

**Oracle Utilities Cloud Services**  
Database Changes Guide  
For 21A Releases  
**F39184-01**

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## Oracle Utilities Cloud Services 21A Database Changes Guide

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# Chapter 1

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## Introduction

This document describes changes in the database in the 21A release of Oracle Utilities cloud services. This includes:

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

# Chapter 2

## Customer Cloud Service Database Changes

This chapter provides lists of database changes in the 21A release of Oracle Utilities Customer Cloud Service. This includes:

- [New Tables](#)
- [New Indexes](#)
- [New Columns](#)
- [Modified Columns](#)
- [Other Database Changes](#)

### New Tables

Table_Name
C1_CS_REQ_TYPE_CUST_CL
C1_CS_REQ_TYPE_PER_BUS

### New Indexes

Table_Name	Index_Name
C1_CS_REQ_TYPE_CUST_CL	C1C138P0
C1_CS_REQ_TYPE_PER_BUS	C1C137P0

### New Columns

Table_Name (View_Name)	Column_Name	Data Type	Data Length
C1_CS_REQ_SA	ALLOW_EST_SW	CHAR	1

C1_CS_REQ_TYPE_CUST_CL	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_CUST_CL	CS_REQ_TYPE_CD	VARC	30
C1_CS_REQ_TYPE_CUST_CL	CUST_CL_CD	CHAR	8
C1_CS_REQ_TYPE_CUST_CL	VERSION	NUMB	5
C1_CS_REQ_TYPE_PER_BUS	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_PER_BUS	CS_REQ_TYPE_CD	VARC	30
C1_CS_REQ_TYPE_PER_BUS	PER_OR_BUS_FLG	CHAR	2
C1_CS_REQ_TYPE_PER_BUS	VERSION	NUMB	5
CI_SA_TYPE	USE_ALT_PA_CRE_SW	CHAR	1
C1_CS_REQ_TYPE	CS_REQ_SA2_BUS_OBJ_CD	CHAR	30

## Modified Columns

Table_Name	Column_Name	Frome	To
C1_CS_REQ_TYPE	CIS_DIVISION	NOT NULLABLE	NULLABLE
C1_MKTMSG_USG	MKTMSG_ID	NOT NULLABLE	NULLABLE
C1_MKTMSG_PAY	MKTMSG_ID	NOT NULLABLE	NULLABLE
C1_MKTMSG_CHG	MKTMSG_ID	NOT NULLABLE	NULLABLE
CI_SA_REL	C1_MKT_CD	CHAR(30)	VARCHAR(30)
CI_SA_REL	PROV_CONFIG_OPT_CD	CHAR(30)	VARCHAR(30)

## Other Database Changes

This release of Oracle Utilities Customer Cloud Service also includes the following database changes:

- [Meter Solution Cloud Service Database Changes](#)
- [Work and Asset Cloud Service Database Changes](#)
- [Application Framework Database Changes](#)

# Chapter 3

## Meter Solution Cloud Service Database Changes

This chapter provides lists of database changes in the 21A release of Oracle Utilities Meter Solution Cloud Service. This includes:

- [New Tables](#)
- [New Columns](#)
- [Updated Columns](#)
- [Added Primary Keys](#)
- [Updated Primary Keys](#)
- [New Indexes](#)
- [Index Changes](#)
- [Updated Views](#)
- [Other Database Changes](#)

### New Tables

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Table_Name
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D1_FACILITY_SP
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### New Columns

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Table_Name	Column_Name	Data Type	Data Length
D1_DVC	ACCESS_GRP_CD	CHAR	12
D1_MEASR_COMP	ACCESS_GRP_CD	CHAR	12

---

D1_FACILITY_SP	FACILITY_ID	CHAR	14
D1_FACILITY_SP	D1_SP_ID	CHAR	12
D1_FACILITY_SP	VERSION	NUMBER	5

## Updated Columns

Table_Name	Old Column Sequence	New Column Sequence
D1_MEASR_COMP_SET_PARTICIPANT	1. MEASR_COMP_ID 2. MEASR_COMP_SET_CD 3. INITIATED_BY_MC_SET_FLG 4. BO_XML_DATA_AREA 5. VERSION 6. SEQNO 7. MC_ID_TYPE_FLG 8. ID_VALUE	1. MEASR_COMP_SET_CD 2. SEQNO 3. BO_XML_DATA_AREA 4. VERSION 5. MEASR_COMP_ID 6. MC_ID_TYPE_FLG 7. ID_VALUE 8. INITIATED_BY_MC_SET_FLG

## Added Primary Keys

Table_Name	Primary_Key	Columns
D1_FACILITY_SP	D1T633P0	FACILITY_ID, D1_SP_ID

## Updated Primary Keys

Table_Name	Old Primary Key Columns	New Primary Key Columns
D1_MEASR_COMP_SET_PARTICIPANT	MEASR_COMP_SET_CD, SEQNO	MEASR_COMP_ID, MEASR_COMP_SET_CD

## New Indexes

Table_Name	Index_Name
D1_FACILITY_SP	D1T633P0
D1_USAGE_EXCP	D1T443S1



## Index Changes

Table_Name	Index_Name	Old Columns	New Columns
D1_CONTACT_IDENTIFIER	D1C183S0	CONTACT_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_CONTACT_IDENTIFIER	D1C183S1	CONTACT_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_SP_IDENTIFIER	D1M104S0	SP_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_SP_IDENTIFIER	D1M104S1	SP_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_US_IDENTIFIER	D1M213S0	US_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_US_IDENTIFIER	D1M213S1	US_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_DVC_IDENTIFIER	D1M236S0	DVC_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_DVC_IDENTIFIER	D1M236S1	DVC_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_MEASR_COMP_IDENTIFIER	D1M253S0	MC_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_MEASR_COMP_IDENTIFIER	D1M253S1	MC_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_ACTIVITY_IDENTIFIER	D1T330S0	ACTIVITY_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_ACTIVITY_IDENTIFIER	D1T330S1	ACTIVITY_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_COMM_OUT_IDENTIFIER	D1T385S0	COMM_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_COMM_OUT_IDENTIFIER	D1T385S1	COMM_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_COMM_IN_IDENTIFIER	D1T391S0	COMM_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_COMM_IN_IDENTIFIER	D1T391S1	COMM_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_DVC_EVT_IDENTIFIER	D1T405S0	DVC_EVT_ID_TYPE_FLG,ID_VALUE	ID_VALUE
D1_DVC_EVT_IDENTIFIER	D1T405S1	DVC_EVT_ID_TYPE_FLG,UPPER(ID_VALUE)	UPPER(ID_VALUE)
D1_MEASR_COMP_SET_PARTICIPANT	D1C478P0	MEASR_COMP_SET_CD,SEQNO	MEASR_COMP_ID,MEASR_COMP_SET_CD

D1_INIT_MSRMT_DATA*	D1T304S1	MEASR_COMP_ID, BO_STATUS_CD, BUS_OBJ_CD, D1_TO_DTTM, D1_FROM_DTTM	MEASR_COMP_ID, D1_TO_DTTM
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**\*Note:** Within this upgrade the Initial Measurement Data secondary index columns have been changed as outlined in the table above.

Please be aware that implementing this change could take longer than expected depending on the amount of data present in the Initial Measurement Data table.

To manually create this index outside of the upgrade process, Oracle recommends you use the following steps:

1. CREATE INDEX ZZ\_D1T304S1 ON D1\_INIT\_MSRMT\_DATA (MEASR\_COMP\_ID,D1\_TO\_DTTM);  
Include tablespace, compression, partitioning, and parallelism as required.
2. ALTER INDEX D1T304S1 RENAME TO ZZ\_D1T304S1\_ORIG;
3. ALTER INDEX ZZ\_D1T304S1 RENAME TO D1T304S1;
4. ALTER INDEX D1T304S1 NOPARALLEL;  
(Optional: If parallelism was used to create the index)
5. DROP INDEX ZZ\_D1T304S1\_ORIG;

Once the index is created with the new columns the upgrade process will not recreate it again.

## Updated Views

View Name
D1_DVC_SP_VW
D1_INBOUND_COMM_VW
D1_INBOUND_COMM_VW

## Other Database Changes

This release of Oracle Utilities Meter Solution Cloud Service also includes the following database changes:

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

# Chapter 4

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## Work and Asset Cloud Service Database Changes

This chapter provides lists of database changes in the 21A release of Oracle Utilities Work and Asset Cloud Service. This includes:

- [New Tables](#)
- [New Views](#)
- [New Columns](#)
- [Column Changes](#)
- [New Indexes](#)
- [Other Database Changes](#)

Note: The new tables, new indexes, new columns, modified columns, and dropped columns described in this chapter, as well as the [Application Framework Database Changes](#), also apply to Oracle Utilities Operational Device Cloud Service.

### New Tables

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Table_Name
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W1_EMP_AUTO_TIMESHEET
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### New Views

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View_Name
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W1_BI_STOCK_ITEM_DTLS_F_VW
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W1_BI_STOCK_ITEM_DTL_VW
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W1_BI_STOCK_ITEM_VW
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W1_BI_STOCK_TRANS_VW
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**W1\_BI\_STOREROOM\_VW**


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## New Columns

Table_Name	Column_Name	Data Type	Data Length
W1_ASSESS_GRP	BUS_OBJ_CD	CHAR	30
W1_BI_STOCK_ITEM_DTLS_F_VW	SI_BELOW_MIN_QTY_CNT	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	SI_BELOW_REORDER_PT_CNT	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	SI_BELOW_SAFETY_STOCK_CNT	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	STOCK_ITEM_DTL_CNT	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	STOCK_ITEM_DTL_ID	CHAR	12
W1_BI_STOCK_ITEM_DTLS_F_VW	STOCK_ITEM_ID	CHAR	12
W1_BI_STOCK_ITEM_DTLS_F_VW	STOREROOM	CHAR	12
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_INVENTORY_AVAILABLE_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_INVENTORY_COST	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_INVENTORY_ON_HAND_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_INV_OUT_STOCK_CNT	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_IN_RECEIPT_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_IN_TRANSFER_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_ON_DEMAND_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_ON_ORDER_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_PEND_RET_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTLS_F_VW	TOTAL_RESERVED_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	ABC_CLASS_FLG	CHAR	4
W1_BI_STOCK_ITEM_DTL_VW	AUTO_REORDER_FLG	CHAR	4
W1_BI_STOCK_ITEM_DTL_VW	BIN	VARCHAR2	100
W1_BI_STOCK_ITEM_DTL_VW	BIN_SEQNO	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	BIN_TYPE_FLG	CHAR	4
W1_BI_STOCK_ITEM_DTL_VW	BO_STATUS_CD	CHAR	12
W1_BI_STOCK_ITEM_DTL_VW	BUYER_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_DTL_VW	COPY_TO_PO_FLG	CHAR	4
W1_BI_STOCK_ITEM_DTL_VW	COST_CENTER_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_DTL_VW	LEAD_TIME	NUMBER	22

W1_BI_STOCK_ITEM_DTL_VW	MANUFACTURER_PART_NO	VARCHAR2	60
W1_BI_STOCK_ITEM_DTL_VW	MASTER_STOCK_ITEM_DTL_ID	CHAR	12
W1_BI_STOCK_ITEM_DTL_VW	MAX_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	MIN_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	PI_RATIO	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	REORDER_POINT	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	REORDER_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	SAFETY_STOCK_QTY	NUMBER	22
W1_BI_STOCK_ITEM_DTL_VW	SID_CLASS_FLG	CHAR	4
W1_BI_STOCK_ITEM_DTL_VW	STOCK_ITEM_DTL_ID	CHAR	12
W1_BI_STOCK_ITEM_DTL_VW	TAX_RATE_SCHED_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_DTL_VW	UOI	VARCHAR2	30
W1_BI_STOCK_ITEM_DTL_VW	UOP	VARCHAR2	30
W1_BI_STOCK_ITEM_DTL_VW	VENDOR_LOC_ID	CHAR	12
W1_BI_STOCK_ITEM_DTL_VW	VENDOR_PART_NO	VARCHAR2	60
W1_BI_STOCK_ITEM_DTL_VW	VENDOR_PRI_FLG	CHAR	4
W1_BI_STOCK_ITEM_DTL_VW	W1_MANUFACTURER_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	ACPT_ON_RCPT_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	ADD_TO_BOM_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	BO_STATUS_CD	CHAR	12
W1_BI_STOCK_ITEM_VW	CAPITAL_SPARE_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	CMDTY_CAT_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	CMDTY_NAME_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	CMDTY_TYPE_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	DESCR100	VARCHAR2	100
W1_BI_STOCK_ITEM_VW	DESCRLONG	VARCHAR2	4000
W1_BI_STOCK_ITEM_VW	DO_NOT_SUB_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	EXPENSE_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	HAZARDOUS_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	HAZARD_TYPE_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	INVENTORY_EXPENSE_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	LOT_MANAGED_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	PURCHASE_CMDTY_CD	VARCHAR2	30
W1_BI_STOCK_ITEM_VW	REPAIRABLE_FLG	CHAR	4

W1_BI_STOCK_ITEM_VW	SHELF_LIFE	NUMBER	22
W1_BI_STOCK_ITEM_VW	STOCK_CAT_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	STOCK_INFORMATION	VARCHAR2	163
W1_BI_STOCK_ITEM_VW	STOCK_ITEM_CODE	VARCHAR2	60
W1_BI_STOCK_ITEM_VW	STOCK_ITEM_ID	CHAR	12
W1_BI_STOCK_ITEM_VW	TRACKABLE_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	TRUCK_STOCK_FLG	CHAR	4
W1_BI_STOCK_ITEM_VW	UNIT_PRICE	NUMBER	22
W1_BI_STOCK_TRANS_VW	ACCEPT_LINE_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	INITIATED_BY_MO_CD	CHAR	12
W1_BI_STOCK_TRANS_VW	INV_ADJ_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	MAT_ISSUE_LINE_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	MAT_RET_LINE_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	PI_CNT_LINE_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	PO_LINE_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	REQUESTED_BY_MO_CD	CHAR	12
W1_BI_STOCK_TRANS_VW	RTN_LINE_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	STOCK_ITEM_DTL_ID	CHAR	12
W1_BI_STOCK_TRANS_VW	STOCK_ITEM_ID	CHAR	12
W1_BI_STOCK_TRANS_VW	STOCK_TRANS_CNT	NUMBER	22
W1_BI_STOCK_TRANS_VW	STOCK_TRANS_ID	CHAR	14
W1_BI_STOCK_TRANS_VW	STOREROOM	CHAR	12
W1_BI_STOCK_TRANS_VW	TOTAL_INVENTORY_COST	NUMBER	22
W1_BI_STOCK_TRANS_VW	TOTAL_INVENTORY_ON_HAND_QTY	NUMBER	22
W1_BI_STOCK_TRANS_VW	TOTAL_IN_RECEIPT_QTY	NUMBER	22
W1_BI_STOCK_TRANS_VW	TOTAL_IN_TRANSFER_QTY	NUMBER	22
W1_BI_STOCK_TRANS_VW	TOTAL_ON_DEMAND_QTY	NUMBER	22
W1_BI_STOCK_TRANS_VW	TOTAL_ON_ORDER_QTY	NUMBER	22
W1_BI_STOCK_TRANS_VW	TOTAL_RESERVED_QTY	NUMBER	22
W1_BI_STOCK_TRANS_VW	UNIT_PRICE	NUMBER	22
W1_BI_STOCK_TRANS_VW	W1_TRANS_DT	DATE	7
W1_BI_STOREROOM_VW	ADDRESS1	VARCHAR2	254
W1_BI_STOREROOM_VW	ADDRESS2	VARCHAR2	254
W1_BI_STOREROOM_VW	ADDRESS3	VARCHAR2	254

W1_BI_STOREROOM_VW	ADDRESS4	VARCHAR2	254
W1_BI_STOREROOM_VW	BUYER_CD	VARCHAR2	30
W1_BI_STOREROOM_VW	CITY	VARCHAR2	90
W1_BI_STOREROOM_VW	COUNTRY	CHAR	3
W1_BI_STOREROOM_VW	DESCR100	VARCHAR2	100
W1_BI_STOREROOM_VW	LOCATION_CLASS_FLG	CHAR	4
W1_BI_STOREROOM_VW	NODE_DPOS_FLG	CHAR	4
W1_BI_STOREROOM_VW	NODE_TYPE_CD	VARCHAR2	30
W1_BI_STOREROOM_VW	PARENT_NODE_ID	CHAR	12
W1_BI_STOREROOM_VW	POSTAL	CHAR	12
W1_BI_STOREROOM_VW	STATE	CHAR	6
W1_BI_STOREROOM_VW	STOREROOM	CHAR	12
W1_BI_STOREROOM_VW	SUPERVISOR_ID	CHAR	12
W1_BI_STOREROOM_VW	W1_MAIN_CONTACT_ID	CHAR	12
W1_BI_STOREROOM_VW	W1_SUBURB	CHAR	64
W1_BI_WO_VW	ASSET_ID	CHAR	12
W1_EMPLOYEE	AUTO_TS_CREATION	CHAR	1
W1_EMPLOYEE	AUTO_TS_CRE_END_DT	DATE	7
W1_EMPLOYEE	AUTO_TS_CRE_START_DT	DATE	7
W1_EMPLOYEE	CALENDAR_CD	CHAR	8
W1_EMP_AUTO_TIMESHEET	ACT_ID	CHAR	14
W1_EMP_AUTO_TIMESHEET	CHARGE_TYPE_FLG	CHAR	4
W1_EMP_AUTO_TIMESHEET	COST_CENTER_CD	VARCHAR2	30
W1_EMP_AUTO_TIMESHEET	CREW_SHIFT_TYPE_CD	VARCHAR2	30
W1_EMP_AUTO_TIMESHEET	EMPLOYEE_ID	CHAR	12
W1_EMP_AUTO_TIMESHEET	END_DT	DATE	7
W1_EMP_AUTO_TIMESHEET	EU_TYPE_CD	VARCHAR2	30
W1_EMP_AUTO_TIMESHEET	FRI	CHAR	1
W1_EMP_AUTO_TIMESHEET	HOURS	NUMBER	22
W1_EMP_AUTO_TIMESHEET	LABOR_EARNING_TYPE_CD	VARCHAR2	30
W1_EMP_AUTO_TIMESHEET	LAST_PROC_DT	DATE	7
W1_EMP_AUTO_TIMESHEET	MON	CHAR	1
W1_EMP_AUTO_TIMESHEET	OVERTIME_TYPE_CD	VARCHAR2	30
W1_EMP_AUTO_TIMESHEET	PRJ_ID	CHAR	12

W1_EMP_AUTO_TIMESHEET	REG_OVERTIME_FLG	CHAR	4
W1_EMP_AUTO_TIMESHEET	RESRC_TYPE_ID	CHAR	12
W1_EMP_AUTO_TIMESHEET	SAT	CHAR	1
W1_EMP_AUTO_TIMESHEET	SEQNO	NUMBER	22
W1_EMP_AUTO_TIMESHEET	START_DT	DATE	7
W1_EMP_AUTO_TIMESHEET	SUN	CHAR	1
W1_EMP_AUTO_TIMESHEET	THU	CHAR	1
W1_EMP_AUTO_TIMESHEET	TUE	CHAR	1
W1_EMP_AUTO_TIMESHEET	VERSION	NUMBER	22
W1_EMP_AUTO_TIMESHEET	WED	CHAR	1
W1_MAT_REQ_HEADER	W1_REQUESTER_EMAIL	VARCHAR2	70
W1_SHIPPING_MEMO	SHIP_TO_VENDOR_LOC_ID	CHAR	12

## Column Changes

Table Name	Column Name	New Data Type	New Length	Old Data Type	Old Length
W1_ASSESS_GRP	BUS_OBJ_CD	CHAR	30	VARCHAR2	25

## New Indexes

Table_Name	Index_Name	Column_Name
W1_EMP_AUTO_TIMESHEET	W1M954P0	EMPLOYEE_ID
W1_EMP_AUTO_TIMESHEET	W1M954P0	SEQNO
W1_MAT_REQ_LINE	W1T384S5	ACT_RESRC_REQMT_ID
W1_PO_HEADER	W1T410S2	BO_STATUS_CD
W1_PO_HEADER	W1T410S2	BUS_OBJ_CD
W1_PO_HEADER	W1T410S2	PO_HEADER_ID
W1_PO_HEADER	W1T410S3	VENDOR_LOC_ID
W1_PO_HEADER	W1T410S4	CURRENCY_CD
W1_PO_LINE	W1T418S4	BO_STATUS_CD
W1_PO_LINE	W1T418S4	BUS_OBJ_CD



W1_PO_LINE	W1T418S4	PO_LINE_ID
W1_RTN_LINE	W1M637S2	PO_LINE_ID
W1_RTN_LINE	W1M637S2	RTN_LINE_ID
W1_RTN_LINE	W1M637S3	STOCK_ITEM_DTL_ID
W1_SHIPPING_MEMO	W1T903S7	SHIP_TO_VENDOR_LOC_ID
W1_STOCK_ITEM_DTL	W1M568S2	NODE_ID
W1_STOCK_ITEM_DTL	W1M568S2	RESRC_TYPE_ID
W1_STOCK_ITEM_DTL	W1M568S2	STOCK_ITEM_DTL_ID
W1_STOCK_ITEM_DTL	W1M568S3	MASTER_STOCK_ITEM_DTL_ID
W1_STOCK_TRANS	W1T306S2	ST_REL_FLG
W1_STOCK_TRANS	W1T306S3	PARENT_MO_CD
W1_STOCK_TRANS	W1T306S3	PARENT_PK1
W1_STOCK_TRANS	W1T306S4	SIBLING_MO_CD
W1_STOCK_TRANS	W1T306S4	SIBLING_PK1
W1_STOCK_TRANS	W1T306S5	STOCK_ITEM_DTL_ID
W1_VENDOR_LOC	W1M637S1	VENDOR_CD
W1_VENDOR_LOC	W1M637S1	VENDOR_LOC_ID

## Other Database Changes

This release of Oracle Utilities Work and Asset Cloud Service also includes the following database changes:

- [Application Framework Database Changes](#)

# Chapter 5

## Application Framework Database Changes

This chapter provides lists of database changes in Oracle Utilities Application Framework included with the 21A release of Oracle Utilities cloud services. This includes:

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

### New Tables

Table_Name
F1_COLOR_OPT
F1_COLOR_OPT_ITEM
F1_COLOR_OPT_L
F1_INSIGHT_TYPE
F1_INSIGHT_TYPE_ALG
F1_INSIGHT_TYPE_CHAR
F1_INSIGHT_TYPE_L
F1_INSIGHT_TYPE_USER_ACT
F1_INSIGHT_TYPE_USER_ACT_ALG
F1_INSIGHT_TYPE_VISUAL_SETTING
F1_TREE
F1_TREE_L
F1_TREE_NODE
F1_TREE_NODE_L
F1_TREE_NODE_ALG
F1_INSIGHT_GRP
F1_INSIGHT_GRP_L

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 F1\_INSIGHT\_GRP\_TYPE
 

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 F1\_INSIGHT\_GRP\_VISUAL\_STR
 

---

 F1\_INSIGHT\_GRP\_CHAR
 

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## New Columns

Table_Name	Column_Name	Data Type	Data Length
CI_BATCH_INST	END_DTTM	Date/Time	26
CI_BATCH_INST	START_DTTM	Date/Time	26
SC_USER	DASHBOARD_LOC_FLG	CHAR	4
SC_USER	DASHBOARD_STATE_FLG	CHAR	4
F1_MD_BI_TBL_FLD	LOGICAL_DM_NAME	VARCHAR2	60