

**Oracle Utilities Cloud Services**  
Database Changes Guide  
For 23B Releases  
**F83235-01**

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Oracle Utilities Cloud Services 23B Database Changes Guide

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# Chapter 1

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## Cloud Services Database Changes Guide

Welcome to the Oracle Utilities Cloud Services Database Changes Guide. This document describes changes in the database in the 23B 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 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](#)

### About New Tables and New Columns

New tables and columns listed in this document are associated with new features introduced in the 23B release of the above listed Oracle Utilities cloud services. For more information about new features introduced in this release, visit the [Oracle Cloud Update Readiness](#) application.

**Note:** The link above directs you to information about Oracle Utilities Customer Cloud Service. Use the links under **Energy and Water** in the left navigation panel to view information about other cloud services.

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# 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](#)
- [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](#)

## 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 23B release of Oracle Utilities cloud services. This includes:

- [New Columns](#)
- [Dropped Columns](#)
- [Updated Columns](#)
- [New Columns](#)

### New Columns

Table_Name	Column_Name	Data Type	Data Length
C1_CS_REQ_TYPE_REL_UPD	REL_UPD_RESPONSE_VALUE	Varchar2	254
C1_CS_REQ_TYPE_REL_UPD	UPDATE_VALUE	Varchar2	254

### Dropped Columns

Table_Name	Column_Name
C1_CS_REQ_TYPE_QUESTION	C1_ANSWER_CD
C1_CS_REQ_TYPE_SVC_CRIT	START_SA_OVRD_SW
C1_CS_REQ_TYPE_SVC_CRIT	STOP_SA_OVRD_SW
C1_QUESTION_ANSWER	C1_ANSWER_STYLE_FLG
C1_QUESTION_ANSWER	CHAR_TYPE_CD
C1_CS_REQ_TYPE_QUESTION	C1_ANSWER_CD

## Updated Columns

Table_Name	Column_Name	Old Data Type	New Data Type
C1_CS_REQ_TYPE_QUESTION	QUESTION_APPL_FLG	NULLABLE	NOT NULLABLE
C1_CS_REQ_SA_SP	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
C1_RC_READ_GTT	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_BCHG_READ	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_BCHG_UP_READ	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_BSEG_READ	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_SA_SP	USE_PCT	NUMBER(3,0)	NUMBER(5,2)

## New Indexes

Table_Name	Index_Name
CI_PREM	XM174S8



# Chapter 3

## Meter-Related Database Changes

This chapter provides lists of meter-related database changes in the 23B release of Oracle Utilities cloud services. This includes:

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

### New Tables

Table	Name	Description
D1_DYN_OPT_USG_GRP*	Dynamic Option Usage Group	This table is used to define relationships between a Dynamic Option and a Usage Calculation Group. When used with Oracle Utilities Digital Asset Cloud Service this is used to define relationships between Programs and Event Settlement Calculation Groups related to the Customer Settlement feature introduced in release 23B.

\* Used by Digital Asset Cloud Service

### New Indexes

Table_Name	Index_Name
D1_DYN_OPT_USG_GRP*	D1M652P0

\* Used by Digital Asset Cloud Service

## New Columns

Table_Name	Column_Name	Data Type	Data Length
D1_DYN_OPT_EVENT*	DYN_OPT_EXT_EVT_ID_VALUE	VARCHAR2	120
D1_SP*	D1_SERVICE_AREA_CD	VARCHAR2	30
D1_USAGE*	EVT_SETT_REQ_TYPE_FLG	CHAR	4
D1_USAGE_PERIOD_SQ*	D1_AMOUNT	NUMBER	15,2
D1_USAGE_PERIOD_SQ*	DYN_OPT_EVENT_ID	CHAR	14
D1_USAGE_PERIOD_SQ*	D1_QUANTITY1	CHAR	14
D1_USAGE_PERIOD_SQ*	D1_QUANTITY2	CHAR	14
D1_USAGE_PERIOD_SQ*	D1_QUANTITY3	CHAR	14
D1_USAGE_PERIOD_SQ*	D1_QUANTITY4	CHAR	14
D1_USAGE_PERIOD_SQ*	D1_QUANTITY5	CHAR	14
D1_USAGE_PERIOD_SQ*	LINE_DESCR	VARCHAR2	254
D1_USAGE_PERIOD_SQ*	D1_CURRENCY_CD	CHAR	3
D1_USAGE_PERIOD_SQ*	DYN_OPT_ID	CHAR	12
D1_USAGE_PERIOD_SQ_DATA*	D1_PRICE	NUMBER	19,8
D1_USAGE_PERIOD_SQ_DATA*	D1_AMOUNT	NUMBER	15,2
D1_USG_RULE_L*	LINE_DESCR	VARCHAR2	254
D1_US_TYPE*	EVT_SETT_BO_CD	CHAR	30

\* Used by Digital Asset Cloud Service

## Updated Columns

Table_Name	Column_Name	Old Length	New Length
D1_USAGE_SCALAR_DTL	USE_PERCENT	NUMBER(3,0)	NUMBER(9,6)
D1_US_SP	USE_PERCENT	NUMBER(3,0)	NUMBER(9,6)

# Chapter 4

## Work and Asset-Related Database Changes

This chapter provides lists of work and asset-related database changes in the 23B release of Oracle Utilities cloud services. This includes:

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

### New Columns

Table_Name	Column_Name	Data Type	Data Length
W1_ACT_RECON_COST_CENTER	W1_AMOUNT	NUMBER	18,7
W1_ACT_RECON_PROP_UNIT	COST_CENTER_CD	VARCHAR2	30
W1_ACT_RECON_PROP_UNIT	CU_USAGE_CD	VARCHAR2	30
W1_ASSET_TYPE	ASSET_NO_CAL_PREFIX_FLG	CHAR	4
W1_ASSET_TYPE	ASSET_NO_GEN_FLG	CHAR	4
W1_ASSET_TYPE	ASSET_NO_PREFIX	CHAR	4
W1_ASSET_TYPE	ASSET_NO_SEQ_LEN	NUMBER	2
W1_ASSET_TYPE	BADGE_NO_CAL_PREFIX_FLG	CHAR	4
W1_ASSET_TYPE	BADGE_NO_GEN_FLG	CHAR	4
W1_ASSET_TYPE	BADGE_NO_PREFIX	CHAR	4
W1_ASSET_TYPE	BADGE_NO_SEQ_LEN	NUMBER	2

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## New Indexes

Table_Name	Index_Name	Column_Name
W1_ODC_DTL	W1T340S3	ACT_RESRC_REQMT_ID
W1_PO_LINE	W1T418S9	ACT_RESRC_REQMT_ID
W1_TIMESHEET_DETAIL	W1M595S4	ACT_RESRC_REQMT_ID

# Chapter 5

## Application Framework Database Changes

This chapter provides lists of database changes in Oracle Utilities Application Framework included with the 23B release of Oracle Utilities cloud services. This includes:

- [New Columns](#)
- [Updated Views](#)
- [Updated Primary Key](#)
- [New Indexes](#)
- [Updated Views](#)

### New Columns

Table_Name	Column_Name	Data Type	Data Length
F1_MIGR_REQ_INSTR	ENTITY_TAG	Varchar2	30
F1_TD_ENTRY	TD_SUB_STATUS_FLG	Flag	4
F1_TD_LOG	TD_LOG_STATUS_FLG	Flag	4
CI_TD_ENTRY	RTE_BATCH_CD	Character	8
CI_TD_ENTRY	RTE_BATCH_NBR	Number	10

### Updated Columns

Table_Name	Column_Name	Old Data Type	New Data Type
F1_CRYPT0_KEY	PUBLIC_KEY	VARCHAR2(4000)	VARCHAR2(32767)
CI_MD_IDX	IDX_CD	CHAR(12)	VARCHAR2 (128)
CI_MD_IDX_FLD	IDX_CD	CHAR(12)	VARCHAR2 (128)

## Updated Primary Key

Table_Name	Old Fields	New Fields
F1_WEB_CAT_INCL_SVC	"WEB_SVC_CAT_CD", "SEQNO"	"WEB_SVC_CAT_CD", "SEQNO", "OWNER_FLG"

## New Indexes

Table	Index
F1_TSPACE_ENTRY	FT001S1 (TSPACE_NAME, TSPACE_ENTRY_TY, TSPACE_ENTRY_ID)
F1_MKTMSG_OUT	F1T782S3 (OUTMSG_ID)
F1_MKTMSG_OUT	F1T782S4 (MKTPROC_ID)
F1_MKTMSG_OUT	F1T782S5 (MKT_REG_NBR)
F1_BATCH_RUN_ANALYTICS_SNAP	F1T301S02 (END_DTTM, BATCH_CD, BATCH_NBR, BATCH_RERUN_NBR)
F1_BATCH_RUN_ANALYTICS_SNAP	F1T301S03(BATCH_BUS_DT, BATCH_CD, BATCH_NBR, BATCH_RERUN_NBR)
F1_BATCH_THD_ANALYTICS_SNAP	F1T401S02 (BATCH_BUS_DT, BATCH_CD, BATCH_NBR, BATCH_RERUN_NBR, BATCH_THREAD_NBR)
F1_BATCH_THD_ANALYTICS_SNAP	F1T401S03 (START_DTTM, BATCH_CD, BATCH_NBR, BATCH_RERUN_NBR, BATCH_THREAD_NBR)
CI_TD_ENTRY	XT039S9 (RTE_BATCH_CD,RTE_BATCH_NBR,ENTRY_STATUS_FLG)
F1_OUTMSG	FT010S2 (NT_XID_CD, CRE_DTTM, OUTMSG_STATUS_FLG)

## Updated Views

View_Name	Changes
CI_TD_ENTRY_OPEN_VW	New Field: TD_SUB_STATUS_FLG
F1_BATCH_RUN_HIST_VW	Used with New Batch Analytics Views feature.
F1_BATCH_THD_HIST_VW	Used with New Batch Analytics Views feature.
F1_BATCH_CONF_VW	Used with New Batch Analytics Views feature.
F1_BATCH_THD_CAP_VW	Used with New Batch Analytics Views feature.