

Oracle Utilities Customer Care and Billing

Database Changes Guide

Release 2.9.0.1.1

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Oracle Utilities Customer Care and Billing 2.9.0.1.1 Database Changes Guide

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Contents

Preface	i
Audience	ii
Related Documents	ii
Updates to this Documentation	ii
Conventions.....	ii
Acronyms.....	iii
Documentation Accessibility	iii
 Chapter 1	
Introduction	1-1
 Chapter 2	
Oracle Utilities Customer Care and Billing Database Changes	2-1
New Tables	2-2
New Indexes.....	2-4
New Columns.....	2-8
Other Database Changes	2-18
 Chapter 3	
Oracle Utilities Application Framework Database Changes	3-1
New Tables	3-2
Dropped Tables	3-2
New Columns.....	3-2
Removed Columns	3-3
Modified Columns.....	3-3
New Views.....	3-4
Modified Views	3-4
New Indexes.....	3-4

Preface

Welcome to the Oracle Utilities Customer Care and Billing Database Changes Guide. This guide provides the list of database changes in the following:

- Oracle Utilities Customer Care and Billing V2.9.0.1.1
- Oracle Utilities Application Framework from V4.5.0.0.0 to V4.5.0.1.1

The preface includes the following:

- [Audience](#)
- [Related Documents](#)
- [Updates to this Documentation](#)
- [Conventions](#)
- [Acronyms](#)
- [Documentation Accessibility](#)

Audience

This guide is intended for database administrators who will be installing and maintaining the database for Oracle Utilities Customer Care and Billing.

Related Documents

For more information, refer to these Oracle documents:

Installation Guides and Release Notes

- *Oracle Utilities Customer Care and Billing Release Notes*
- *Oracle Utilities Customer Care and Billing Quick Install Guide*
- *Oracle Utilities Customer Care and Billing Installation Guide*
- *Oracle Utilities Customer Care and Billing Database Administrator's Guide*
- *Oracle Utilities Customer Care and Billing Database Changes Guide*
- *Oracle Utilities Customer Care and Billing Optional Products Installation Guide*
- *Oracle Utilities Customer Care and Billing Licensing Information User Manual*

Administrative and Business User Guides

- *Oracle Utilities Customer Care and Billing Administrative User Guide*
- *Oracle Utilities Customer Care and Billing Business User Guide*

Supplemental Documents

- *Server Administration Guide*
- *Security Guide*

Updates to this Documentation

This documentation is provided with the version of the product indicated. Additional and updated information about the operations and configuration of the product is available from the Knowledge Base section of My Oracle Support (<http://support.oracle.com>). Please refer to My Oracle Support for more information.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.

Convention	Meaning
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Acronyms

The following terms are used in this document:

Term	Expanded form
CCB	Oracle Utilities Customer Care and Billing
OUAF	Oracle Utilities Application Framework

Documentation Accessibility

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Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For more information, visit [My Oracle Support](#) or [Oracle Accessibility Learning and Support](#) if you are hearing impaired.

Chapter 1

Introduction

This chapter describes the changes in the Oracle Utilities Customer Care and Billing database for this release:

- [Oracle Utilities Customer Care and Billing Database Changes](#)
- [Oracle Utilities Application Framework Database Changes](#)

Chapter 2

Oracle Utilities Customer Care and Billing Database Changes

This chapter provides lists of database changes in the 2.9.0.1.1 release of Oracle Utilities Customer Care and Billing. It includes the following:

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

New Tables

Table	Name	Description
C1_CC_IDENTIFIER	Customer Contact Identifier	Used to store identifying fields of customer contacts (for searching)
C1_CC_LOG	Customer Contact Log	Used to store log entries as a customer contact moves through its lifecycle
C1_CC_LOG_PARM	Customer Contact Log Parameter	Used to store parameters related to the Customer Contact Log
C1_NTF_EVT_CC_CL_TYPE	Notification Event Contact Type	Used to store the Customer Contact Classes and Types related to a given Notification Event Type
C1_NTF_EVT_TYPE	Notification Event Type	Used to store configuration data that control behavior of Notification Events
C1_NTF_EVT_TYPE_ALG	Notification Event Type Algorithm	Used to store a collection of system events and the plug-ins that execute when the events occur
C1_NTF_EVT_TYPE_CHAR	Notification Event Type Characteristic	Used to store a collection of characteristics related to the Notification Event Type
C1_QUESTION	Question - CCB	Used to store configuration data representing questions that can be asked as part of a Service Call Communication
C1_QUESTION_ANSWER	Question Answer - CCB	Used to store valid multiple-choice answers to questions specified on Question - CCB table
C1_QUESTION_ANSWER_L	Question Answer Language - CCB	Language table related to the Question Answer - CCB table.
C1_QUESTION_CHAR	Question Characteristic - CCB	Used to store codified attributes of questions configured on the Question - CCB table
C1_QUESTION_L	Question Language - CCB	Language table related to the Question - CCB table.
C1_RESPONSE	Response	Used to store transactional data capturing responses to questions asked as part of a Service Call Communication
C1_RESPONSE_ANSWER	Response Answer	Child of the Response table, used to store answers to multiple-choice questions
C1_RESPONSE_CHAR	Response Characteristic	Used to store codified attributes of a Response
C1_RESPONSE_K	Response Key	Key table related to the Response table
C1_RESPONSE_LOG	Response Log	Used to store log entries as a customer contact moves through its lifecycle

Table	Name	Description
C1_RESPONSE_LOG_PARM	Response Log Parameter	Used to store parameters related to the Response Log
C1_SERVICE_CAT	Service Category - CCB	Used to store classification of services specified as part of a Service Call Communication
C1_SERVICE_CAT_CHAR	Service Category Characteristics - CCB	Used to store codified attributes of a Service Category
C1_SERVICE_CAT_L	Service Category Language - CCB	Language table related to the Service Category - CCB table.
C1_SERVICE_CAT_SVC_CD	Service Category Service Code - CCB	Used to store valid Service Codes for a Service Category
C1_SERVICE_CODE	Service Code - CCB	Used to store configuration of services that can be requested as part of a Service Call Communication
C1_SERVICE_CODE_CHAR	Service Code Characteristic - CCB	Used to store codified attributes of a Service Code
C1_SERVICE_CODE_L	Service Code Language - CCB	Language table related to the Service Code - CCB table.
C1_SERVICE_CODE_QUESTION	Service Code Question - CCB	Used to store what Questions are asked for a given Service Code
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
C1_CS_REQ_TYPE_REL_UPD	CS Request Type Related Update	Table used to store details about related updates associated with a customer service request type.
C1_CS_REQ_TYPE_SVC_CRIT	CS Request Type Svc Criteria	Child table of Customer Service Request Type table, used to store criteria used by request types
C1_CS_REQ_TYPE_SVC_CRIT_ALG	CS Request Type Criteria Algorithm	Child table of CS Request Type Svc Criteria table, used to store algorithms used by request type criteria
C1_CS_REQ_TYPE_SVC_CRIT_L	CS Request Type Criteria Language	Language table for CS Request Type Svc Criteria
C1_CS_REQ_TYPE_SVC_CRIT_SATY	CS Request Type Criteria SA Type	Child table of CS Request Type Svc Criteria table, used to store service agreement types used by request type criteria

Table	Name	Description
C1_CS_REQ_TYPE_SVC_CRIT_STOP	CS Request Type Criteria Start Option	Child table of CS Request Type Criteria SA Type table, used to store service agreement type start options used by request type criteria

New Indexes

Table_Name	Index_Name
C1_CC_IDENTIFIER	C1T161P0
C1_CC_IDENTIFIER	C1T161S1
C1_CC_LOG	C1T162P0
C1_CC_LOG	C1T162S1
C1_CC_LOG	C1T162S2
C1_CC_LOG_PARM	C1T163P0
C1_CONT	C1M017S2
C1_CONT_ID	C1T028S1
C1_CONT_MS	C1T030S1
C1_CONT_MS	C1T030S2
C1_CONT_MS_PROD	C1T031S1
C1_CONT_MS_PROD	C1T031S2
C1_CONT_PROD	C1T032S1
C1_CONT_PROD	C1T032S2
C1_CONT_PROD	C1T032S3
C1_CONT_PROD	C1T032S4
C1_CS_REQ	C1T043S2
C1_CS_REQ	C1T043S3
C1_CS_REQ	C1T043S4
C1_CS_REQ	C1T043S5
C1_CS_REQ	C1T043S6
C1_CS_REQ_ACCT	C1T079S2
C1_CS_REQ_ACCT	C1T079S3
C1_CS_REQ_ACCT	C1T079S4
C1_CS_REQ_ACCT	C1T079S5

Table_Name	Index_Name
C1_CS_REQ_ACCT_APAY	C1T082S1
C1_CS_REQ_ACCT_PER	C1T086S1
C1_CS_REQ_ACCT_PER	C1T086S2
C1_CS_REQ_ACCT_PER	C1T086S3
C1_CS_REQ_CONT	C1T055S2
C1_CS_REQ_CONT	C1T055S3
C1_CS_REQ_CONT_MS_PROD	C1T061S1
C1_CS_REQ_CONT_PROD	C1T065S2
C1_CS_REQ_CONT_PROD	C1T065S3
C1_CS_REQ_CONT_PROD	C1T065S4
C1_CS_REQ_CONT_PROD	C1T065S5
C1_CS_REQ_CONT_PROD	C1T065S6
C1_CS_REQ_CONT_PROD	C1T065S7
C1_CS_REQ_PER	C1T070S2
C1_CS_REQ_PER	C1T070S3
C1_CS_REQ_PER_NAME	C1T071S1
C1_CS_REQ_PER_NAME	C1T071S2
C1_CS_REQ_PER_NAME	C1T071S3
C1_CS_REQ_PREM	C1T092S1
C1_CS_REQ_PREM	C1T092S10
C1_CS_REQ_PREM	C1T092S2
C1_CS_REQ_PREM	C1T092S3
C1_CS_REQ_PREM	C1T092S4
C1_CS_REQ_PREM	C1T092S5
C1_CS_REQ_PREM	C1T092S6
C1_CS_REQ_PREM	C1T092S7
C1_CS_REQ_PREM	C1T092S8
C1_CS_REQ_PREM	C1T092S9
C1_CS_REQ_REL_OBJ	C1T045S1
C1_CS_REQ_REL_OBJ	C1T045S2
C1_CS_REQ_SA	C1T141S2
C1_CS_REQ_SA	C1T141S3
C1_CS_REQ_SA	C1T141S4

Table_Name	Index_Name
C1_CS_REQ_SA	C1T141S5
C1_CS_REQ_SA	C1T141S6
C1_CS_REQ_SA	C1T141S7
C1_CS_REQ_SA	C1T141S8
C1_CS_REQ_SA_SP	C1T144S1
C1_CS_REQ_SA_SP	C1T144S2
C1_CS_REQ_SA_SP	C1T144S3
C1_CS_REQ_SA_SP	C1T144S4
C1_CS_REQ_SA_SP	C1T144S5
C1_CS_REQ_SA_SP_FA	C1T146S1
C1_CS_REQ_SA_SP_FA	C1T146S2
C1_CS_REQ_SA_SP_FA	C1T146S3
C1_CS_REQ_SA_SP_FA	C1T146S4
C1_CS_REQ_SVC_LOC	C1T049S3
C1_CS_REQ_SVC_LOC	C1T049S4
C1_CS_REQ_SVC_LOC	C1T049S5
C1_CS_REQ_SVC_LOC	C1T049S6
C1_CS_REQ_SVC_LOC	C1T049S7
C1_CS_REQ_SVC_LOC	C1T049S8
C1_CS_REQ_SVC_LOC_CONT_PROD	C1T052S3
C1_CS_REQ_SVC_LOC_CONT_PROD	C1T052S4
C1_MKTMSG_CHG	C1T135S2
C1_MKTMSG_CHG_DTL	C1T137S1
C1_MKTMSG_CHG_DTL	C1T137S2
C1_MKTMSG_CHG_DTL	C1T137S3
C1_MKTMSG_CHG_DTL	C1T137S4
C1_MKTMSG_CHG_REL_OBJ	C1T138S2
C1_MKTMSG_PAY	C1T129S2
C1_MKTMSG_PAY_DTL	C1T131S1
C1_MKTMSG_PAY_DTL	C1T131S2
C1_MKTMSG_PAY_DTL	C1T131S3
C1_MKTMSG_PAY_REL_OBJ	C1T132S2
C1_MKTMSG_USG	C1T123S2

Table_Name	Index_Name
C1_MKTMSG_USG_REL_OBJ	C1T126S2
C1_MKT_RP_REL_OBJ	C1M014S2
C1_NTF_EVT_CC_CL_TYPE	C1C162P0
C1_NTF_EVT_TYPE	C1C158P0
C1_NTF_EVT_TYPE	C1C158S1
C1_NTF_EVT_TYPE_ALG	C1C160P0
C1_NTF_EVT_TYPE_CHAR	C1C161P0
C1_NTF_EVT_TYPE_CHAR	C1C161S1
C1_QUESTION	C1C150P0
C1_QUESTION_ANSWER	C1C153P0
C1_QUESTION_ANSWER_L	C1C154P0
C1_QUESTION_CHAR	C1C152P0
C1_QUESTION_CHAR	C1C152S1
C1_QUESTION_L	C1C151P0
C1_RESPONSE	C1C147P0
C1_RESPONSE	C1C147S1
C1_RESPONSE	C1C147S2
C1_RESPONSE_ANSWER	C1C148P0
C1_RESPONSE_CHAR	C1C155P0
C1_RESPONSE_CHAR	C1C155S1
C1_RESPONSE_K	C1C157P0
C1_RESPONSE_LOG	C1C149P0
C1_RESPONSE_LOG	C1C149S1
C1_RESPONSE_LOG	C1C149S2
C1_RESPONSE_LOG_PARM	C1C156P0
C1_SA_CONT_PROD	C1M018S1
C1_SERVICE_CAT	C1C139P0
C1_SERVICE_CAT_CHAR	C1C142P0
C1_SERVICE_CAT_CHAR	C1C142S1
C1_SERVICE_CAT_L	C1C141P0
C1_SERVICE_CAT_SVC_CD	C1C140P0
C1_SERVICE_CODE	C1C143P0
C1_SERVICE_CODE_CHAR	C1C146P0

Table_Name	Index_Name
C1_SERVICE_CODE_CHAR	C1C146S1
C1_SERVICE_CODE_L	C1C145P0
C1_SERVICE_CODE_QUESTION	C1C144P0
CI_CC	XT057S7
CI_SPR	XC339S3
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
C1_CS_REQ_TYPE_REL_UPD	C1C173P0
C1_CS_REQ_TYPE_REL_UPD	C1C173S1
C1_CS_REQ_TYPE_REL_UPD	C1C173S2
C1_CS_REQ_TYPE_REL_UPD	C1C173S3
C1_CS_REQ_TYPE_REL_UPD	C1C173S4
C1_CS_REQ_TYPE_REL_UPD	C1C173S5
C1_CS_REQ_TYPE_REL_UPD	C1C173S6
C1_CS_REQ_TYPE_REL_UPD	C1C173S7
C1_CS_REQ_TYPE_SVC_CRIT	C1C168P0
C1_CS_REQ_TYPE_SVC_CRIT_ALG	C1C170P0
C1_CS_REQ_TYPE_SVC_CRIT_L	C1C169P0
C1_CS_REQ_TYPE_SVC_CRIT_SATY	C1C171P0
C1_CS_REQ_TYPE_SVC_CRIT_STOP	C1C172P0

New Columns

Table_Name	Column_Name	Data Type	Data Length
C1_CC_IDENTIFIER	CC_EXT_REF_ID	VARCHAR	120
C1_CC_IDENTIFIER	CC_ID	CHAR	10

Table_Name	Column_Name	Data Type	Data Length
C1_CC_IDENTIFIER	CC_ID_TYPE_FLG	CHAR	4
C1_CC_IDENTIFIER	VERSION	NUMB	5
C1_CC_LOG	ADHOC_CHAR_VAL	VARCHAR	254
C1_CC_LOG	CC_ID	CHAR	10
C1_CC_LOG	CC_INT_EVENT_DTTM	DTTM	26
C1_CC_LOG	CC_INT_STAT_FLG	CHAR	4
C1_CC_LOG	CC_INT_STAT_RSN_DESCR	VARCHAR	500
C1_CC_LOG	CHAR_TYPE_CD	CHAR	8
C1_CC_LOG	CHAR_VAL	CHAR	16
C1_CC_LOG	CHAR_VAL_FK1	VARCHAR	50
C1_CC_LOG	CHAR_VAL_FK2	VARCHAR	50
C1_CC_LOG	CHAR_VAL_FK3	VARCHAR	50
C1_CC_LOG	CHAR_VAL_FK4	VARCHAR	50
C1_CC_LOG	CHAR_VAL_FK5	VARCHAR	50
C1_CC_LOG	DESCRLONG	VARCHAR	4000
C1_CC_LOG	LOG_DTTM	DTTM	26
C1_CC_LOG	LOG_ENTRY_TYPE_FLG	CHAR	4
C1_CC_LOG	MESSAGE_CAT_NBR	NUMB	5
C1_CC_LOG	MESSAGE_NBR	NUMB	5
C1_CC_LOG	SEQNO	NUMB	5
C1_CC_LOG	USER_ID	CHAR	8
C1_CC_LOG	VERSION	NUMB	5
C1_CC_LOG_PARM	CC_ID	CHAR	10
C1_CC_LOG_PARM	MSG_PARM_TYP_FLG	CHAR	4
C1_CC_LOG_PARM	MSG_PARM_VAL	VARCHAR	2000
C1_CC_LOG_PARM	PARM_SEQ	NUMB	3
C1_CC_LOG_PARM	SEQNO	NUMB	5
C1_CC_LOG_PARM	VERSION	NUMB	5
C1_NTF_EVT_CC_CL_TYPE	CC_CL_CD	CHAR	4
C1_NTF_EVT_CC_CL_TYPE	CC_TYPE_CD	CHAR	12
C1_NTF_EVT_CC_CL_TYPE	CC_TYPE_USG_FLG	CHAR	4
C1_NTF_EVT_CC_CL_TYPE	NTF_EVT_TYPE_FLG	CHAR	4

Table_Name	Column_Name	Data Type	Data Length
C1_NTF_EVT_CC_CL_TYPE	VERSION	NUMB	5
C1_NTF_EVT_TYPE	BO_XML_DATA_AREA	XML	1073741824
C1_NTF_EVT_TYPE	BUS_OBJ_CD	CHAR	30
C1_NTF_EVT_TYPE	NTF_EVT_ACT_INACT_FLG	CHAR	4
C1_NTF_EVT_TYPE	NTF_EVT_TYPE_FLG	CHAR	4
C1_NTF_EVT_TYPE	NTF_MODE_FLG	CHAR	4
C1_NTF_EVT_TYPE	NTF_TYPE_CD	VARCHAR	30
C1_NTF_EVT_TYPE	VERSION	NUMB	5
C1_NTF_EVT_TYPE_ALG	ALG_CD	CHAR	12
C1_NTF_EVT_TYPE_ALG	NTF_EVT_ALG_ENTITY_FLG	CHAR	4
C1_NTF_EVT_TYPE_ALG	NTF_EVT_TYPE_FLG	CHAR	4
C1_NTF_EVT_TYPE_ALG	SEQ_NUM	NUMB	3
C1_NTF_EVT_TYPE_ALG	VERSION	NUMB	5
C1_NTF_EVT_TYPE_CHAR	ADHOC_CHAR_VAL	VARCHAR	254
C1_NTF_EVT_TYPE_CHAR	CHAR_TYPE_CD	CHAR	8
C1_NTF_EVT_TYPE_CHAR	CHAR_VAL	CHAR	16
C1_NTF_EVT_TYPE_CHAR	CHAR_VAL_FK1	VARCHAR	50
C1_NTF_EVT_TYPE_CHAR	CHAR_VAL_FK2	VARCHAR	50
C1_NTF_EVT_TYPE_CHAR	CHAR_VAL_FK3	VARCHAR	50
C1_NTF_EVT_TYPE_CHAR	CHAR_VAL_FK4	VARCHAR	50
C1_NTF_EVT_TYPE_CHAR	CHAR_VAL_FK5	VARCHAR	50
C1_NTF_EVT_TYPE_CHAR	NTF_EVT_TYPE_FLG	CHAR	4
C1_NTF_EVT_TYPE_CHAR	SEQ_NUM	NUMB	3
C1_NTF_EVT_TYPE_CHAR	SRCH_CHAR_VAL	VARCHAR	50
C1_NTF_EVT_TYPE_CHAR	VERSION	NUMB	5
C1_QUESTION	BO_XML_DATA_AREA	XML	1073741824
C1_QUESTION	BUS_OBJ_CD	CHAR	30
C1_QUESTION	C1_QUESTION_CD	VARCHAR	30
C1_QUESTION	C1_QUESTION_STATUS_FLG	CHAR	4
C1_QUESTION	VERSION	NUMB	5
C1_QUESTION_ANSWER	C1_ANSWER_CD	VARCHAR	30
C1_QUESTION_ANSWER	C1_ANSWER_STATUS_FLG	CHAR	4

Table_Name	Column_Name	Data Type	Data Length
C1_QUESTION_ANSWER	C1_ANSWER_STYLE_FLG	CHAR	4
C1_QUESTION_ANSWER	C1_QUESTION_CD	VARCHAR	30
C1_QUESTION_ANSWER	SEQ_NUM	NUMB	3
C1_QUESTION_ANSWER	VERSION	NUMB	5
C1_QUESTION_ANSWER_L	C1_ANSWER_CD	VARCHAR	30
C1_QUESTION_ANSWER_L	C1_QUESTION_CD	VARCHAR	30
C1_QUESTION_ANSWER_L	DESCR100	VARCHAR	100
C1_QUESTION_ANSWER_L	DESCRLONG	VARCHAR	4000
C1_QUESTION_ANSWER_L	LANGUAGE_CD	CHAR	3
C1_QUESTION_ANSWER_L	VERSION	NUMB	5
C1_QUESTION_CHAR	ADHOC_CHAR_VAL	VARCHAR	254
C1_QUESTION_CHAR	C1_QUESTION_CD	VARCHAR	30
C1_QUESTION_CHAR	CHAR_TYPE_CD	CHAR	8
C1_QUESTION_CHAR	CHAR_VAL	CHAR	16
C1_QUESTION_CHAR	CHAR_VAL_FK1	VARCHAR	50
C1_QUESTION_CHAR	CHAR_VAL_FK2	VARCHAR	50
C1_QUESTION_CHAR	CHAR_VAL_FK3	VARCHAR	50
C1_QUESTION_CHAR	CHAR_VAL_FK4	VARCHAR	50
C1_QUESTION_CHAR	CHAR_VAL_FK5	VARCHAR	50
C1_QUESTION_CHAR	SEQ_NUM	NUMB	3
C1_QUESTION_CHAR	SRCH_CHAR_VAL	VARCHAR	50
C1_QUESTION_CHAR	VERSION	NUMB	5
C1_QUESTION_L	C1_QUESTION_CD	VARCHAR	30
C1_QUESTION_L	DESCR100	VARCHAR	100
C1_QUESTION_L	DESCRLONG	VARCHAR	4000
C1_QUESTION_L	LANGUAGE_CD	CHAR	3
C1_QUESTION_L	VERSION	NUMB	5
C1_RESPONSE	BO_STATUS_CD	CHAR	12
C1_RESPONSE	BO_STATUS_REASON_CD	VARCHAR	30
C1_RESPONSE	BO_XML_DATA_AREA	XML	1073741824
C1_RESPONSE	BUS_OBJ_CD	CHAR	30
C1_RESPONSE	CRE_DTTM	DTTM	26

Table_Name	Column_Name	Data Type	Data Length
C1_RESPONSE	CS_REQ_ID	CHAR	14
C1_RESPONSE	F1_SVC_TASK_ID	CHAR	14
C1_RESPONSE	ILM_ARCH_SW	CHAR	1
C1_RESPONSE	ILM_DT	DATE	10
C1_RESPONSE	RESPONSE_ID	CHAR	14
C1_RESPONSE	STATUS_UPD_DTTM	DTTM	26
C1_RESPONSE	VERSION	NUMB	5
C1_RESPONSE_ANSWER	BO_XML_DATA_AREA	XML	1073741824
C1_RESPONSE_ANSWER	C1_ANSWER_CD	VARCHAR	30
C1_RESPONSE_ANSWER	C1_QUESTION_CD	VARCHAR	30
C1_RESPONSE_ANSWER	C1_QUESTION_SUB_SEQ	NUMB	3
C1_RESPONSE_ANSWER	C1_RESPONSE_ANSWER	VARCHAR	4000
C1_RESPONSE_ANSWER	RESPONSE_ID	CHAR	14
C1_RESPONSE_ANSWER	SEQ_NUM	NUMB	3
C1_RESPONSE_ANSWER	VERSION	NUMB	5
C1_RESPONSE_CHAR	ADHOC_CHAR_VAL	VARCHAR	254
C1_RESPONSE_CHAR	CHAR_TYPE_CD	CHAR	8
C1_RESPONSE_CHAR	CHAR_VAL	CHAR	16
C1_RESPONSE_CHAR	CHAR_VAL_FK1	VARCHAR	50
C1_RESPONSE_CHAR	CHAR_VAL_FK2	VARCHAR	50
C1_RESPONSE_CHAR	CHAR_VAL_FK3	VARCHAR	50
C1_RESPONSE_CHAR	CHAR_VAL_FK4	VARCHAR	50
C1_RESPONSE_CHAR	CHAR_VAL_FK5	VARCHAR	50
C1_RESPONSE_CHAR	RESPONSE_ID	CHAR	14
C1_RESPONSE_CHAR	SEQ_NUM	NUMB	3
C1_RESPONSE_CHAR	SRCH_CHAR_VAL	VARCHAR	50
C1_RESPONSE_CHAR	VERSION	NUMB	5
C1_RESPONSE_K	ENV_ID	NUMB	6
C1_RESPONSE_K	RESPONSE_ID	CHAR	14
C1_RESPONSE_LOG	ADHOC_CHAR_VAL	VARCHAR	254
C1_RESPONSE_LOG	BO_STATUS_CD	CHAR	12
C1_RESPONSE_LOG	BO_STATUS_REASON_CD	VARCHAR	30

Table_Name	Column_Name	Data Type	Data Length
C1_RESPONSE_LOG	CHAR_TYPE_CD	CHAR	8
C1_RESPONSE_LOG	CHAR_VAL	CHAR	16
C1_RESPONSE_LOG	CHAR_VAL_FK1	VARCHAR	50
C1_RESPONSE_LOG	CHAR_VAL_FK2	VARCHAR	50
C1_RESPONSE_LOG	CHAR_VAL_FK3	VARCHAR	50
C1_RESPONSE_LOG	CHAR_VAL_FK4	VARCHAR	50
C1_RESPONSE_LOG	CHAR_VAL_FK5	VARCHAR	50
C1_RESPONSE_LOG	DESCRLONG	VARCHAR	4000
C1_RESPONSE_LOG	LOG_DTTM	DTTM	26
C1_RESPONSE_LOG	LOG_ENTRY_TYPE_FLG	CHAR	4
C1_RESPONSE_LOG	MESSAGE_CAT_NBR	NUMB	5
C1_RESPONSE_LOG	MESSAGE_NBR	NUMB	5
C1_RESPONSE_LOG	RESPONSE_ID	CHAR	14
C1_RESPONSE_LOG	SEQNO	NUMB	5
C1_RESPONSE_LOG	USER_ID	CHAR	8
C1_RESPONSE_LOG	VERSION	NUMB	5
C1_RESPONSE_LOG_PARM	MSG_PARM_TYP_FLG	CHAR	4
C1_RESPONSE_LOG_PARM	MSG_PARM_VAL	VARCHAR	2000
C1_RESPONSE_LOG_PARM	PARM_SEQ	NUMB	3
C1_RESPONSE_LOG_PARM	RESPONSE_ID	CHAR	14
C1_RESPONSE_LOG_PARM	SEQNO	NUMB	5
C1_RESPONSE_LOG_PARM	VERSION	NUMB	5
C1_SERVICE_CAT	BO_XML_DATA_AREA	XML	1073741824
C1_SERVICE_CAT	BUS_OBJ_CD	CHAR	30
C1_SERVICE_CAT	C1_SERVICE_CAT_CD	VARCHAR	30
C1_SERVICE_CAT	VERSION	NUMB	5
C1_SERVICE_CAT_CHAR	ADHOC_CHAR_VAL	VARCHAR	254
C1_SERVICE_CAT_CHAR	C1_SERVICE_CAT_CD	VARCHAR	30
C1_SERVICE_CAT_CHAR	CHAR_TYPE_CD	CHAR	8
C1_SERVICE_CAT_CHAR	CHAR_VAL	CHAR	16
C1_SERVICE_CAT_CHAR	CHAR_VAL_FK1	VARCHAR	50
C1_SERVICE_CAT_CHAR	CHAR_VAL_FK2	VARCHAR	50

Table_Name	Column_Name	Data Type	Data Length
C1_SERVICE_CAT_CHAR	CHAR_VAL_FK3	VARCHAR	50
C1_SERVICE_CAT_CHAR	CHAR_VAL_FK4	VARCHAR	50
C1_SERVICE_CAT_CHAR	CHAR_VAL_FK5	VARCHAR	50
C1_SERVICE_CAT_CHAR	SEQ_NUM	NUMB	3
C1_SERVICE_CAT_CHAR	SRCH_CHAR_VAL	VARCHAR	50
C1_SERVICE_CAT_CHAR	VERSION	NUMB	5
C1_SERVICE_CAT_L	C1_SERVICE_CAT_CD	VARCHAR	30
C1_SERVICE_CAT_L	DESCR100	VARCHAR	100
C1_SERVICE_CAT_L	DESCRLONG	VARCHAR	4000
C1_SERVICE_CAT_L	LANGUAGE_CD	CHAR	3
C1_SERVICE_CAT_L	VERSION	NUMB	5
C1_SERVICE_CAT_SVC_CD	C1_SERVICE_CAT_CD	VARCHAR	30
C1_SERVICE_CAT_SVC_CD	C1_SERVICE_CD	VARCHAR	30
C1_SERVICE_CAT_SVC_CD	VERSION	NUMB	5
C1_SERVICE_CODE	BO_XML_DATA_AREA	XML	1073741824
C1_SERVICE_CODE	BUS_OBJ_CD	CHAR	30
C1_SERVICE_CODE	C1_SERVICE_CD	VARCHAR	30
C1_SERVICE_CODE	VERSION	NUMB	5
C1_SERVICE_CODE_CHAR	ADHOC_CHAR_VAL	VARCHAR	254
C1_SERVICE_CODE_CHAR	C1_SERVICE_CD	VARCHAR	30
C1_SERVICE_CODE_CHAR	CHAR_TYPE_CD	CHAR	8
C1_SERVICE_CODE_CHAR	CHAR_VAL	CHAR	16
C1_SERVICE_CODE_CHAR	CHAR_VAL_FK1	VARCHAR	50
C1_SERVICE_CODE_CHAR	CHAR_VAL_FK2	VARCHAR	50
C1_SERVICE_CODE_CHAR	CHAR_VAL_FK3	VARCHAR	50
C1_SERVICE_CODE_CHAR	CHAR_VAL_FK4	VARCHAR	50
C1_SERVICE_CODE_CHAR	CHAR_VAL_FK5	VARCHAR	50
C1_SERVICE_CODE_CHAR	SEQ_NUM	NUMB	3
C1_SERVICE_CODE_CHAR	SRCH_CHAR_VAL	VARCHAR	50
C1_SERVICE_CODE_CHAR	VERSION	NUMB	5
C1_SERVICE_CODE_L	C1_SERVICE_CD	VARCHAR	30
C1_SERVICE_CODE_L	DESCR100	VARCHAR	100

Table_Name	Column_Name	Data Type	Data Length
C1_SERVICE_CODE_L	DESCRLONG	VARCHAR	4000
C1_SERVICE_CODE_L	LANGUAGE_CD	CHAR	3
C1_SERVICE_CODE_L	VERSION	NUMB	5
C1_SERVICE_CODE_QUESTION	C1_BEHAVIOR_FLG	CHAR	4
C1_SERVICE_CODE_QUESTION	C1_QUESTION_CD	VARCHAR	30
C1_SERVICE_CODE_QUESTION	C1_SERVICE_CD	VARCHAR	30
C1_SERVICE_CODE_QUESTION	SEQ_NUM	NUMB	3
C1_SERVICE_CODE_QUESTION	VERSION	NUMB	5
CI_CC	C1_SS_DELIVERY_TYPE	CHAR	4
CI_CC	CC_INT_STAT_FLG	CHAR	4
CI_CC	CC_INT_STAT_RSN_DESCR	VARCHAR	500
CI_CC	CONTACT_VALUE	VARCHAR	254
CI_CC	EDGE_APP_ID_FLG	CHAR	4
CI_CC	MESSAGE_SUBJECT	VARCHAR	256
CI_CC	NTF_CONTACT_ID	CHAR	10
CI_CC	NTF_EVT_TYPE_FLG	CHAR	4
CI_CC	NTF_INST_ID	CHAR	32
CI_CC	NTF_PREF_ID	CHAR	14
CI_CC	NTF_TYPE_CD	VARCHAR	30
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

Table_Name	Column_Name	Data Type	Data Length
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
C1_CS_REQ_TYPE_REL_UPD	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_REL_UPD	BUS_OBJ_CD	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	CHAR_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_REL_UPD	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_REL_UPD	CS_REQ_TYPE_REL_UPD	VARCHAR	254
C1_CS_REQ_TYPE_REL_UPD	CS_REQ_TYPE_REL_UPD_SEQ	NUMBER	3
C1_CS_REQ_TYPE_REL_UPD	FLD_NAME	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	REL_UPD_PROC_ALG_CD	CHAR	12
C1_CS_REQ_TYPE_REL_UPD	SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_REL_UPD	TBL_NAME	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	UPD_ELEM_XPATH	CHAR	254
C1_CS_REQ_TYPE_REL_UPD	UPD_ENT_BUS_OBJ_CD	CHAR	30

Table_Name	Column_Name	Data Type	Data Length
C1_CS_REQ_TYPE_REL_UPD	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_SVC_CRIT	BUS_OBJ_CD	CHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	C1_ANSWER_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	C1_QUESTION_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	CRITERIA_BASIS_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CRITERIA_COMPARISON_VALUE	VARCHAR	254
C1_CS_REQ_TYPE_SVC_CRIT	CRITERIA_OPERATOR_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CSRT_SEC_FALSE_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CSRT_SEC_INSUFFICIENT_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CSRT_SEC_TRUE_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT	START_SA_OVRD_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT	STOP_SA_OVRD_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_ALG	ALG_CD	CHAR	12
C1_CS_REQ_TYPE_SVC_CRIT_ALG	ALG_ENTITY_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT_ALG	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_ALG	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_ALG	SEQ_NUM	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_ALG	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_L	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_L	DESCR100	VARCHAR	100
C1_CS_REQ_TYPE_SVC_CRIT_L	DESCRLONG	VARCHAR	4000
C1_CS_REQ_TYPE_SVC_CRIT_L	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_L	LANGUAGE_CD	CHAR	3
C1_CS_REQ_TYPE_SVC_CRIT_L	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_SATY	CIS_DIVISION	CHAR	5
C1_CS_REQ_TYPE_SVC_CRIT_SATY	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_SATY	DEFAULT_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT_SATY	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3

Table_Name	Column_Name	Data Type	Data Length
C1_CS_REQ_TYPE_SVC_CRIT_SATY	SA_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_SVC_CRIT_SATY	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_STOP	CIS_DIVISION	CHAR	5
C1_CS_REQ_TYPE_SVC_CRIT_STOP	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_STOP	DEFAULT_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT_STOP	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_STOP	SA_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_SVC_CRIT_STOP	START_OPT_CD	CHAR	12
C1_CS_REQ_TYPE_SVC_CRIT_STOP	VERSION	NUMBER	5
C1_QUESTION	C1_ANSWER_STYLE_FLG	CHAR	4
C1_QUESTION	CHAR_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_QUESTION	DFLT_ANSWER	VARCHAR	254

Other Database Changes

This release of Oracle Utilities Customer Care and Billing also includes the following database changes:

- [Oracle Utilities Application Framework Database Changes](#)

Chapter 3

Oracle Utilities Application Framework Database Changes

This chapter provides lists of database changes in Oracle Utilities Application Framework 4.5.0.1.1 included with the 2.9.0.1.1 release of Oracle Utilities Customer Care and Billing.

It includes the following:

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

New Tables

Table	Name	Description
F1_REDACTION_RULE	Redaction Rule	Used to define redaction configuration for fields that may contain personal identifiable information.*
F1_REDACTION_RULE_L	Redaction Rule Language	Language table related to the Redaction Rule table.*
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.

Dropped Tables

Table	Comments
F1_CRYPTOKEYRING_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 Columns

Table	Field	Required
F1_CRYPTOKEYRING	OWNER_FLG	CHAR

Table	Field	Required
F1_CRYPT0_KEY_RING_L	OWNER_FLG	CHAR
F1_MIGR_DATA_ST	REDACT_OPT_FLG	CHAR
F1_MIGR_DATA_ST	INSERT_ONLY_FLG	CHAR
F1_MIGR_DATA_ST	BULK_IMPORT_FLG	CHAR
F1_MIGR_OBJ	ENTITIES_CNT	NUMBER
F1_MIGR_OBJ_SQL	PK_VALUE1	VARCHAR2
F1_MIGR_OBJ_SQL	PK_VALUE2	VARCHAR2
F1_MIGR_OBJ_SQL	PK_VALUE3	VARCHAR2
F1_MIGR_OBJ_SQL	PK_VALUE4	VARCHAR2
F1_MIGR_OBJ_SQL	PK_VALUE5	VARCHAR2
SC_APP_SERVICE_L	DESCRLONG	VARCHAR2
F1_CRYPT0_KEY_RING	KEY_RING_CAT_FLG	CHAR
CI_CURRENCY_CD	EXT_CURRENCY_CD	CHAR
F1_ETL_MP_CTRL	F1_BI_TYPE_FLD	CHAR
F1_ETL_MP_CTRL	F1_BI_TYPE_VALUE	CHAR
CI_BATCH_RUN	LOG_FILE_NAME	No
F1_BATCH_RUN_ANALYTICS_SNAP	ELAPSED_SECS	No

Removed Columns

Table	Field
F1_BATCH_RUN_ANALYTICS_SNAP	ELAPSED_TIME
F1_BATCH_THD_ANALYTICS_SNAP	JOB_END_MINS
F1_BATCH_THD_ANALYTICS_SNAP	JOB_START_MINS
F1_BATCH_THD_ANALYTICS_SNAP	JOB_TOTAL_MINS

Modified Columns

Table_Name	Column_Name	From	To
F1_PROC_PANEL	UI_MAP_CD	Varchar30	Char30

Table_Name	Column_Name	From	To
F1_CRYPT0_KEY	PUBLIC_KEY	VARCHAR (2000)	VARCHAR (4000)

New Views

View Name	Description
F1_MENU_APP_SVCS_VW	Lists all application services that are associated with menu lines.

Modified Views

View_Name	Changes
CI_TD_ENTRY_OPEN_VW	/*+ no_unnest */ hint added

New Indexes

Table_Name	Index_Name
F1_MIGR_OBJ	F1T188S3
F1_SVC_TASK	F1C474S3
F1_MKTMSG_IN	F1T759S3