimension Surrogate Key	W1_ASSET_NODE.AT TCH_TO_ASSET_ID	
LOCATION_KEY	Location Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID	Transformation Logic: This field is populated based on the asset's current location. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
PRIOR_LOCATION_K EY	Prior Location Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID	Transformation Logic: This field is populated based on the asset's prior location. If it is a component and its current disposition is "Attached", its disposition will follow the disposition of the asset it is currently attached to.
ADDR_KEY	Address Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID	Transformation Logic: The source for this column will be the asset's current location.
SP_KEY	Service Point Dimension Surrogate Key	W1_NODE_IDENTIFI ER.W1_ID_VALUE	Transformation Logic: This field is populated only for joint ODM-MDM integration. It is populated using the MDM SP natural key stored in the ODM system.

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

Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
SA_KEY	Service Agreement Dimension Surrogate Key		Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB SA that is linked to the MDM SP natural key stored in the ODM system.
PREM_KEY	Premise Dimension Surrogate Key		Transformation Logic: This field is populated only for joint ODM-MDM-CCB integration. It is populated by deriving the CCB premise that is linked to the MDM SP natural key stored in the ODM system.
DISP_DATE_KEY	Disposition Date Dimension Surrogate Key		
DISP_TIME_KEY	Disposition Time Dimension Surrogate Key		
DISP_DTTM	Disposition Date/Time	W1_ASSET_NODE.EF F_DTTM	Transformation Logic: This is the disposition date/time of the asset's current disposition.
PRIOR_DISP_DATE_ KEY	Prior Disposition Date Dimension Surrogate Key		
PRIOR_DISP_TIME_K EY	Prior Disposition Time Dimension Surrogate Key		
PRIOR_DISP_DTTM	Prior Disposition Date/ Time	W1_ASSET_NODE.EF F_DTTM	Transformation Logic: This is the disposition date/time of the asset's prior disposition.
ASSET_LOC_UDD1_K EY	Asset Location User Defined Dimension 1 Surrogate Key		
ASSET_LOC_UDD2_K EY	Asset Location User Defined Dimension 2 Surrogate Key		
UDM1	User Defined Measure 1		

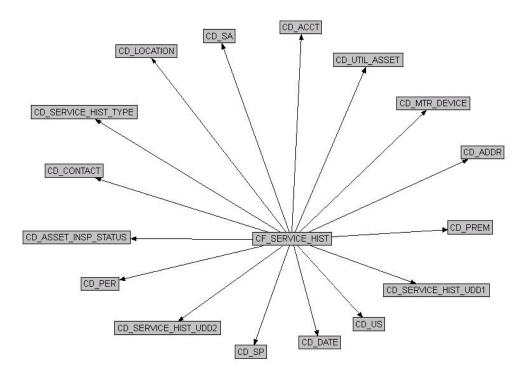
Target Field	OBIEE Field	Source Field	Transformation / Calculation Logic
UDM2	User Defined Measure 2		
UDM3	User Defined Measure 3		
UDM4	User Defined Measure 4		
UDM5	User Defined Measure 5		
UDM6	User Defined Measure 6		
UDM7	User Defined Measure 7		
UDM8	User Defined Measure 8		
UDM9	User Defined Measure 9		
UDM10	User Defined Measure 10		
UDDGEN1	User Defined Degenerate Dimension 1		
UDDGEN2	User Defined Degenerate Dimension 2		
UDDGEN3	User Defined Degenerate Dimension 3		
UDDGEN4	User Defined Degenerate Dimension 4		
UDDGEN5	User Defined Degenerate Dimension 5		
UDDGENL1	User Defined Long Degenerate Dimension 1		
UDDGENL2	User Defined Long Degenerate Dimension 2		
UDDGENL3	User Defined Long Degenerate Dimension 3		
UDDGENL4	User Defined Long Degenerate Dimension 4		
UDDGENL5	User Defined Long Degenerate Dimension 5		
UDDFK1_KEY	User Defined Dimension Foreign Key 1		
UDDFK2_KEY	User Defined Dimension Foreign Key 2		
UDDFK3_KEY	User Defined Dimension Foreign Key 3		
UDDFK4_KEY	User Defined Dimension Foreign Key 4		

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

# **Service History Fact**

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

### **Entity Relationship Diagram**



# **Properties**

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

### **Fields**

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

Target Field	OBIEE Field	Source Field	Transformation/ Calculation Logic
SRC_SERVICE_HIST_I D	Source Service History ID	W1_SVC_HIST.SVC_HI ST_ID	
SERVICE_HIST_TYPE _KEY	Service History Type Dimension Surrogate Key	W1_SVC_HIST.SVC_HI ST_TYPE_CD	
OPR_DEVICE_KEY	Operational Device Dimension Surrogate Key	W1_SVC_HIST.ASSET_ ID	
	T.C.,	W1_SVC_HIST.EFF_D TTM	
UTIL_ASSET_KEY	Utility Asset Dimension Surrogate Key	W1_SVC_HIST.ASSET_ ID	
		W1_SVC_HIST.EFF_D TTM	
LOCATION_KEY	Location Dimension Surrogate Key	W1_SVC_HIST.EFF_D TTM	Transformation Logic: This field is populated based on the current
		W1_ASSET_NODE.N ODE_ID	location of the asset associated with the
		W1_ASSET_NODE.EF F_DTTM	Service History. If it is a component and its current disposition is
		W1_ASSET_NODE.AT TCH_TO_ASSET_ID	"Attached", its disposition will follow the disposition of the asset it is currently attached to.
ADDR_KEY	Address Dimension Surrogate Key	W1_ASSET_NODE.N ODE_ID	Transformation Logic: The source for this column will be the asset's location.
ASSET_INSP_STATUS _KEY	Asset Inspection Status Dimension Surrogate Key	W1_SVC_HIST_TYPE. SVC_HIST_CATEGOR Y_FLG	Transformation Logic: Only populated for Service Histories of
		W1_SVC_HIST_CHAR. CHAR_TYPE_CD	Inspection Category. This is populated based on the characteristic value
		W1_SVC_HIST_CHAR. CHAR_VAL	configured for the 'Operational Status' characteristic type. If no value is configured, then the default value of 'NA' will be mapped.

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

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

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

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

# **Chapter 3**

# Configuring Oracle Utilities Operational Device Management

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

• BI Configuration Portal

# **BI Configuration Portal**

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

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

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

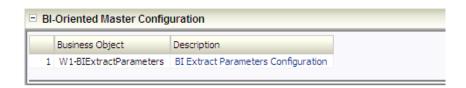
Use the BI Configuration portal to perform the following tasks:

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

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

# **BI-Oriented Master Configuration**

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



#### **Extract Parameters**

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

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

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

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

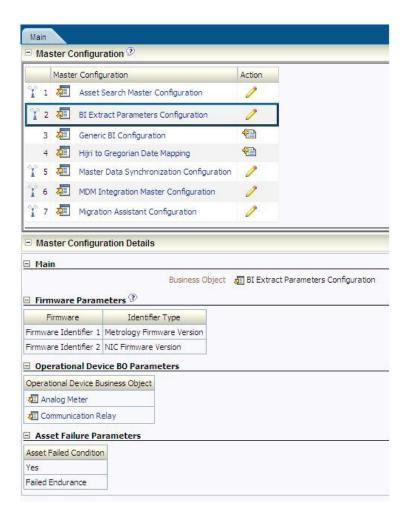
Use this firmware parameter configuration to specify the type of firmware versions that should be extracted into each of the columns.

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

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

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

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



# **Bucket Configuration**

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

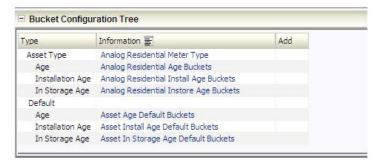
### **Defining Age Buckets**

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

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

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

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



**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 Advances Spatial and Operational Analytics Administration Guide.* 

### **Asset Age Buckets**

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



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

### **Asset Installation Age Buckets**

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



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

### **Asset In Storage Age Buckets**

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



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

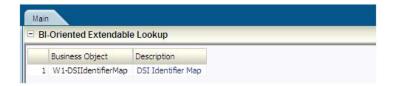
### **Bucket Definition Considerations**

To define the age bucket ranges follow these rules:

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

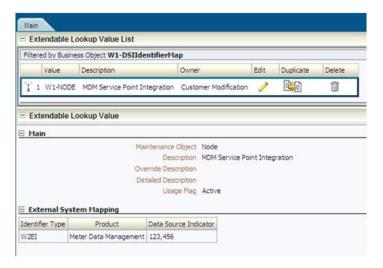
# **BI-Oriented Extendable Lookups**

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



### **DSI Identifier Mapping**

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



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

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

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

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

select ENV\_ID from F1\_INSTALLATION;