

Oracle Utilities Cloud Services

Database Changes Guide

For 22C Releases

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Oracle Utilities Cloud Services 22C Database Changes Guide

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Chapter 1

Cloud Services Database Changes Guide

Welcome to the Oracle Utilities Cloud Services Database Changes Guide. This document describes changes in the database in the 22C release of the following Oracle Utilities cloud services:

- [Oracle Utilities Billing Cloud Service](#)
- [Oracle Utilities Customer Care and Billing Cloud Service](#)
- [Oracle Utilities Customer Cloud Service](#)
- [Oracle Utilities Digital Asset Cloud Service](#)
- [Oracle Utilities Generation Asset Manager Cloud Service](#)
- [Oracle Utilities Market Settlements Management Cloud Service](#)
- [Oracle Utilities Meter Solution Cloud Service](#)
- [Oracle Utilities Operational Device Cloud Service](#)
- [Oracle Utilities Rate Cloud Service](#)
- [Oracle Utilities Work and Asset Cloud Service](#)

This document includes:

- [Cloud Services and Database Changes](#)
- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

Cloud Services and Database Changes

This section outlines the database changes that apply to each of the following cloud services:

- [Billing Cloud Service](#)
- [Customer Care and Billing Cloud Service](#)
- [Customer Cloud Service](#)
- [Digital Asset Cloud Service](#)
- [Generation Asset Manager Cloud Service](#)
- [Market Settlements Management Cloud Service](#)
- [Meter Solution Cloud Service](#)
- [Operational Device Cloud Service](#)
- [Rate Cloud Service](#)
- [Work and Asset Cloud Service](#)

Billing Cloud Service

The following database changes apply to Oracle Utilities Billing Cloud Service:

- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)
- [Application Framework Database Changes](#)

Customer Care and Billing Cloud Service

The following database changes apply to Oracle Utilities Customer Care and Billing Cloud Service:

- [Customer-Related Database Changes](#)
- [Application Framework Database Changes](#)

Customer Cloud Service

The following database changes apply to Oracle Utilities Customer Cloud Service:

- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

Digital Asset Cloud Service

The following database changes apply to Oracle Utilities Digital Asset Cloud Service:

- [Customer-Related Database Changes](#)

- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

Generation Asset Manager Cloud Service

The following database changes apply to Oracle Utilities Generation Asset Manager Cloud Service:

- [Application Framework Database Changes](#)

Market Settlements Management Cloud Service

The following database changes apply to Oracle Utilities Market Settlements Management Cloud Service:

- [Meter-Related Database Changes](#)
- [Application Framework Database Changes](#)

Meter Solution Cloud Service

The following database changes apply to Oracle Utilities Meter Solution Cloud Service:

- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

Operational Device Cloud Service

The following database changes apply to Oracle Utilities Operational Device Cloud Service:

- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

Rate Cloud Service

The following database changes apply to Oracle Utilities Rate Cloud Service:

- [Customer-Related Database Changes](#)
- [Application Framework Database Changes](#)

Work and Asset Cloud Service

The following database changes apply to Oracle Utilities Work and Asset Cloud Service:

- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

Chapter 2

Customer-Related Database Changes

This chapter provides lists of customer-related database changes in the 22C release of Oracle Utilities cloud services. This includes:

- [New Tables](#)
- [New Indexes](#)
- [New Columns](#)

New Tables

Table	Name	Description
C1_CS_REQ_TYPE_QSTN_RELOBJ	CS Request Type Question Related Object	Child of the CS Request Type Question table, used to store related objects
C1_CS_REQ_TYPE_QUESTION	CS Request Type Question	Used to store configuration data representing questions that can be asked as part of a request type
C1_CS_REQ_TYPE_QUESTION_REL	CS Request Type Question Relationship	Child of the CS Request Type Question table, used to store relationships between questions and other objects

New Indexes

Table_Name	Index_Name
C1_CS_REQ_TYPE_QSTN_RELOBJ	C1C167P0
C1_CS_REQ_TYPE_QSTN_RELOBJ	C1C167S1
C1_CS_REQ_TYPE_QUESTION	C1C165P0

C1_CS_REQ_TYPE_QUESTION	C1C165S1
C1_CS_REQ_TYPE_QUESTION	C1C165S2
C1_CS_REQ_TYPE_QUESTION_REL	C1C166P0
C1_MKTMSG_CHG_DTL	C1T137S5

New Columns

Table_Name	Column_Name	Data Type	Data Length
C1_BI_FT_VW	XFER_TO_GL_DT	Date	10
C1_CS_REQ_TYPE_QSTN_RELOBJ	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_QSTN_RELOBJ	MAINT_OBJ_CD	CHAR	12
C1_CS_REQ_TYPE_QSTN_RELOBJ	PK_VALUE1	VARCHAR	254
C1_CS_REQ_TYPE_QSTN_RELOBJ	PK_VALUE2	VARCHAR	254
C1_CS_REQ_TYPE_QSTN_RELOBJ	PK_VALUE3	VARCHAR	254
C1_CS_REQ_TYPE_QSTN_RELOBJ	PK_VALUE4	VARCHAR	254
C1_CS_REQ_TYPE_QSTN_RELOBJ	PK_VALUE5	VARCHAR	254
C1_CS_REQ_TYPE_QSTN_RELOBJ	QSTN_REL_OBJ_SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_QSTN_RELOBJ	QSTN_REL_OBJ_TYPE_FLG	CHAR	4
C1_CS_REQ_TYPE_QSTN_RELOBJ	QUESTION_APPL_FLG	CHAR	4
C1_CS_REQ_TYPE_QSTN_RELOBJ	SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_QSTN_RELOBJ	VERSION	NUMB	5
C1_CS_REQ_TYPE_QUESTION	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_QUESTION	BUS_OBJ_CD	CHAR	30
C1_CS_REQ_TYPE_QUESTION	C1_ANSWER_CD	VARCHAR	30
C1_CS_REQ_TYPE_QUESTION	C1_QUESTION_CD	VARCHAR	30
C1_CS_REQ_TYPE_QUESTION	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_QUESTION	CS_REQ_TYPE_QSTN_STAT_FLG	CHAR	4
C1_CS_REQ_TYPE_QUESTION	CUST_CL_CD	CHAR	8
C1_CS_REQ_TYPE_QUESTION	PERS_BUS_QSTN_APPL_FLG	CHAR	4
C1_CS_REQ_TYPE_QUESTION	QUESTION_APPL_FLG	CHAR	4
C1_CS_REQ_TYPE_QUESTION	QUESTION_PLACE_GRP	VARCHAR	254
C1_CS_REQ_TYPE_QUESTION	SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_QUESTION	SORT_SEQ5	NUMB	5

C1_CS_REQ_TYPE_QUESTION	VERSION	NUMB	5
C1_CS_REQ_TYPE_QUESTION_REL	C1_ANSWER_CD	VARCHAR	30
C1_CS_REQ_TYPE_QUESTION_REL	C1_QUESTION_CD	VARCHAR	30
C1_CS_REQ_TYPE_QUESTION_REL	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_QUESTION_REL	REL_QSTN_SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_QUESTION_REL	SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_QUESTION_REL	VERSION	NUMB	5
C1_QUESTION_ANSWER	CHAR_TYPE_CD	CHAR	8

Chapter 3

Meter-Related Database Changes

This chapter provides lists of meter-related database changes in the 22C release of Oracle Utilities cloud services. This includes:

- [New Indexes](#)
- [New Columns](#)
- [Dropped Columns](#)
- [Modified Columns](#)

New Indexes

Table_Name	Index_Name
D1_EVT_PARTICIPATION	D1T652S1*

* Used by Digital Asset Cloud Service

New Columns

Table_Name	Column_Name	Data Type	Data Length
D1_DYN_OPT_EVENT	DYN_OPT_EXT_ID_VALUE*	VARCHAR2	120
D1_DYN_OPT_TYPE	DYN_OPT_CATEGORY*	VARCHAR2	254
D1_DYN_OPT_TYPE	DEVICE_REQD_FLG*	CHAR	4
D1_EVT_PARTICIPATION	RESERVATION_START_DTTM*	DATE	
D1_EVT_PARTICIPATION	RESERVATION_END_DTTM*	DATE	
D1_EVT_PARTICIPATION	ILM_DT*	DATE	
D1_EVT_PARTICIPATION	ILM_ARCH_SW*	CHAR	1

* Used by Digital Asset Cloud Service

Dropped Columns

Table_Name	Column_Name	Data Type	Data Length
D1_EVT_PARTICIPATION	EFF_DTTM	DATE	

Modified Columns

Table_Name	Column_Name	Data Type	Data Length	Change
D1_EVT_PARTICIPATION	US_ID*	CHAR	12	Not Null to Nullable
D1_EVT_PARTICIPATION	DYN_OPT_ID*	CHAR	12	Not Null to Nullable
D1_EVT_PARTICIPATION	DYN_OPT_EVENT_ID*	CHAR	14	Not Null to Nullable

* Used by Digital Asset Cloud Service

Chapter 4

Work and Asset-Related Database Changes

This chapter provides lists of work and asset-related database changes in the 22C release of Oracle Utilities cloud services. This includes:

- [New Tables](#)
- [New Columns](#)
- [Modified Columns](#)
- [New Indexes](#)

New Tables

Table	Name	Description
W1_CU_CU_USAGE	Compatible Unit CU Usage	Used to store configuration data related to compatible units usage

New Columns

Table_Name	Column_Name	Data Type	Data Length
W1_ACTIVITY	ACT_DURATION	NUMBER	22
W1_ACTIVITY	UOT_FLG	CHAR	4
W1_ACTIVITY_TYPE	ACT_DURATION	NUMBER	22
W1_ACTIVITY_TYPE	UOT_FLG	CHAR	4
W1_ASSET	ASSET_AVAILABILITY_FLG*	CHAR	1
W1_AST_DERMS_EVTCTL_CSTHIST	ASSET_AVAILABILITY_FLG*	CHAR	1
W1_CU_CU_USAGE	CU_ID	CHAR	12

W1_CU_CU_USAGE	CU_USAGE_CD	VARCHAR2	30
W1_CU_CU_USAGE	VERSION	NUMBER	22
W1_OVERHEAD	ADJUSTMENT_TYPE_CD	VARCHAR2	30
W1_OVERHEAD_RESRC	ADJUSTMENT_TYPE_CD	VARCHAR2	30
W1_TMPL_ACT	ACT_DURATION	NUMBER	22
W1_TMPL_ACT	UOT_FLG	CHAR	4

* Used by Digital Asset Cloud Service

Modified Columns

Table_Name	Column_Name	New Data Type	Old Precision	New Precision
W1_BC_LINE	PI_RATIO	NUMBER	3	8

New Indexes

Table_Name	Index_Name	Column_Name
W1_COMPLIANCE_TYPE_CHAR	W1C845S1	SRCH_CHAR_VAL
W1_CU	W1M746S3	ASSET_TYPE_CD
W1_CU_CU_USAGE	W1M968P0	CU_ID
W1_CU_CU_USAGE	W1M968P0	CU_USAGE_CD
W1_CU_SET	W1C757S1	CU_SET_CD
W1_CU_SET	W1C757S1	EQUIP_GROUP_CD
W1_DESIGN_ELEMENT_CHAR	W1M799S1	SRCH_CHAR_VAL
W1_DESIGN_ELEMENT_LOG	W1M801S1	CHAR_TYPE_CD
W1_DESIGN_ELEMENT_LOG	W1M801S1	CHAR_VAL_FK1
W1_DESIGN_ELEMENT_LOG	W1M801S2	CHAR_TYPE_CD
W1_DESIGN_ELEMENT_LOG	W1M801S2	CHAR_VAL
W1_EQUIP_GROUP	W1C768S1	CU_CATEGORY_CD
W1_FT	W1T312S1	ACT_ID
W1_PR_HDR	W1T434S6	BUYER_CD
W1_WORK_DESIGN_CHAR	W1M790S1	SRCH_CHAR_VAL
W1_WORK_DESIGN_LOG	W1M792S1	CHAR_TYPE_CD

W1_WORK_DESIGN_LOG	W1M792S1	CHAR_VAL_FK1
W1_WORK_DESIGN_LOG	W1M792S2	CHAR_TYPE_CD
W1_WORK_DESIGN_LOG	W1M792S2	CHAR_VAL

Chapter 5

Application Framework Database Changes

This chapter provides lists of database changes in Oracle Utilities Application Framework included with the 22C release of Oracle Utilities cloud services. This includes:

- [New Tables](#)
- [Dropped Tables](#)
- [New Indexes](#)
- [New Columns](#)
- [Modified Columns](#)
- [Modified Views](#)

New Tables

Table	Name	Description
CI_MD_FLD_ADDTL	Field Additional Attributes	This is an extension of the CI_MD_FLD table and is used to capture additional information about a field.
F1_MO_UPD_BACKUP	Entity Key Backup Table	This table is part of generalized export batch it is used to keep a backup of all entity keys exported by a specific batch run number
F1_MIGR_OBJ_DATA	Migration Object Data	This is a child table to store Migration Object Content that is currently stored directly on the migration object itself
F1_BATCH_RUN_ANALYTICS_SNAP*	Batch Run Analytics Snapshot	Reserved for future use.
F1_BATCH_THD_ANALYTICS_SNAP*	Batch Thread Analytics Snapshot	Reserved for future use.

*Future use only.

Dropped Tables

Table	Comments
F1_CRYPTO_KEY_RING_LINK	This table was created in a previous release in anticipation of a future feature. It was not used in any product functionality. Subsequently the design changed such that this table is not longer needed.

New Indexes

Table_Name	Index_Name
F1_MIGR_OBJ	F1T188S3
F1_SVC_TASK	F1C474S3
F1_MKTMSG_IN	F1T759S3

New Columns

Table_Name	Column_Name	Data Type	Data Length
F1_MIGR_DATA_ST	REDACT_OPT_FLG	CHAR	4
F1_MIGR_DATA_ST	INSERT_ONLY_FLG	CHAR	4
F1_MIGR_DATA_ST	BULK_IMPORT_FLG	CHAR	4
F1_MIGR_OBJ	ENTITIES_CNT	NUMBER	6
F1_MIGR_OBJ_SQL	PK_VALUE1	VARCHAR2	254
F1_MIGR_OBJ_SQL	PK_VALUE2	VARCHAR2	254
F1_MIGR_OBJ_SQL	PK_VALUE3	VARCHAR2	254
F1_MIGR_OBJ_SQL	PK_VALUE4	VARCHAR2	254
F1_MIGR_OBJ_SQL	PK_VALUE5	VARCHAR2	254
SC_APP_SERVICE_L	DESCRLONG	VARCHAR2	4000
F1_CRYPTO_KEY_RING	KEY_RING_CAT_FLG	CHAR	4
CI_CURRENCY_CD	EXT_CURRENCY_CD	CHAR	36
F1_ETL_MP_CTRL	F1_BI_TYPE_FLD	CHAR	30
F1_ETL_MP_CTRL	F1_BI_TYPE_VALUE	CHAR	4

Modified Columns

Table_Name	Column_Name	From	To
F1_CRYPTO_KEY	PUBLIC_KEY	VARCHAR (2000)	VARCHAR (4000)

Modified Views

View_Name	Changes
CI_TD_ENTRY_OPEN_VW	/*+ no_unnest */ hint added