amdocs**billing**

Billing 6.0
Detailed Interfaces

amdocs

Document Information

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Contents

1.   INTRODUCTION

Amdocs Billing includes file interfaces for communicating with other Amdocs components (such as Customer Management, Rating, Accounts Receivable, Collection, and Customer Relationship Management) and external systems, and transmitting necessary information among these components and systems.

In addition, Billing subscribes to transactions that are published by other components (such as Customer Management and Accounts Receivable) through a uniform interface. These transactions affect entities that Billing maintains, and are logged through the Transaction Broker. Billing also publishes transactions to other components.

This document provides a high-level description of Amdocs Billing file interfaces and transactions.

Scope of this Document

This document provides complete details on each interface that is implemented in Billing 6.0.

Open System Architecture

Amdocs Billing complies with open system architecture guidelines. All data flows into and out of each Amdocs component or external system through APIs or other interfaces. This enables external systems to access Billing to request services or information. Billing uses the Transaction Broker for asynchronous communication with other components.

Terminology

The following terms and acronyms are used in this document.

Term	Definition
BC	Billing Configurator. A user-friendly GUI application that enables individual configuration of the billing behavior according to the needs of each CSP. It serves as the Billing Engine front-end for building one-time charges, charge structures and control over the Billing policies.
BOD	Bill on demand. A specific bill or invoice produced upon request, outside the context of the customer's regular billing cycle.
CET	Charge Entity Type. This can be Voice, Data, etc.
CSR	Customer Service Representative

Term	Definition
Discount Engine	The Discount Engine defines discount plans and calculates a customer's discounts based on customer information, discount item definitions, and customer performance. Discount items are defined in the Product Catalog.
PI	Performance Indicator – Contains information on all accumulated rated events for a subscriber or group of subscribers. Any attribute and amount of the event can be accumulated. Usually the chargeable attributes as well as the event rates are accumulated. Performance Indicators are used for retaining data in connection with allowances, discounts, and budget control schemes.
Pricing Item	A pricing package is composed of pricing items, which are the building blocks required to specify rates, allowances, charges, discounts, and benefits. Each pricing item is based on a pricing item type that is defined within the Implementation Repository subsystem. Pricing items are also assigned roles that determine their functionality in pricing packages.
OC	One-Time Charge
RC	Recurring Charge
Transaction Broker	The Transaction Broker is responsible for the exchange of information among numerous functional components in the Billing system of a telecommunications company. Each Billing component is responsible for a defined set of functions, and is decoupled and self-contained. The Transaction Broker is responsible for transferring the information between these components. The Transaction Broker is a persistent and robust messaging system, supporting a large volume of transactions, supports 24X7 working mode and a full system monitor. The Transaction Broker is based on a publisher/subscriber operational method, which enables the modules to publish their XMLs to which other modules subscribe.
VAS	Value-Added Service
UC	Usage Charge

2. FILE INTERFACES

Amdocs Billing file interfaces are used for communicating with other Amdocs components and external systems by means of files. This chapter describes the Billing file interfaces in detail.

Customer Management – Incoming

Billing receives the files described below from the Customer Management component.

Snapshot

The Snapshot file is an input file for the Discount Calculation process. The file contains snapshots of hierarchies of customers that belong to the current cycle, with the discounts that are attached to the hierarchy.

File Layout

The file is a binary file, created by the Discount Engine API, and read by another API, also supplied by the Discount Engine. Neither Billing nor Customer Management knows the format and layout of the file.

Rating – Incoming

Billing receives the files described below from the Rating component.

Accumulated Usage Extract

During event processing, accumulated usage for customer populations is extracted into the Accumulated Usage file. Each accumulated usage record is a charge request for Billing, and is created as a charge on bill day.

Each accumulated usage record is in the format of the related charge entity type (CET). Each record includes a static list of the attributes of the charge and the dynamic attributes defined for the charge entity type in the implementation. The attributes of the CET list below reflect the CET defined by core implementation.

File Format

ASCII

Charge Attributes File Layout

Field	Format	Description
Charge type	String	Defines the type of the charge: CRD – Credit DBT – Debit
Charge code	String	Defines the charge code
Revenue code	String	The revenue type of the charge code: ▪ UC – Usage charge ▪ RC – Recurring charge ▪ OC – One-time charge
Charge origin	String	Identifies the application that created the CET
Service receiver type	String	Identifies the entity that receives the service (offer); in UC, always 'S" for Subscriber
Service receiver ID	Numeric	Identifies the entity that receives the service (offer); for UC, the agreement ID from the PI
Service receiver customer ID	Numeric	For UC, the service receiver customer ID
Offer	Numeric	Offer ID
Offer instance	Numeric	Offer sequence number of the offer ID
Pricing item	Numeric	Pricing item ID
Billing arrangement	Numeric	Billing arrangement
Pay channel	Numeric	Pay channel
Effective date	String	In UC, the tax change date
Amount	*Monetary amount (Precision 2)	Charge amount
Amount currency	String	The currency used for the amount

UC Base CET File Layout

Inherited from Charge.

Field	Format	Description
Period name	String	The name of the time period appropriate for the charge amount (for example, Peak, Off-peak)
Number of events	Numeric	The number of events used in charge creation
Number of free events	Numeric	The number of free events used in charge creation
First event date	String	The date of the earliest event used in charge creation, stored as YYYYMMDD
Last event date	String	The date of the latest event used in charge creation, stored as YYYYMMDD
Discount amount	*Monetary amount (precision 2)	Total discount amount, which influences the charge amount
Billing resource type	String	
Billing resource ID	Numeric	

UC Duration CET File Layout

Inherited from UC base CET.

Field	Format	Description
Duration	Numeric (precision 2)	Duration (in minutes)
Free duration	Numeric (precision 2)	Free duration (in minutes)
Duration UOM	String	Unit of measurement of the duration
Basic service type	String	The type of the basic service (either a Tele Service or a Bearer Service), for GSM EDRs only (for example, voice, fax, or data)

UC Duration Roaming CET File Layout

Inherited from UC duration CET.

Field	Format	Description
Tax amount	Numeric *Monetary amount (precision 2)	Roaming tax amount
Original amount	Numeric *Monetary amount (precision 2)	Roaming original amount, in customer currency
Roaming rate type	String	Roaming rate type: As is – No additional change, only the amount on the event Mark up – Increase or decrease original amount Incollect re-rate – Recalculate the amount

UC Data CET File Layout

Inherited from UC base CET.

Field	Format	Description
Volume	Numeric (precision 4)	Volume used for charge calculation
Free volume	Numeric (precision 4)	Free volumes used for charge calculation
Chargeable attribute	String	Type of volume (downlink, uplink, or total volume) used in charge calculation.
Volume UOM	String	Unit of measurement used for volume attributes (kilobytes, due to a Billing request)
Additional qualifier	String	APN (access point naming), URL etc.

UC Data Roaming CET File Layout

Inherited from UC data CET.

Field	Elementary Type	Description
Tax amount	Numeric *Monetary amount (precision 2)	Roaming tax amount
Original amount	Numeric *Monetary amount (precision 2)	Roaming original amount, in customer currency
Roaming rate type	String	Roaming rate type: ▪ As is – No additional change, only the amount on the event ▪ Mark up – Increase or decrease original amount ▪ Incollect re-rate – Recalculate the amount

UC Occurrence CET

Inherited from UC base CET.

UC WL voice CET File Layout

Inherited from UC duration CET.

Field	Elementary Type	Description
Product type	String	Indicates the product type of subscriber.
Call type	String	The call type of the event (for instance a 1-700 or 1-800 call).
Carrier level service	String	Identifies the service level agreement at the Carrier level.
Carrier code	String	Identifies the carrier of the billing party
Waived amount	Numeric *Monetary amount (precision 2)	Waived amount in monetary amount, in case that there is a limitation budget on the call.

M-commerce

The M-commerce file holds purchase transactions made through the Internet, a mobile phone network, or a fixed phone network. These purchases are billed through the Billing system.

The service provider sends files to the Amdocs Acquisition & Formatting component, which edits them and passes them to the Rating component. Rating sends the records to Billing, and Billing creates a one-time charge request for each record.

File Format

The file is in ASCII format and its attributes should match the attributes of the relevant charge entity defined by implementation. The file can also be produced in XML format, although this may have a negative impact on performance and storage.

File Layout

External Record	Field	Description
Charge CET	Charge Type	Set default value 'D'
	Charge Code	Charge code
	Revenue Code	'OC'
	Charge Origin	Empty
	Service Receiver Type	Subscriber
	Service Receiver ID	Subscriber ID
	Service Receiver Customer ID	Customer ID
	Offer	Offer ID
	Offer Instance	Empty
	Pricing Item	Pricing Item ID
	Billing Arrangement	Billing arrangement
	Pay Channel	Pay channel
	Effective Date	Start time
	Amount	Charge amount
	Amount Currency	Customer offer currency
M-Commerce CET	Provider ID	Provider ID
	Charge Description	Service description
	Original Amount	Original converted charge amount
	Number of Items	Number of item
	Discount Amount	
	VAS Reference No	VAS reference number
	Network Type	Network type
	Item Category	Item category
	Tax amount	Original converted tax amount

Rating – Outgoing

Billing sends the files described below to the Rating component.

PI Extract List

The PI Extract list is produced by the Billing Population Extract (BLPOPX) process. It lists the customers that participate in the cycle and for which Rating should extract the accumulated usage.

File Format

ASCII

File Layout

The file contains following information:

- Name/path of output file and its routing criteria.
- Format name - A pointer to the XML file that describes the output format of the extract.
- Cycle Info – Information on cycle from which the data is being extracted
- Customer List – List of the customers for which the accumulated usage should be extracted.

Field	Format	Description
Custom Where Clause	String	Identifies the additional where clause
Routing Criteria	String	Identifies the routing criteria
Out File Alias	String	Identifies the out file alias
Out File Name	String	Identifies the out file name
Out File Path	String	Identifies the out file path
Data Group	String	Identifies the data group
Format Name	String	Identifies the output format to be used by Extract
Cycle Code	Int	Identifies the cycle code
Cycle Instance	Int	Identifies the cycle instance
Cycle Year	Int	Identifies the cycle year
Customer ID	Dlong	Identifies the customer ID
Rater Partition	Long	Identifies Rater partition customer is on
BA	DLong	Always Empty

Rerate Cycle List

The Rerate Cycle List file is produced by the Request Listener process. It lists the cycles that require re-rating at the end of a cycle.

File Format

ASCII

File Layout

This file lists the Cycles that require re-rating.

Field	Format	Description
Customer ID	Dlong	Always empty
Cycle Code	Int	Identifies the cycle code
Cycle Instance	Int	Identifies the cycle instance
Cycle Year	Int	Identifies the cycle year

Rerate Customer List

The Rerate Customer List file is produced by the Undo process. It lists the customers that require re-rating.

File Format

ASCII

File Layout

This file lists the customer IDs of the customers that require re-rating.

Field	Format	Description
Customer ID	Dlong	Identifies the customer
Cycle Code	Int	Identifies the cycle code
Cycle Instance	Int	Identifies the cycle instance
Cycle Year	Int	Identifies the cycle year

Accounts Receivable – Incoming

Billing receives the files described below from the Accounts Receivable component.

Finance Activities

The Finance Activities file contains the total amounts of activities that impact on the balance of the billing arrangement. Each record in the file represents the lump-sum amount of the activity since the last billing run. The finance activities affect the total amount due for bill receivers. The definition per finance activity, whether it increases or decreases the balance, is defined in the Billing Configurator.

File Format

ASCII

File Layout

Field	Format	Description
BA	Number (12)	Identifies billing arrangement
PCN	Number (12)	Identifies pay channel
Finance Activity	Char (30)	Defines the finance activities that impact the amount due of the bill statement (for example, payment, adjustment, etc.)
Currency	Char (3)	The billing currency
Amount	Number (9,2)	The total amount of the activity posted during the billing period
Tax Amount	Number (9,2)	The total amount of tax on the activity posted during the billing period

Pay Channel

The Pay Channel file is received from Accounts Receivable on bill day. It contains information relevant to Billing, such the Accounts Receivable balance and an indicator whether to produce a billing document.

File Format

ASCII

File Layout

Field	Format	Description
BA	Number (12)	Identifies billing arrangement
PCN	Number (12)	Identifies postpaid pay channel
Currency	Char (3)	The billing currency
AR Balance	Number (9,2)	For bill receivers, reconciles with previous amount due plus finance activities; for invoice receivers, includes overpayment amount
AR Produce Bill Indicator	Char (1)	Indicates whether to produce the billing document for the customer; for written-off accounts, the value is 'N' (No)

One-Time Charge Request

Billing can receive one-time charges from external systems on bill day. The definition of the process that extracts the charges and the file format of the charges are defined during implementation using the Billing Configurator.

The core implementation defines an Accounts Receivable process that extracts late payment charge requests.

File Format

ASCII

File Layout

Field	Format	Description
BA	Number (12)	Identifies billing arrangement
PCN	Number (12)	Identifies pay channel
Charge Code	Char (15)	Identifies the charge
Amount Currency	Char (3)	The billing currency
Amount	Number (9,2)	Amount of the charge
Offer	Number (15)	Identifies the offer under which the charges was calculated (can have null value)
Service Receiver Type	Char (1)	Identifies the type of the receiver of the charge: C – Customer B – Billing arrangement U – Unit S – Subscriber
Service receiver ID	Number (12)	The ID of the charge receiver
Receiver Customer	Number (12)	The customer of the service receiver
Effective Date	Date	The date of the activity
Charge Type	Char (3)	Indicates whether it is a charge or credit: CHAG – Charge CRD – Credit
Dynamic attributes	Number (9)	A compound field that includes all dynamic attributes in the following format: 'attribute name'='attribute value'#'attribute name'='attribute value'

Accounts Receivable – Outgoing

Billing sends the files described below to the Accounts Receivable component.

Cycle BA List

The Cycle BA List file is extracted by Billing to external applications (including Accounts Receivable) and for the bill day run. It defines the billing arrangement population for which data from other applications is required.

File Format

ASCII

File Layout

Field	Format	Description
Customer Key	Char(5)	A key for database partitioning. *For Billing use only.*
Customer ID	Number(12)	The customer as specified in Billing.
Billing Arrangement (BA)	Number(12)	The billing arrangement number associated with the customer ID.
Database Status	Char(2)	*For Billing use only.*
Production_ Type	Char(2)	A code identifying the document type: RG – Regular FR – First bill FN – Final bill RF – Revised final bill Each code results in different Accounts Receivable rules for the document (such as "do not calculate late payment" for a revised final document).
Run Type	Varchar2(6)	The run type (regular for regular run; BOD type for bill on demand run): REGULR – Regular run FINAL – Final BOD UCNOC – UC/OC threshold exceeded SPCFOC – Specific OC
Cycle Sequence Number	Number(9)	The cycle in which the bill is prepared.
Cycle Sequence Run	Number(5)	The cycle sequence run assigned (by BOD Initiator) to the bill preparation run handling this bill on demand (BOD).
Cut Off Date	Date	The cut–off date.
New Cycle Effective Date	Date	New effective date. *For Billing use.*
Account Number	Number(12)	The account number associated with the customer ID and the billing arrangement.
Billing Arrangement Status	Char(1)	*Not applicable in AR. For Billing use only.*
Billing Arrangement Status Date	Date	Date the billing arrangement status becomes effective. *Not applicable in AR. For Billing use only.*
Billing Arrangement Last Production Date	Date	Date the last billing document was produced successfully for the billing arrangement.

Field	Format	Description
Billing Arrangement Document Type	Char(2)	Indicates whether the billing document contains an invoice or bill, as follows: BL – Bill BP – Bill-and-pre-paid IN – Invoice IP – Invoice-and-pre-paid PP – Pre-paid
Tax Itemized Indicator	Char(1)	Indicates whether to calculate the tax on each charge or on the total amount only. *Accounts Receivable supports itemized tax only.*
Last Document ID	Number(12)	Last document produced for the billing arrangement.
Document Format	Char(2)	The bill format: individual or business or any other format.
Due Days	Number(3)	Number of days to add to the invoice date to get the due date.
Document Produce Indicator	Char(1)	Indicates whether a document is to be produced for the billing arrangement.
Zero Balance Indicator	Char(1)	Indicates whether to zero the balance of the billing arrangement during the billing run.
Account Currency	Char(3)	Currency used for posting financial transactions to the account.
Permanent Printing Category	Varchar2 (30)	Permanent printing category.
Temp Printing Category	Varchar2 (30)	Temporary printing category.
Temp Printing Category Effective Date	Date	Effective date of temporary printing category.
Temp Printing Category Expiration Date	Date	Expiration date of temporary printing category.
Bill Frequency	Number(2)	Bill production frequency (per cycle).
Total Amount Due	Number	The total amount to be paid.
BE	Number(9)	The business entity associated with the billing arrangement.

Confirmation Extracts

Billing provides a set of confirmation extracts as input to Accounts Receivable. These contain the details of each account that are to be updated in to the Account Receivable tables.

These extracts are broadly categorized into Postpaid, Direct Debit and Prepaid extracts as below:

■   Postpaid extract, contains the following extract files:

- Bill and Invoice Statement extract
- Charges and Credits extract
- Tax extract
■ Direct debit request extract
■ Prepaid Charges extract

This section describes the format of these extract files.

The dynamic attributes displayed on the Charge entity reflect the attributes defined per CET in the core implementation.

Postpaid Extract

Bill and Invoice Statement File Layout

Field	Format	Description
Account Number	Number(12)	Uniquely identifies the account.
BA Number	Number(12)	Uniquely identifies the billing arrangement.
Pay Channel Number	Number(12)	The pay channel for which the statement is produced.
Due Date	Date(8)	The date the amount should be paid. Relevant only for bill statement and invoice statement.
Total Amount Due	Number	The amount due of the invoice statement or bill statement.
Amount Due Handling	Varchar(2)	Define special handling on the amount due: ZB – Zero balance CO – Carry over
Legal Invoice Number	Varchar2(180)	A legal invoice number for bill statement or invoice statement; for prepaid statement, pad with spaces.
Previous Balance Amount	Number(9,2)	Previous balance of the billing arrangement. The total amount due from the previous statement.
Total Finance Activity	Number(9,2)	The total amount of the finance activities including tax.
Bill Date	Date(8)	The bill date displayed on the document.
Production Type	Char(2)	FR – First RG – Regular FN – Final DR – Drop RF – Revised Final
Cycle Sequence Number	Number(9)	The cycle in which the bill is prepared.

Field	Format	Description
Cycle Sequence Run	Number(5)	The cycle sequence run assigned (by BOD Initiator) to the bill preparation run handling this bill on demand (BOD).
Itemized Tax Indicator	Char(1)	If the indication is set to 'Y,' the tax is calculated per charge. If the indication is set to 'N,' the tax is calculated on accumulated amounts.
Billing Amount Currency	Char(3)	The currency of the amounts of the statement.
Cycle Code	Number(4)	The code of the cycle in which the statement is created.
Cycle Year	Number(4)	The year of the cycle in which the statement is created.
Cycle Instance	Number(2)	The month of the cycle in which the statement is created.

Charge and Credit File Layout

Field	Format	Description
Account Number	Number(12)	Identifies the owner account of the billing arrangement and the pay channel.
BA Number	Number(12)	The billing arrangement to which the charge is associated
Pay Channel Number	Number(12)	The pay channel ID
Charge Sequence Number	Number(12)	A unique identifier of the charge
Charge Correction Sequence Number	Number(5)	A unique identifier of the correction to the charge. There may be more than one correction to the same charge
Charge Type	Varchar2(3)	CHG – CHARGE CRD – CREDIT
Effective Date	Date	The date of the activity. This date is used for tax calculation
Billing Currency	Char(3)	The billing currency
Billing Currency Amount	Number	The charge amount in billing currency – if debit, the amount is positive; if credit, the amount is negative
Charge Code	Varchar2(25)	The main characteristic of the charge that affects the charge attributes, e.g., tax code
Revenue Code	Char(2)	Indicates if the charge is one-time, recurring or usage charge: UC – Usage charge RC – Recurring charge OC – One-time charge

Field	Format	Description
Invoice Item Type	Varchar2(6)	The invoice type to which the charge is linked in Accounts Receivable
Tax Code	Varchar2(6)	The tax code associated with the charge
Service Receiver Type	Char(1)	C – Customer U – Unit S – Subscriber B – Billing arrangement
Service Receiver ID	Number(12)	The identifier of the charge receiver (for example, if the service receiver type is subscriber, the service receiver ID is the subscriber ID)
Offer	Number(15)	The offer associated to the calculated charge.
Charge Origin	Char(2)	The process or application which created the charge: RA – Rating CM – Customer Management CC – Charge Calculator AR – Accounts Receivable DE – Discount Engine DO – Documentation IN – Invoicing
Tax Sequence Number	Number(9)	A reference to the tax record
Cycle Code	Number(4)	The code of the cycle in which the statement is created
Cycle Instance	Number(2)	The month of the cycle in which the statement is created
Cycle Year	Number(4)	The year of the cycle in which the statement is created
Charge code Dynamic Attribute List	Varchar2(4000)	Dynamic attributes list of charge code
Charge Dynamic Attribute	Varchar2(4000)	Dynamic attributes of the charge
Charge Entity Type	Varchar2(60)	The charge entity type to which the charge code is related. Indicates the set of attributes that should exist on each charge with the same charge code (and charge entity type).

Charge Entity Dynamic Attributes

The table below lists the dynamic attributes of the Charge entity.

Field	Related CET

Field	Related CET
Period name	UC occurrence CET
Number of events	UC occurrence CET
Number of free events	UC occurrence CET
First event date	UC occurrence CET
Last event date	UC occurrence CET
Discount amount	UC occurrence CET
Billing resource type	UC occurrence CET
Billing resource ID	UC occurrence CET
Period name	UC duration roaming CET
Number of events	UC duration roaming CET
Number of free events	UC duration roaming CET
First event date	UC duration roaming CET
Last event date	UC duration roaming CET
Discount amount	UC duration roaming CET
Billing resource type	UC duration roaming CET
Billing resource ID	UC duration roaming CET
Duration	UC duration roaming CET
Free duration	UC duration roaming CET
Duration UOM	UC duration roaming CET
Basic service type	UC duration roaming CET
Tax amount	UC duration roaming CET
Original amount	UC duration roaming CET
Roaming rate type	UC duration roaming CET
Period name	UC duration CET/ UC duration roaming CET
Number of events	UC duration CET/ UC duration roaming CET
Number of free events	UC duration CET/ UC duration roaming CET
First event date	UC duration CET/ UC duration roaming CET
Last event date	UC duration CET/ UC duration roaming CET
Discount amount	UC duration CET/ UC duration roaming CET
Billing resource type	UC duration CET/ UC duration roaming CET
Billing resource ID	UC duration CET/ UC duration roaming CET
Duration	UC duration CET/ UC duration roaming CET
Free duration	UC duration CET/ UC duration roaming CET
Duration UOM	UC duration CET/ UC duration roaming CET
Basic service type	UC duration CET/ UC duration roaming CET
Period name	UC data CET
Number of events	UC data CET
Number of free events	UC data CET

Field	Related CET
First event date	UC data CET
Last event date	UC data CET
Discount amount	UC data CET
Billing resource type	UC data CET
Billing resource ID	UC data CET
Volume	UC data CET
Free volume	UC data CET
Chargeable attribute	UC data CET
Volume UOM	UC data CET
Additional qualifier	UC data CET
Period name	UC data roaming CET
Number of events	UC data roaming CET
Number of free events	UC data roaming CET
First event date	UC data roaming CET
Last event date	UC data roaming CET
Discount amount	UC data roaming CET
Billing resource type	UC data roaming CET
Billing resource ID	UC data roaming CET
Volume	UC data roaming CET
Free volume	UC data roaming CET
Chargeable attribute	UC data roaming CET
Volume UOM	UC data roaming CET
Additional qualifier	UC data roaming CET
Tax amount	UC data roaming CET
Original amount	UC data roaming CET
Roaming rate type	UC data roaming CET
Provider ID	M-commerce CET
Charge description	M-commerce CET
Original amount	M-commerce CET
Number of items	M-commerce CET
Discount amount	M-commerce CET
VAS reference number	M-commerce CET
Network type	M-commerce CET
Item category	M-commerce CET
Tax amount	M-commerce CET
Proration factor	RC base CET
Period start date	RC base CET
Period end date	RC base CET

Field	Related CET
Base rate	RC base CET
Subscriber status	RC base CET
Price plan indicator	RC base CET
Proration factor	RC bandwidth CET
Period start date	RC bandwidth CET
Period end date	RC bandwidth CET
Base rate	RC bandwidth CET
Subscriber status	RC bandwidth CET
Price plan indicator	RC bandwidth CET
Bandwidth downlink	RC bandwidth CET
Bandwidth uplink	RC bandwidth CET
Activity code	OC base CET
Activity reason code	OC base CET
Activity code	OC commitment penalty CET
Activity reason code	OC commitment penalty CET
Commitment period	OC commitment penalty CET
Remaining period	OC commitment penalty CET
Description	General OC CET
Linked invoice	Fee CET
Description	Fee CET
Percentage	Discount CET
Discount plan name	Discount CET
Contributing amount	Discount CET
Accumulation UOM	Discount CET
Postpaid Pay Channel	Replenishment CET
Prepaid Pay Channel	Replenishment CET
Activity code	OC WL CET
Activity reason code	OC WL CET
Override OC indicator	OC WL CET
Proration factor	RC WL CET
Period start date	RC WL CET
Period end date	RC WL CET
Base rate	RC WL CET
Subscriber status	RC WL CET
Price plan indicator	RC WL CET
Override RC indicator	RC WL CET
Activity code	OC WL purchase CET
Activity reason code	OC WL purchase CET

Field	Related CET
Override OC indicator	OC WL purchase CET
Barcode	OC WL purchase CET
Purchased quantity	OC WL purchase CET
Period name	UC WL voice CET
Number of events	UC WL voice CET
Number of free events	UC WL voice CET
First event date	UC WL voice CET
Last event date	UC WL voice CET
Discount amount	UC WL voice CET
Billing resource type	UC WL voice CET
Billing resource ID	UC WL voice CET
Duration	UC WL voice CET
Free duration	UC WL voice CET
Duration UOM	UC WL voice CET
Basic service type	UC WL voice CET
Product type	UC WL voice CET
Call type	UC WL voice CET
Carrier level service	UC WL voice CET
Carrier code	UC WL voice CET
Waived amount	UC WL voice CET

Tax File Layout

Field	Format	Description
Account Number	Number(12)	Identifies the owner account of the billing arrangement and the pay channel.
BA Number	Number(12)	The billing arrangement ID
Tax Relation	Char(1)	Indicates if the tax relates to one charge or to a group of charges. If a tax is calculated to a group of charges, it is related to all these charges. C – Single Charge G – Group of Charges
Tax Sequence Number	Number(9)	The sequence of the tax. The charge reference to tax is by tax sequence number
Tax Item Sequence Number	Number(9)	Uniquely identifies the tax record
Tax Authority	Varchar2(6)	The authority that receives the taxes, e.g., city
Tax code	String	Internal code identifying the tax type and tax authority

Field	Format	Description
Tax Type	Varchar2(6)	Tax type, e.g., VAT
Tax Rate	Number(5,2)	The rate of the tax
Tax Amount	Number	The amount of the tax
Taxable Amount	Number	The charge amount that the tax was calculated on
Exemption Type	Char(1)	Indicates the source of the exemption for the tax item: S – Service C – Customer N – None

Prepaid Extract

The extract holds the charges paid by a prepaid pay channel.

File Layout

Field	Format	Description
Rownum	Number	Oracle Row number
Account Number	Number(12)	The account identifier
Charge Sequence Number	Number(9)	Unique identifier of the charge.
Charge Correction Sequence Number	Number(5)	Unique identifier of the correction to the charge. There may be more than one correction to the same charge.
Charge Type	Char(3)	CHG – CHARGE CRD – CREDIT
Effective Date	Date(8)	The effective date
Amount Currency	Char(3)	The unit of the charge amount.
Amount	Number(9,2)	The charge amount. If the charge type indicates a debit, i.e., CHG, the amount is positive. If the charge type indicates a credit, the amount is negative.
Charge Code	Char(15)	The main characteristic of the charge that affects the charge attributes, e.g., tax code
Revenue Code	Char(2)	Indicates whether the charge is a one-time, recurring or usage charge UC – Usage charge RC – Recurring charge OC – One-Time charge
Service Receiver Type	Char(1)	C – Customer U – Unit S – Subscriber B – Billing arrangement

Field	Format	Description
Service Receiver ID	Number(12)	The identifier of the charge receiver (for example, if the service receiver type is subscriber, the service receiver ID is the subscriber ID)
Offer	Number(15)	The offer associated with the calculated charge.
Charge Origin	Char(2)	The component that originated the charge: RA – Rating CM – Customer management CC – Charge Calculator AR – Accounts Receivable DE – Discount DO – Document calculation IN – Invoicing
Cycle Code	Number(4)	The code of the cycle in which the statement is created
Cycle Instance	Number(2)	
Cycle Year	Number(4)	The year of the cycle in which the statement is created
Charge code Dynamic Attribute List	Varchar2(4000)	Dynamic attributes list of charge code
Charge Entity Type	Varchar2(60)	The charge entity type to which the charge code is related. Indicates the set of attributes that should exist on each charge with the same charge code (and charge entity type).
Charge Dynamic Attribute	Varchar2(4000)	Dynamic attributes of the charge

Direct Debit Extract

This extracts payment requests for the banks for customers who pay by direct debit.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Pay channel number	Number(12)	Identifies the pay channel
Legal Invoice number	Varchar2(180)	Number that appears on the invoice
Payment method	Varchar2(3)	Payment method code
Total amount due	Number(9,2)	The amount to be paid by direct debit

Field	Format	Description
Due date	Date	The due date for the payment

Collection – Incoming

Billing receives the files described below from the Collection component.

Collection Financial Activities Extract

The file contains the financial activities associated with the collection process for a customer. The file includes the collection payment arrangement (PA) remaining amount (bill receiver).

This extract runs only in the expanded bill preparation flow.

File Format

ASCII

File Layout

Field	Format	Description
CUSTOMER_NO	Number(12)	Identifies customer number
BA	Number(12)	Identifies billing arrangement
PCN	Number(12)	N/A
Finance Activity	Char(30)	N/A
Currency	Char(3)	N/A
Amount	Number(9,2)	The collection PA remaining due amount
Tax Amount	Number(9,2)	N/A
ACCOUNT_NO	Number(9)	Identifies account number

External Application – Incoming

Billing receives the file described below from external systems.

Discount Feed

Amdocs Billing receives information from external components to apply discounts that are not based on charge performance. Billing feeds the information into the Discount Engine during the Billing run. The information should be based on a discount entity type defined in the Product Catalog.

File Layout

Field	Format	Description
Discount Entity Type	String	The DET name (e.g., subscriber discount)
Entity ID	Dlong	The entity identifier (e.g., subscriber ID)
Entity Type	Char	Entity Type, which can be: S – Subscriber C – Customer U – Unit

Field	Format	Description
Customer ID	Dlong	The customer identifier
Dynamic Attributes	String	The accumulation and qualification fields must appear with the same field names that they appear in the DET (for example, Subscriber Status, Subscriber Type, Subscriber Activation Date)

Bill Formatter Utility – Outgoing

Interfaces to the Bill Layout utility are represented in the Billing core system by extract entities, where an extract entity defines the list of attributes related to a business entity. When defining the extract files in the customization layer, the user can edit the file by selecting specific attributes from the extract entity attributes list and making such changes as editing the format of the field, etc.

This section describes the files that comprise the output from Billing to the Formatter utility.

Billing Document

The Billing Document file includes general information on billing documents produced for billing arrangements.

File Layout

The table below lists the extract entity attributes.

Field	Format	Description
Document Sequence Number	Number(12)	Uniquely identifies the document.
BA Number	Number(12)	Identifies the billing arrangement to which this document belongs.
Customer Number	Number(12)	Identifies the customer of the billing arrangement.
Bill Date	Date(8)	The date printed on the billing document as the extract date.
Account Number	Number(12)	Identifies the owner account of the billing arrangement and pay channel.
Cycle Code	Number(4)	The code of the cycle in which the document was produced.
Cycle Instance	Number(2)	The month of the cycle in which the document was produced.
Cycle Year	Number(4)	The year of the cycle in which the document was produced.

Field	Format	Description
Document Type	Varchar2(2)	The statements associated with the document: BL – Bill statement IN – Invoice statement PP – Prepaid statement BP – Bill statement and one or more prepaid statements IP – Invoice statement and one or more prepaid statements
Period Start Date	Date(8)	The start date of the billing period covered by the document.
Period End Date	Date(8)	The end date of the billing period covered by the document.
Document Format	Char(2)	Identifies the bill format, e.g., individual, business, or any other format.
Production Type	Char(2)	The production type of the specific billing document: FR – First RG – Regular FN – Final RF – Revised final DR – Drop
Document Produce Indicator	Char(1)	Indicates whether the document should be produced for the customer (for example, can set not to produce for prepaid customer): Y – Produce and extract N – Do not produce or extract E – Extract for archive only; do not produce bill
Amount Currency	Char(3)	The currency of the amount displayed on the document.
Printing Category	Varchar2(40)	Printing category code – String that identifies the printing category.
Document Demand Type	Varchar2(6)	The bill on demand (BOD) type: FINAL – A final bill for customers whose service is being cancelled UCNOC – UC/OC threshold exceeded SPCFOC – Specific OC REGULR – A regular bill document (i.e., not a BOD)

Bill Statement

The Bill Statement file contains information regarding statements produced for bill receivers.

File Layout

The table below lists the extract entity fields.

Field	Format	Description
Statement Sequence Number	Number(9)	Uniquely identifies the statement.
Document Sequence Number	Number(12)	A reference to the document
Invoice Sequence Number	Number(9)	A reference to the invoice
BA Number	Number(12)	Identifies the billing arrangement
Pay Channel No	Number(12)	A unique identifier of the pay channel
Statement Date	Date(8)	The date that the statement is produced
Legal Invoice Number	Varchar2(180)	A legal invoice number
Due Date	Date(8)	The last date allowed for the bill statement to be paid
Previous Balance Amt	Number	The billing arrangement's previous balance, i.e., the total amount due from previous document
Total Amount Due	Number	The calculated amount that is to be paid
Amount Due Handling	Varchar2(2)	Define special handling performed on the total amount due: ZB – Zero balance CO – Carry over
Payment Method	Varchar2(3)	The method of payment: DD – Direct debit CA – Cash AT – ATM CC – Credit card CH – Check
Total Finance Activities	Number	The total amount of the finance activities (including tax)
Total Invoice Amount	Number	The total of all new charges and credits (including discounts and taxes) since the previous invoice
Tax Total Invoice Amount	Number	The total tax amount calculated for the newly invoiced charges and credits of the current invoice
Period Coverage Start Date	Date(8)	The start date of the billed period for the current document. For regular billing documents, this is the cycle start date. For first billing documents, this is the date on which the billing arrangement was opened

Field	Format	Description
Period Coverage End Date	Date(8)	The end date of the billed period for the current document. For regular billing documents, this is the cycle close date. For final billing documents, this is the date on which the billing arrangement was cancelled
Itemized Tax Indicator	Char(1)	If the indication is set to 'Y,' the tax is calculated per charge. If the indication is set to 'N,' the tax is calculated on accumulated amounts
Amount Currency	Char(3)	The currency of the invoice's amounts

Bill Finance Activities

The Bill Finance Activities file contains information about finance activities extracted from Accounts Receivable that impacts the amount due of the Bill receiver.

File Layout

The table below lists the extract entity fields.

Field	Format	Description
Statement Sequence Number	Number(9)	A reference to the bill statement
Finance Activity Sequence Number	Number(9)	A unique identifier of the record
BA Number	Number(12)	Identifies the billing arrangement
Finance Activity	Varchar2(30)	Defines the finance activities that impact the amount due of the bill statement (for example, payment, adjustment, etc.)
Amount	Number	The total amount of the activity posted during the billing period
Tax Amount	Number	The total tax amount of the activity (for example, total tax amount for adjustment)

Invoice Statement

The Invoice Statement file contains information regarding the statements produced for invoice receivers.

File Layout

The table below lists the extract entity attributes.

Field	Format	Description
Statement Sequence Number	Number(9)	Uniquely identifies the statement.
Document Sequence Number	Number(12)	A reference to the document.

Field	Format	Description
BA Number	Number(12)	Billing arrangement ID.
Pay Channel Number	Number(12)	A unique identifier of the pay channel.
Statement Date	Date(8)	The date that the statement is produced.
Legal Invoice Number	Varchar2(180)	A legal invoice number.
Invoice Sequence Number	Number(9)	A reference to the invoice.
Due Date	Date(8)	The last date allowed for the bill statement to be paid.
Over Payment Amount	Number	The overpayment amount deducted from the total amount due.
Total Amt Due	Number	The calculated amount that is to be paid.
Amount Due Handling	Varchar2(2)	Special handling performed on the total amount due: ZB – Zero balance CO – Carry over
Payment Method	Varchar2(3)	The method of payment: DD – Direct debit CA – Cash AT – ATM CC – Credit card CH – Check
Total Invoice Amount	Number	The total of all new charges and credits (including discounts and taxes), since the previous invoice.
Tax Total Inv Amount	Number	The total tax amount calculated for the newly invoiced charges and credits of the current invoice.
Period Coverage Start Date	Date(8)	The start date of the billed period for the current document. For regular billing documents, this is the cycle start date. For first billing documents, this is the date on which the billing arrangement was opened.
Period Coverage End Date	Date(8)	The end date of the billed period for the current document. For regular billing documents, this is the cycle close date. For final billing documents, this is the date on which the billing arrangement was cancelled.
Itemized Tax Indicator	Char(1)	If the indicator is set to 'Y,' the tax is calculated per charge. If the indicator is set to 'N,' the tax is calculated on accumulated amounts.
Amount Currency	Char(3)	The currency of the invoice's amounts.

Prepaid Statement

The Prepaid Statement file contains information regarding the prepaid statements produced for the prepaid pay channel.

File Layout

The table below lists the extract entity fields.

Field	Format	Description
Statement Sequence Number	Number(9)	Uniquely identifies the statement
Cycle Sequence Number	Number(12)	A reference to the document
BA Number	Number(12)	Billing arrangement ID
Pay Channel Number	Number(12)	A unique identifier of the pay channel
Prepaid Produce Indicator	Char(1)	Indicates if a prepaid statement should be produced for the customer: Y – Produce and extract N – Do not produce or extract E – Extract for archive only, do not produce statement

Charge

The Charge file contains details of the charges and credits included in the billing document.

File Layout

The table below lists the extract entity fields.

Field	Format	Description
Charge Sequence Number	Number(12)	An identifier of the charge. The charge sequence plus charge correction sequence uniquely identify the charge record
Charge Correction Sequence Number	Number(5)	A unique identifier of the correction to the charge. There may be more than one correction to the same charge
Statement Sequence Number	Number(9)	A reference to the statement
Tax Sequence Number	Number(9)	A reference to tax
Billing Currency Amount	Number	The charge amount
Billing Currency	Char(3)	The billing currency
Amount Exchange Date	Date	The date of conversion from offer currency to billing currency
Customer Currency Amount	Number	The charge amount in the customer currency

Field	Format	Description
Customer Currency	Char(3)	The offer currency
BA Number	Number(12)	The billing arrangement identifier
Pay Channel Number	Number(12)	The pay channel identifier
Charge Type	Char(3)	Debit or credit: CRD – Credit DBT – Debit
Charge Code	Varchar2(25)	Main characteristic of the charge. The dynamic attributes are filled according to the charge type. Each charge type has a set of attributes that should exist for each charge of the same charge type. The list of relevant attributes is defined in the reference area
Charge Entity Type	Varchar2(60)	The charge entity type to which the charge code relates. Indicates the set of attributes that should exist on each charge with the same charge code (and charge entity type)
Revenue Code	Char(2)	The revenue type of the charge code: UC – Usage charge RC – Recurring charge OC – One-time charge
Tax Code	Varchar2(60)	Reference to the tax code
Invoice Item Type	Varchar(6)	An Accounts Receivable attribute, driven from the charge. If the tax is calculated on one charge, it holds the invoice type of the charge
Message Code	Varchar2(20)	Reference to message associated with the charge code
Effective Date	Date	The date the charge becomes effective, used for tax calculations
Service Receiver Type	Char(1)	Identifies the type of the receiver of the charge: C – Customer U – Unit S – Subscriber B – Billing arrangement
Service Receiver ID	Number(12)	The identifier of the charge receiver (for example, if the service receiver type is subscriber, the service receiver ID is the subscriber ID)
Receiver Customer	Number(12)	The customer of the service receiver
Offer	Number(15)	The offer according to which the charge was calculated
Offer Instance	Number(9)	The offer instance uniquely identifying the offer given to the subscriber

Field	Format	Description
Offer Item	Number(15)	The offer item according to which the charge was calculated
Charge Origin	Char(2)	The process or application which created the charge: RA – Rating CM – Customer Management CC – Charge Calculator AR – Accounts Receivable DE – Discount Engine DO – Documentation IN – Invoicing
Cycle Code	Number(4)	The code of the cycle in which the statement is created
Cycle Instance	Number(2)	The month of the cycle in which the statement is created
Cycle Year	Number(4)	The year of the cycle in which the statement is created

The following dynamic attributes depend on the attributes defined per CET by implementation. The list below represents dynamic attributes for a CET defined by core implementation.

Charge Entity Dynamic Attributes

Following is a list of dynamic attributes on the Charge entity.

Field	Related CET
Period name	UC occurrence CET
Number of events	UC occurrence CET
Number of free events	UC occurrence CET
First event date	UC occurrence CET
Last event date	UC occurrence CET
Discount amount	UC occurrence CET
Billing resource type	UC occurrence CET
Billing resource ID	UC occurrence CET
Period name	UC duration roaming CET
Number of events	UC duration roaming CET
Number of free events	UC duration roaming CET
First event date	UC duration roaming CET
Last event date	UC duration roaming CET
Discount amount	UC duration roaming CET
Billing resource type	UC duration roaming CET
Billing resource ID	UC duration roaming CET
Duration	UC duration roaming CET

Field	Related CET
Free duration	UC duration roaming CET
Duration UOM	UC duration roaming CET
Basic service type	UC duration roaming CET
Tax amount	UC duration roaming CET
Original amount	UC duration roaming CET
Roaming rate type	UC duration roaming CET
Period name	UC duration CET
Number of events	UC duration CET
Number of free events	UC duration CET
First event date	UC duration CET
Last event date	UC duration CET
Discount amount	UC duration CET
Billing resource type	UC duration CET
Billing resource ID	UC duration CET
Duration	UC duration CET
Free duration	UC duration CET
Duration UOM	UC duration CET
Basic service type	UC duration CET
Period name	UC data CET
Number of events	UC data CET
Number of free events	UC data CET
First event date	UC data CET
Last event date	UC data CET
Discount amount	UC data CET
Billing resource type	UC data CET
Billing resource ID	UC data CET
Volume	UC data CET
Free volume	UC data CET
Chargeable attribute	UC data CET
Volume UOM	UC data CET
Additional qualifier	UC data CET
Period name	UC data roaming CET
Number of events	UC data roaming CET
Number of free events	UC data roaming CET
First event date	UC data roaming CET
Last event date	UC data roaming CET
Discount amount	UC data roaming CET
Billing resource type	UC data roaming CET

Field	Related CET
Billing resource ID	UC data roaming CET
Volume	UC data roaming CET
Free volume	UC data roaming CET
Chargeable attribute	UC data roaming CET
Volume UOM	UC data roaming CET
Additional qualifier	UC data roaming CET
Tax amount	UC data roaming CET
Original amount	UC data roaming CET
Roaming rate type	UC data roaming CET
Provider ID	M-commerce CET
Charge description	M-commerce CET
Original amount	M-commerce CET
Number of items	M-commerce CET
Discount amount	M-commerce CET
VAS reference number	M-commerce CET
Network type	M-commerce CET
Item category	M-commerce CET
Tax amount	M-commerce CET
Proration factor	RC base CET
Period start date	RC base CET
Period end date	RC base CET
Base rate	RC base CET
Subscriber status	RC base CET
Price plan indicator	RC base CET
Proration factor	RC bandwidth CET
Period start date	RC bandwidth CET
Period end date	RC bandwidth CET
Base rate	RC bandwidth CET
Subscriber status	RC bandwidth CET
Price plan indicator	RC bandwidth CET
Bandwidth downlink	RC bandwidth CET
Bandwidth uplink	RC bandwidth CET
Activity code	OC base CET
Activity reason code	OC base CET
Activity code	OC commitment penalty CET
Activity reason code	OC commitment penalty CET
Commitment period	OC commitment penalty CET
Remaining period	OC commitment penalty CET

Field	Related CET
Description	General OC CET
Linked invoice	Fee CET
Description	Fee CET
Percentage	Discount CET
Discount plan name	Discount CET
Contributing amount	Discount CET
Accumulation UOM	Discount CET
Postpaid Pay Channel	Replenishment CET
Prepaid Pay Channel	Replenishment CET
Activity code	OC WL CET
Activity reason code	OC WL CET
Override OC indicator	OC WL CET
Proration factor	RC WL CET
Period start date	RC WL CET
Period end date	RC WL CET
Base rate	RC WL CET
Subscriber status	RC WL CET
Price plan indicator	RC WL CET
Override RC indicator	RC WL CET
Activity code	OC WL purchase CET
Activity reason code	OC WL purchase CET
Override OC indicator	OC WL purchase CET
Barcode	OC WL purchase CET
Purchased quantity	OC WL purchase CET
Period name	UC WL voice CET
Number of events	UC WL voice CET
Number of free events	UC WL voice CET
First event date	UC WL voice CET
Last event date	UC WL voice CET
Discount amount	UC WL voice CET
Billing resource type	UC WL voice CET
Billing resource ID	UC WL voice CET
Duration	UC WL voice CET
Free duration	UC WL voice CET
Duration UOM	UC WL voice CET
Basic service type	UC WL voice CET
Product type	UC WL voice CET
Call type	UC WL voice CET

Field	Related CET
Carrier level service	UC WL voice CET
Carrier code	UC WL voice CET
Waived amount	UC WL voice CET

Tax

The Tax file contains detailed tax information associated with charges and groups of charges.

File Layout

The table below lists the extract entity fields.

Field Name	Format	Description
Tax Item Sequence Number	Number(9)	Uniquely identify the record
Tax Sequence Number	Number(9)	A reference to the charge or group of charges
BA Number	Number(12)	Billing arrangement ID
Total Tax Amount	Number	Holds the sum of the tax amounts of all tax items
Tax Relation	Char(1)	Indicates if the tax relates to one charge or to a group of charges: G – Group of charges C – One charge
Invoice Type	Varchar2(6)	Indicates the invoice to which the tax is reported in Accounts Receivable, driven from the charge
Tax Qualifiers	Varchar2(4000)	Tax qualifiers hold attributes, usually customer attributes that impact the tax calculation and are used for tax reports or auditing. In internal taxation it includes the attribute of the tax rule, which defines the tax rate. In external taxation it is populated in the customization layer.
Tax Authority	Varchar2(6)	The level of taxing authority (e.g., country)
Tax Type	Varchar2(6)	The type of tax calculated (e.g., VAT)
Tax Rate	Number(5,2)	The tax percentage
Tax Amount	Number	The amount of the tax
Taxable Amount	Number	The amount that the tax was calculated on
Exemption Type	Char(1)	Indicates the source of the exemption: S – Service exemption C – Customer exemption N – None

Charge Accumulation

The Charge Accumulation file contains charge accumulation groups for billing arrangements.

File Layout

The table below lists the extract entity attributes.

Field Name	Format	Description
Invoice Sequence Number	Number(9)	Reference to the invoice statement
BA Number	Number(12)	Billing arrangement ID
Pay Channel Number	Number(12)	Identifier of the pay channel
Group ID	Varchar2(6)	The group ID to which this charge accumulation relates. The group ID is reference to Charge Account Group defined in the Billing Configurator.
Total	Number	The total of the accumulated attribute defined by the Billing Configurator on the Charge Account Group entity
Charge Counter	Number(5)	The number of charges that contribute to the total
* Accumulation by Attribute List	Varchar2(4000)	List of name and values of the accumulated by attributes

Billing Reference Entities

The files described below contain billing reference information.

Message Code

This file contains information on the message codes associated with charge, FYI, and tax messages.

File Layout

Field	Format	Description
Message Code	Varchar2(20)	The message code
Message Type	Varchar2(6)	The message type: CHG – Charge TAX – Tax FYI – Marketing message PAGEIN – Page insert
Text Number of Lines	Number(5)	The number of text lines in the message
Dynamic Attribute	Varchar2(4000)	List of names and values of dynamic attributes for the bill layout utility, such as priority, message position, etc.

Message Text

The Message Text file holds the text of charge, FYI, and tax messages:

File Layout

Field	Format	Description
Message Code	Varchar2(20)	Identifies the message
Message Language	Char(2)	Identify the message language: EN – English FR – French
Line Sequence No	Number(5)	A unique sequence number for each text line in the message
Message Text	Varchar2(1500)	Message text including parameters

Tax Type

The Tax Type file contains the message code for each tax type and tax authority.

File Layout

Field	Format	Description
Tax Type	Varchar2(6)	The tax type
Tax Authority	Varchar2(6)	The tax authority
Message Code	Varchar2(20)	Message code associated with the tax type and tax authority
Description	Varchar2(180)	The tax type and authority description

BOD Layout Format Extract

The BOD Layout Format Extract file contains the value of the bill on demand layout format note attribute (from the Business Entity Policy table).

File Layout

Field	Format	Description
Attribute Name	Varchar2(30)	The name of the attribute: MKTBODLAYOUT – BOD Layout Format Note
Attribute Value	Varchar2(180)	The value of the attribute: Y – Yes
BE	Number(9)	Identifies the business entity of the given policy attribute.
Effective Date	Date	Effective date of the attribute value. Date Mask: YYYYMMDD
Expiration Date	Date	Expiration date of the attribute value. Date Mask: YYYYMMDD

Finance Activities

The Finance Activities file contains descriptions of each finance activity to display on the billing document.

File Layout

Field	Format	Description
Activity Origin	Varchar2(10)	The application that extracted the activity: AR – Accounts Receivable RPL – Replenishment
Finance Activity	Varchar2(30)	The finance activity
Description	Varchar2(180)	Description to display on the document
Impact on balance	Char(1)	Impact on total amount due: D – Decrease I – Increase

Customer Management Entities

The files described below contain Customer Management information.

Address Data

The Address Data file contains the addresses of the billing arrangement.

File Layout

Field	Format	Description
BA Number	Number(12)	The Billing arrangement ID
Link type	Char(1)	The type of name and address to which the link record points. B – Billing M – Mailing R – Reporting C – Customer P – Corporate A – Account S – Subscriber
Address Line 1	Varchar2(4000)	The secondary line (first line on the envelope). Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Line 2	Varchar2(4000)	This line is presented to the CSR in Customer Management and is printed on the bill. Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type

Field	Format	Description
Address Line 3	Varchar2(4000)	Usually contains the city name and zip. Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Line 4	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 1	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 2	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 3	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 4	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 5	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 6	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 7	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 8	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 9	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 10	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type

Field	Format	Description
Address Element 11	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 12	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 13	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 14	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type
Address Element 15	Varchar2(4000)	Populated based on implementation definitions in the ADR_NAME_DEFINITION table per address type

Billing Arrangement Name

The Billing Arrangement Name file contains the billing arrangement name.

File Layout

Field	Format	Description
BA Number	Number(12)	
Name Line 1	Varchar2(4000)	The first line of the name on the envelope. Populated based on implementation definition
Name Line 2	Varchar2(4000)	The second line of the name on the envelope. Populated based on implementation definition
Name Element 1	Varchar2(300)	Populated based on implementation definition
Name Element 2	Varchar2(300)	Populated based on implementation definition
Name Element 3	Varchar2(300)	Populated based on implementation definition
Name Element 4	Varchar2(300)	Populated based on implementation definition
Name Element 5	Varchar2(300)	Populated based on implementation definition
Name Element 6	Varchar2(300)	Populated based on implementation definition

Field	Format	Description
Name Element 7	Varchar2(300)	Populated based on implementation definition
Name Element 8	Varchar2(300)	Populated based on implementation definition
Name Element 9	Varchar2(300)	Populated based on implementation definition
Name Element 10	Varchar2(300)	Populated based on implementation definition

Account Name

The Account Name file contains the account name to be displayed on the remittance slip.

File Layout

Field	Format	Description
BA Number	Number(12)	Identifies the billing arrangement
Name Line 1	Varchar2(4000)	The first line of the name on the envelope. Populated based on implementation definitions
Name Line 2	Varchar2(4000)	The second line of the name on the envelope. Populated based on implementation definition
Name Element 1	Varchar2 (300)	Populated based on implementation definition
Name Element 2	Varchar2 (300)	Populated based on implementation definition
Name Element 3	Varchar2 (300)	Populated based on implementation definition
Name Element 4	Varchar2 (300)	Populated based on implementation definition
Name Element 5	Varchar2 (300)	Populated based on implementation definition
Name Element 6	Varchar2 (300)	Populated based on implementation definition
Name Element 7	Varchar2 (300)	Populated based on implementation definition
Name Element 8	Varchar2 (300)	Populated based on implementation definition
Name Element 9	Varchar2 (300)	Populated based on implementation definition
Name Element 10	Varchar2 (300)	Populated based on implementation definition

Subscriber Name

The Subscriber Name file contains the subscriber name and primary resource, e.g., phone number.

File Layout

Field	Format	Description
Customer ID	Number(9)	Identify the customer to which the subscriber belongs
Subscriber number	Number(9)	The subscriber ID
Subscriber status	Char(1)	Subscriber status: O – open, C – cancel
Primary resource type	Varchar2(4)	The type of the resource
Primary resource value	Varchar2(63)	The resource value, such as MSISDN or user name.
Link Type	Char(1)	The type of name and address to which the link record points. Values are taken from the Name Address Link Type reference table (implemented by the Generic Codes table).
Name line 1	Varchar2(4000)	The first line of the name on the envelope. A concatenation of the first line name elements.
Name line 2	Varchar2(4000)	The second line of the name on the envelope. A concatenation of the second line name elements.
Name element 1	Varchar2(300)	The following fields are populated with name lines based on a customizable algorithm.
Name element 2	Varchar2(300)	
Name element 3	Varchar2(300)	
Name element 4	Varchar2(300)	
Name element 5	Varchar2(300)	
Name element 6	Varchar2(300)	
Name element 7	Varchar2(300)	
Name element 8	Varchar2(300)	
Name element 9	Varchar2(300)	
Name element 10	Varchar2(300)	

Pay Channel

The Pay Channel file contains the pay channel information.

File Layout

Field	Format	Description
Payment Channel Number	Number(9)	A unique identifier of the pay channel
BA Number	Number(12)	Identifies the billing arrangement

Field	Format	Description
Payment Category	Varchar2(4)	Identifies whether the pay channel is a prepaid or postpaid channel. Prepaid channels also represent the balance in the prepaid machine.
Payment Method	Char(3)	The payment method: DD – Direct Debit CC – Credit card CA – Cash CH – Check AP – ATM
Payment Type	Char(1)	The payment type: R – Recurring T – Returning N – None
Bank Code	Varchar2(8)	The code of the bank where the customer's account is managed (relevant for the Direct Debit from Bank Account payment method); can be relevant both for prepaid and postpaid customers
Bank Account Number	Varchar2(64)	The bank account number (relevant for the Direct Debit from Bank Account payment method). It can be relevant both for prepaid and postpaid customers. Values are taken from the Bank Account Type reference table (implemented by the Generic Codes table)
Bank Account Type	Char(1)	A check digit used to validate the bank account number
Bank Branch Number	Varchar2(20)	The branch number of the bank where the customer's account is managed
Credit Card Type	Varchar2(2)	Credit card type
Credit Card No	Varchar2(21)	Credit card number
Credit Card Expiration Date	Date	Credit card expiration date
Pay Channel Description	Varchar2(50)	Visual description of the pay channel to be used for selecting pay channel or bill display

Customer Management Reference Entities

The files described below contain Customer Management information.

Offer

The Offer file contains offer information, such as the name of the offer, to be displayed in the billing document.

File Layout

Field	Format	Description
Offer Code	Varchar2(15)	Identifies the offer
Offer Name	Varchar2(255)	Identifies the name of the offer
Offer Type	Char(1)	Identifies the type of the offer, i.e., if it is a price plan, an additional service, or a discount
Product Type	Varchar2(2)	Identifies the product to which this offer is related
Discount Plan	VARCHAR2(3)	Defines the name of the "Discount Plan" of the offer if this offer is a Discount Offer.
Currency	VARCHAR2(15)	Defines the currency of the offer. If the currency is set, only subscribers or agreements that belong to customers with the same "offer currency" are eligible to purchase this offer.

Offer Item

The Offer Item file contains offer item information. The bill formatter utility can use this information to display items for price plans.

File Layout

Field	Format	Description
Offer Code	Varchar2(15)	Identifies the offer
Item Code	Varchar2(15)	The code of the item
Item Name	Varchar2(255)	The name of the item
Item Type	VARCHAR2(2)	Identifies the type of the item (whether it is a provisioning item, pricing item or event distribution item)
Revenue Code	Varchar2(3)	The revenue type of the offer item: U – Usage charge R – Recurring charge O – One-time charge

Accounts Receivable Entities

The files described below contain information from the Amdocs Accounts Receivable database.

Payment

The Payment file contains payments and Fund Transfer To payments posted in Accounts Receivable since the last billing document extract.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing
Payment ID	Number(9)	This is the unique sequence ID of the Payment Details entry related to this Payment.
Deposit Date	Date	The date on which the payment was deposited in the bank. This is the payment effective date.
Original Amount	Number(18,2)	The original amount of the customer payment
Billing Invoice Number	Varchar2(12)	This field is the billing invoice number which is associated with the payment.
Payment Method	Char(3)	The payment type, e.g., check, cash, or credit card
Payment Sub Method	Varchar2(3)	Describes additional details for a payment type, such as the code of the credit card company used for the payment (for example, Visa or MasterCard)
Activity Indicator	Char(5)	Indicate whether there is a payment activity for this payment.
Bank Code	Char (6)	The code of the customer's bank from which the payment is withdrawn
Bank Branch Number	Char (8)	The bank branch from which the payment arrives.
Bank Account Number	Varchar2(18)	The customer's bank account number.
Check Number	Varchar2(15)	The check number
Credit Card Number	Varchar2(22)	The number of the credit card used for payment

Field	Format	Description
Credit Card Authentication Code	Varchar2(8)	The code issued as authorization that the credit card payment is valid
Credit Card Expiration Date	Varchar2(6)	The expiration date of the credit card used for the payment.
Direct Debit Voucher	Number(9)	A unique number used for direct debit payments

Backout

The Backout file contains backouts of payments and funds transfers from payments posted in Accounts Receivable since the last billing document extract.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing
Payment ID	Number(9)	This is the unique sequence ID of the Payment Details entry related to this Payment.
Activity Type	Char(5)	The type of the activity
Reason Code	Varchar2(10)	Reason of the fund transfer activity.
Deposit Date	Date	The date on which the payment was deposited in the bank. This is the payment effective date.
Original Amount	Number(18,2)	The original amount of the customer payment
Billing Invoice Number	Varchar2(12)	This field is the billing invoice number which is associated with the payment.
Amount Activity	Number(18,2)	The amount of the activity
Bank Code	Char(6)	The code of the customer's bank from which the payment is withdrawn
Bank Branch Number	Char(8)	The bank branch from which the payment arrives.
Bank Account Number	Varchar2(18)	The customer's bank account number.
Payment Method	Char(3)	The payment type, e.g., check, cash, or credit card

Field	Format	Description
Payment Sub Method	Varchar2(3)	Describes additional details for a payment type, such as the code of the credit card company used for the payment (for example, Visa or MasterCard)
Reversal Reason	Varchar2(10)	The Reason for Payment Backout. Valid values are derived from the Backout Reason reference table.
Check Number	Varchar2(15)	The check number
Credit Card Number	Varchar2(22)	The number of the credit card used for payment
Credit Card Authentication Code	Varchar2(8)	The code issued as authorization that the credit card payment is valid
Credit Card Expiration Date	Varchar2(6)	The expiration date of the credit card used for the payment.
Direct Debit Voucher	Number(9)	A unique number used for direct debit payments
Payment Source Type	Char(1)	The type of the source posting the payment: D – Direct debit C – Credit card O – On line
Payment Source ID	Char(8)	Identifies the specific source from which the payment arrives

Credit

The Credit file contains general corrections made to the account balance in Accounts Receivable.

note   *This table does not contain credits resulting from a dispute.*

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing
Credit Identifier	Number(12)	This is a unique sequence ID of the entry.
Credit Reason	Varchar2(10)	Reason code for the credit. Valid values are derived from the Credit Reasons reference table.

Field	Format	Description
Activity Date	Date	The date on which the credit is created.
Activity Amount	Number(18,2)	The net amount, i.e., without taxes, of the Credit.
Finalize date	Date	Indicates the date on which the credit note was finalized.
Cycle Sequence Number	Number(9)	For immediate credits it is populated with the cycle parameters by the bill preparation process. For pending credits it is populated with the cycle parameters by the bill confirmation process.
Invoice ID	Number(12)	Identifies the Invoice associated with Credit that is the invoice created for the credit.
Credit Level Code	Char(3)	The level of credit and to what type of debt the credit is applied
Charge Code	Varchar2(15)	This is the Charge Code associated with the credit. Valid values are derived from the Charge Codes reference table.
Charge Revenue Code	Char(6)	The revenue type of the credit: U – Usage charge R – Recurring charge O – One-time charge
Tax Amount	Number(18,2)	Amount of Taxes of the credit.
Balance Impact Code	Char (1)	This code defines if the credit impacts the balance or is it a draft.

Credit Reversal

The Credit Reversal file contains Credit Reversal transactions posted in Accounts Receivable.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Credit Identifier	Number(12)	This is a unique sequence ID of the entry.
Credit Reason	Varchar2(10)	Reason code for the credit. Valid values are derived from the Credit Reasons reference table.
Reversal Reason	Varchar2(10)	Reason code for reversing the Credit. Valid values are derived from the Credit Reasons reference table.
Credit Date	Date	The date on which the credit is created.
Reversal Date	Date	The date on which the credit is reversed.
Activity Amount	Number(18,2)	The net amount, i.e., without taxes, of the Credit.
Finalize date	Date	Indicates the date on which the credit note was finalized.
Cycle Sequence Number	Number(9)	For immediate credits it is populated with the cycle parameters by the bill preparation process. For pending credits it is populated with the cycle parameters by the bill confirmation process.
Reversal Cycle Sequence Number	Number(9)	For immediate credit reversal activities this field is not populated upon the reversal activity. It is populated with the cycle parameters by the bill preparation process.
Invoice ID	Number(12)	Identifies the Invoice associated with Credit that is the invoice created for the credit.
Invoice Reversal Number	Number(12)	Identifies the Invoice ID associated with the credit reversal.
Credit Level Code	Char(3)	The level of adjustment and to what type of debt the adjustment is applied

Field	Format	Description
Charge Code	Varchar2(15)	This is the Charge Code associated with the credit. Valid values are derived from the Charge Codes reference table.
Charge Revenue Code	Char(6)	The revenue type of the credit: U – Usage charge R – Recurring charge O – One-time charge
Tax Amount	Number(18,2)	Amount of taxes of the credit.
Balance Impact Code	Char(1)	This code defines if the credit impacts the balance or is it a draft.

Dispute Credit

The Dispute Credit file contains the dispute corrections made to the account balance in Accounts Receivable. These corrections comprise credits granted to the account following a customer complaint, for example, in relation to the quality of service.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account.
Dispute Id	Number(12)	Identifies the dispute.
Billing Arrangement	Number(12)	Identifies the billing arrangement.
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Credit Identifier	Number(12)	A unique sequence ID of the entry.
Credit Reason	Varchar2(10)	Reason code for the credit. Valid values are derived from the Credit Reasons reference table.
Activity Date	Date	The date on which the credit is created.
Activity Amount	Number(18,2)	The net amount of the Credit, that is, excluding taxes.
Cycle Sequence Number	Number(9)	For immediate credits the field is populated with the cycle parameters by the bill preparation process. For pending credits the field is populated with the cycle parameters by the bill confirmation process.
Finalize date	Date	Indicates the date on which the credit note was finalized.

Field	Format	Description
Invoice Item Sequence Number	Number(12)	Identifies the Invoice associated with Credit, that is, the invoice created for the credit.
Credit Level Code	Char(3)	The level of credit and the type of debt to which the credit is applied.
Charge Code	Varchar2(15)	The Charge Code associated with the credit. Permitted values are derived from the Charge Codes reference table.
Charge Revenue Code	Char(6)	The revenue type of the credit: U – Usage charge R – Recurring charge O – One-time charge
Tax Amount	Number(18,2)	Amount of Taxes of the credit.
Balance Impact Code	Char (1)	The code that defines whether the credit impacts the balance or it is a draft.
Dispute status	CHAR (2)	The status of the dispute: O – Open J – Justify C – Cancelled The file includes only disputes with the status of Justify.
Ext id	VARCHAR2(30)	This field is only populated when one of the Dispute APIs is called by an external application, for example, CRM, CM, etc. EXT_ID is a numeric ID from the external application, identifying the dispute within the external application.
App code	VARCHAR2(30)	This field is only populated when one of the Dispute APIs is called by an external application, e.g., CRM, CM, etc. APP_CODE is populated with a two-character code representing the ID of the application making the dispute API call.

Refund to Overpayment

The Refund to Overpayment file contains the refunds to over payment posted in Accounts Receivable.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12))	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Refund ID	Number(12)	The unique sequence ID of the Refund Request
Type of Refund Request	Varchar2(5)	The type of the Refund Request P – Payment O – Over Payment
Refund Method	Varchar2(3)	This is the refund method by which the customer is refunded.
Refund Reason	Varchar2(10)	The reason for the refund or refund reversal
Refund Status	Char(1)	The current status of the Refund Request.
Activity Date	Date	The date on which the refund is issued or reversed
Amount	Number(18,2)	The amount of the Refund Request
Debit ID	Number (12)	Indicates the debit ID associated with the overpayment refund. This is populated for Refund to over payment with the charge group ID.
Reversal reason	Varchar2(10)	The reason for the refund reversal. Valid values are derived from the Refund Reasons reference table.
Reversal Date	Date	The refund reversal date.

Refund to Payment

The Refund to Payment file contains the refunds to payments posted in Accounts Receivable.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Refund ID	Number(12)	The unique sequence ID of the Refund Request

Field	Format	Description
Type of Refund Request	Varchar2(5)	The type of the Refund Request P – Payment O – Over Payment
Refund Method	Varchar2(3)	This is the refund method by which the customer is refunded.
Refund Reason	Varchar2(10)	The reason for the refund or refund reversal
Refund Status	Char(1)	The current status of the Refund Request.
Activity Date	Date	The date on which the refund is issued or reversed
Amount	Number(18,2)	The amount of the Refund Request
Credit ID	Number (12)	Indicates the debit ID associated with the overpayment refund. This is populated for Refund to over payment with the charge group ID.

Refund Reversal of Overpayment Refund

The Refund Reversal of Overpayment Refund file contains the refunds reversal of refunded over payment posted in Accounts Receivable.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12))	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Refund ID	Number (12))	The unique sequence ID of the Refund Request
Type of Refund Request	Varchar2(5)	The type of the Refund Request P – Payment O – Over Payment
Refund Method	Varchar2(3)	This is the refund method by which the customer is refunded.
Refund Reason	Varchar2(10)	The reason for the refund or refund reversal
Refund Status	Char(1)	The current status of the Refund Request.
Activity Date	Date	The date in which the refund is issued or reversed
Amount	Number(18,2)	The amount of the Refund Request

Field	Format	Description
Debit ID	Number (12)	Indicates the debit ID associated with the overpayment refund. This is populated for Refund to over payment with the charge group ID.
Reversal reason	Varchar2(10)	The reason for the refund reversal. Valid values are derived from the Refund Reasons reference table.
Reversal Date	Date	The refund reversal date.

Refund Reversal of Payment Refund

The Refund Reversal of Payment Refund file contains the refunds reversal of refunded payments posted in Accounts Receivable.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Refund ID	Number (12)	The unique sequence ID of the Refund Request
Type of Refund Request	Varchar2(5)	The type of the Refund Request P – Payment O – Over Payment
Refund Method	Varchar2(3)	This is the refund method by which the customer is refunded.
Refund Reason	Varchar2(10)	The reason for the refund or refund reversal
Refund Status	Char(1)	The current status of the Refund Request.
Activity Date	Date	The date in which the refund is issued or reversed
Amount	Number(18,2)	The amount of the Refund Request
Credit ID	Number (12)	Indicates the debit ID associated with the overpayment refund. This is populated for Refund to over payment with the charge group ID.
Reversal reason	Varchar2(10)	The reason for the refund reversal. Valid values are derived from the Refund Reasons reference table.
Reversal Date	Date	The refund reversal date.

Charge Group

The Charge Group file contains the Invoices (charge groups) posted in Accounts Receivable.

File Format

ASCII

File Layout

Field	Format	Description
Account ID	Number(12)	Identifies the account
Billing Arrangement	Number(12)	Identifies the billing arrangement
Charge group ID	Number(12)	Identifies the charge group (debit ID).
CM Pay Channel ID	Varchar2(12)	Identifies the pay channel in billing.
Invoice ID	Number(12)	Identifies the Invoice associated with a charge group, that is, the invoice created for the charge group.
Group Type	Char(5)	Type of Charge Group to which the charge is related, i.e., B (Bill), D (DCK).
Charge Amount	Number(18,2)	The total Gross amount (i.e. included taxes) of charges minus discounts.
Tax amount	Number(18,2)	The total taxes amount associated with this charge group's charges.
Amount of Charge Group	Number(18,2)	The amount of this Charge Group that is open, i.e. not covered by credits. Amount still owing on Charge Group.
Creation Date	Date	Date Charge Group record was generated.
Due Date	Date)	Date payment is due for Charge Group assigned by billing.
Bill Seq No	Number(9)	Received from billing in the preparation process.

Accounts Receivable Reference Entities

The files described below contain Accounts Receivable Reference information.

Charge Group

The Charge Group file contains charge group information to be displayed on the billing document, such as the charge group description.

File Format

ASCII

File Layout

Field	Format	Description
Charge Invoice Type	Char(2)	Type of the charge group. Valid values are derived from the Charge Group Priority reference table.
Description	Varchar2(150)	Charge Invoice Type description.

Backout Reason Description

The Backout Reason Description file contains the names and description of the backout reason codes.

File Format

ASCII

File Layout

Field	Format	Description
Backout Reason Code	Char(6)	Identifies the reason for a payment backout.
Backout Reason Type	Varchar2(3)	Identify the Reason type such as Backout for payment, direct debit or Fund Transfer.
Description	Varchar2(150)	Full description of the backout reason code.

Credit Reason Description

The Credit Reason Description file contains the names and description of the credit reason codes.

File Format

ASCII

File Layout

Field	Format	Description
Credit Reason Code	Varchar2(6)	Identifies the reason for the credit and credit reversals.
Description	Varchar2(150)	Full description of the credit reason code.
Activity Level Code	Char(1)	The entity to which the credit is given. A – Account I – Invoice C – Charge
Reversal Indicator	Char(1)	Indicates whether this reason is used for credit or credit reversal.

Refund Reason Description

The Refund Reason Description file contains the names and description of the Refund reason codes.

File Format

ASCII

File Layout

Field	Format	Description
Refund Reason Code	Varchar2(6)	Identifies the reason for issuing the refund
Description	Varchar2(150)	Full description of the Refund Reason Code.
Reversal Indicator	Char(1)	Indicates whether the refund reason code for reversal.

Rating – Incoming

The files described below contain Rating information.

Event Extract

The Event Extract file contains details of rated events. This extract provides several records for a single event if the event was rated a number of times (each time for a different dimension – quantity or type – for example, duration, total volume, uplink volume, etc.).

File Format

ASCII

File Layout

The file can be extracted in a fixed format, or in flexible format, extracting a different set of attributes per event type.

Fixed Format:

Field	Format	Description
Subscriber ID	Numeric	The subscriber ID
Network start time	Date	The original start date and time of the event
Event ID	Numeric	A unique record number of the event
Customer ID	Numeric	The customer ID
Target Customer ID	Numeric	The identifier of customer to which the account, billing arrangement, and pay channel belong
Account	Numeric	The account ID
Billing Arrangement	Numeric	Billing arrangement ID
Pay Channel	Numeric	Pay channel ID
Event Group	String	Distinguishes business, private, and extra line events on the bill and in the PI
IMSI	String	The IMSI number for GSM subscribers. For MOC calls this is the calling party, and for MTC calls, the called party
Equipment ID	String	The electronic serial number of the device that placed the call: ESN – For non-GSM IMEI – For GSM voice and GPRS
Billing Resource ID	String	Indicates the resource ID, which is displayed on the bill (for example, primary MSISDN number, alternate line number, e-mail address)
Billing Resource Type	String	Indicates the type of the Billing resource ID (for example, "Primary MSISDN," "Alternate line," "e-mail address"
Pricing Item ID	Numeric	The identifier of the "rate" pricing item
Offer ID	Numeric	The offer ID the rate-pricing item belongs to
Basic Offer ID	Numeric	The identifier of the subscriber's price plan
Basic Offer Effective Date	Date	The date from which the subscriber's price plan is effective
Call Source	String	The source of the EDR, e.g., GSM, UMTS, Internet, SMS, or TA
Call Destination	String	The destination of the event, e.g., fixed line, pnet, hot line, etc.
Call Direction	String	The direction of the call (incoming or outgoing)
Calling Number	String	The originating number of the event
Called Number	String	The terminating number of the event
Calling Country Code	String	The country code in which the event originated

Field	Format	Description
Called Country Code	String	The country code in which the event terminated
Cell ID	String	The first cell from which the event was placed
Basic Service Code	String	The provisioning code of the event. Amdocs Acquisition & Formatting populates this field based on the Tele Service code of the Tele Service module or Bearer Service Code of the Bearer module plus the Data Rate Code of the Data module
Basic Service Type	String	This field contain the basic type of the usage
Service Filter	String	This attribute defines the filter, which is used by the Pricing Engine to qualify the Pricing Item Type and to rate the call. For example, a mobile-to-mobile inland voice call is classified by: MO2MV0.
Termination Reason	String	Indicates whether or not the call was terminated normally
Call Category	String	Indicates whether the event is considered an Inland, Roam MTC, Roam MOC, Special Number, or International event
Cycle Month Start Date	Date	The start date of the cycle
Call Forward Indicator	String	Indicates whether the event is a call forward event
Provider ID	String	The provider ID number. For Roam MOC and Roam MTC events, this field contains the provider ID of the TAP EDR sender; for other events, this field contains a fixed value
Call Start Period	Numeric	The period in which the event started
Charge Amount	Numeric	The charge amount, according to the charge qualifier and quantity type
Additional Charge	Numeric	The additional charge amount
Roam Charge Amount	Numeric	The original charge amount, which was received on input rated CDR, usually VAS and roaming
Roam Tax Amount	Numeric	The original tax amount, which was received on input rated CDR, usually VAS and roaming
APN	String	The access point name to which the target network is connected
Original Quantity 1.5	Numeric	The original quantity according to the original unit of measurement

Field	Format	Description
Chargeable Attribute 1.5	Numeric	DR – Duration TV – Total volume UV – Uplink volume DV – Downlink volume " " – Space
Original UOM 1.5	String	The unit of measurement of the quantity
Rounded Quantity 1.5	Numeric	The rounded quantity according to the rounding factor of the relevant quantity type
Billed Quantity 1.5	Numeric	The quantity to rate after free units were reduced
Free Quantity 1.5	Numeric	The quantity of free units that were used to reduce the number of rated units for the relevant quantity type
Store UOM 1. 5	String	Reflects the unit of measurement of the quantity (for example, kilobytes, minutes)
Event Type ID	Numeric	This attribute identifies the event type from the Product Catalog. The Product Catalog generates the values of this attribute
Charge Including Free Allow	Numeric	The gross charge amount of the event includes free allowances and discount and additional charge amounts

Flexible Format

- GSM Voice Extract

  The GSM voice extract is assembled from the attributes described in the following table:

Attribute Name	Elementary Type	Description	Event Type
Event Type ID	Catalog ID	Identifies the event type from the Product Catalog. The Product Catalog generates the values of this attribute. For example, if the Event type is GPRS, the Event type ID is 10.	Basic event
Start Time	Date	The start date/time of the event that is used by the Rater for qualification and rating of the event. Usually, the *Start time* is the same as the *Network start time*, but this may change during error management.	Basic event
Subscriber ID	Agreement ID	The subscriber number of the event.	Basic event
Customer ID	Customer ID	The service customer ID of the subscriber.	Basic event
Service Filter	Service Filter	This attribute defines the filter used by the Pricing Engine to qualify the Pricing Item and to rate the call. For example, a mobile-to-mobile inland voice call is classified by: MO2MV0.	Basic event

Attribute Name	Elementary Type	Description	Event Type
Billing Resource ID	Resource ID	The resource ID that is displayed on the bill (for example, the primary MSISDN number, alternate line number, e-mail address).	Basic event
Billing Resource Type	Resource Type	The type of the billing resource (for example, the primary MSISDN number, alternate line number, e-mail address).	Basic event
IMSI	IMSI	The IMSI number for GSM subscribers. For MOC calls, this is the calling party, and for MTC calls, the called party.	Basic event
Billing Arrangement	Billing Arrangement	The billing arrangement number.	Basic event
Pay Channel	Payment Channel	The pay channel of the event.	Basic event
Event Group	Event Group	Events can be mapped to different pay channels based on event groups, which are used for *persona* classification (business calls, private calls) or for special event aggregations, such as roaming calls or international calls that need to be mapped to different pay channels. Usually, this attribute is used as a Performance Indicator dimension to split the charges of the same Performance Indicator and show them on the bill separately.	Basic event
Pricing Item ID	Catalog ID	Identifies the rate-pricing item.	Basic event
Charge Amount	Monetary Amount	The net charge amount of the event, which is calculated by the Rater, and includes additional charges. For VAS events, this attribute contains the VAS amount and is populated by Acquisition & Formatting.	Basic event
Discount Amount	Monetary Amount	The discount charge amount of the event.	Basic event
Additional Charge	Monetary Amount	The additional charge amount.	Basic event
Provider ID	Provider ID	For roaming incollect events, this is the provider ID of the TAP CDR sender.	Basic event
Offer ID	Catalog ID	Identifies the offer to which the rate-pricing item belongs.	Basic event
Special Number	Telephone Number	For special number events (this is the special number determined by Acquisition & Formatting).	Basic event
Recording Device ID	Equipment ID	Identifies the switch (MSC) that generated the call record.	Basic call
Cell ID	Cell ID	The first cell from which the call was placed.	Basic call

Attribute Name	Elementary Type	Description	Event Type
Duration	Duration	For postpaid events, this is the original duration of the event. For prepaid events, this is the duration to be charged. This attribute is usually stored in seconds.	Duration known event
Rounded Duration	Duration	The original duration. This is rounded according to a rounding method and a rounding factor.	Duration known event
Free Duration	Duration	The free duration of the event, such as free allowances or free days.	Duration known event
Audit duration	Duration	The duration for payment.	Duration known event
Call Category	Call category	Indicates whether the message is an inland, roam-MTC, roam-MOC, special number, or international call.	GSM voice base
Call Direction	Call direction	The direction of the call (incoming or outgoing).	GSM voice base
Call Forward Indicator	Boolean	Indicates whether this is a call forward call.	GSM voice base
Called Number	Telephone Number	Identifies the called number of the call.	GSM voice base
Called Country	Country Code	Identifies the country in which the call terminated. Usually, this attribute is used for rating international calls.	GSM voice base

■ SMS Extract

The SMS extract is assembled from the attributes described in the following table:

Attribute Name	Elementary Type	Description	Event Type
Event Type ID	Catalog ID	Identifies the event type from the Product Catalog.	Basic event
Start Time	Date	The start date/time of the event that is used by the Rater for qualification and rating of the event.	Basic event
Subscriber ID	Agreement ID	The subscriber number of the event.	Basic event
Customer ID	Customer ID	The service customer ID of the subscriber.	Basic event
Service Filter	Service Filter	This attribute defines the filter used by the Pricing Engine to qualify the Pricing Item and to rate the call. For example, a mobile-to-mobile inland voice call is classified by: MO2MV0.	Basic event
Billing Resource ID	Resource ID	The resource ID that is displayed on the bill (for example, the primary MSISDN number, alternate line number, e-mail address).	Basic event
Billing Resource Type	Resource Type	The type of the billing resource (for example, the primary MSISDN number, alternate line number, e-mail address).	Basic event
IMSI	IMSI	The IMSI number for GSM subscribers. For MOC calls, this is the calling party, and for MTC calls, the called party.	Basic event
Billing Arrangement	Billing Arrangement	The billing arrangement number.	Basic event
Pay Channel	Payment Channel	The pay channel of the event.	Basic event
Event Group	Event Group	Events can be mapped to different pay channels based on event groups	Basic event
Pricing Item ID	Catalog ID	Identifies the rate-pricing item.	Basic event
Charge Amount	Monetary Amount	The net charge amount of the event, which is calculated by the Rater, and includes additional charges.	Basic event
Discount Amount	Monetary Amount	The discount charge amount of the event.	Basic event
Additional Charge	Monetary Amount	The additional charge amount.	Basic event
Payment Category	Payment Category	The payment category (either postpaid or prepaid).	Basic event
Special Number	Telephone Number	For special number events (this is the special number determined by Acquisition & Formatting).	Basic event

Attribute Name	Elementary Type	Description	Event Type
Provider ID	Provider ID	For roaming incollect events, this is the provider ID of the TAP CDR sender.	Basic event
Offer ID	Catalog ID	Identifies the offer to which the rate-pricing item belongs.	Basic event
Recording Device ID	Equipment ID	Identifies the switch (MSC) that generated the call record.	Basic call
Cell ID	Cell ID	The first cell from which the call was placed.	Basic call
Call Forward Indicator	Boolean	Indicates whether this is a call forward call.	SMS base
Called Number	Telephone Number	Identifies the called number of the call.	SMS base
Called Country	Country Code	Identifies the country in which the call terminated. Usually, this is used for rating international calls.	SMS base

■ GPRS Extract

The GPRS extract is assembled from the attributes described in the following table:

Attribute Name	Elementary Type	Description	Event Type
Event Type ID	Catalog ID	Identifies the event type from the Product Catalog.	Basic event
Start Time	Date	The start date/time of the event that is used by the Rater for qualification and rating of the event	Basic event
Subscriber ID	Agreement ID	The subscriber number of the event.	Basic event
Customer ID	Customer ID	The service customer ID of the subscriber.	Basic event
Service Filter	Service Filter	This attribute defines the filter used by the Pricing Engine to qualify the Pricing Item and to rate the call. For example, a mobile-to-mobile inland voice call is classified by: MO2MV0.	Basic event
Billing Resource ID	Resource ID	The resource ID that is displayed on the bill.	Basic event
Billing Resource Type	Resource Type	The type of the billing resource.	Basic event
IMSI	IMSI	The IMSI number for GSM subscribers. For MOC calls, this is the calling party, and for MTC calls, the called party.	Basic event
Billing Arrangement	Billing Arrangement	The billing arrangement number	Basic event

Attribute Name	Elementary Type	Description	Event Type
Pay Channel	Payment Channel	The pay channel of the event.	Basic event
Event Group	Event Group	Events can be mapped to different pay channels based on event groups, which are used for *persona* classification (business calls, private calls) or for special event aggregations, such as roaming calls or international calls that need to be mapped to different pay channels.	Basic event
Pricing Item ID	Catalog ID	Identifies the rate-pricing item.	Basic event
Charge Amount	Monetary Amount	The net charge amount of the event, which is calculated by the Rater, and includes additional charges.	Basic event
Discount Amount	Monetary Amount	The discount charge amount of the event.	Basic event
Additional Charge	Monetary Amount	The additional charge amount.	Basic event
Payment Category	Payment Category	The payment category (either postpaid or prepaid).	Basic event
Offer ID	Catalog ID	Identifies the offer to which the rate-pricing item belongs.	Basic event
Special Number	Telephone Number	For special number events, this is the special number determined by Acquisition & Formatting.	Basic event
Provider ID	Provider ID	For roaming incollect events, this is the provider ID of the TAP CDR sender.	Basic event
Recording Device ID	Equipment ID	Identifies the switch (MSC) that generated the call record.	Basic call
Cell ID	Cell ID	The first cell from which the call was placed.	Basic call
Duration	Duration	The original duration of the event. For prepaid events, this is the duration to be charged. This attribute is usually stored in seconds.	Duration known event
Rounded Duration	Duration	The original duration. This is rounded according to a rounding method and a rounding factor.	Duration known event
Free Duration	Duration	The free duration of the event, such as free allowances or free days.	Duration known event
Audit duration	Duration	The duration for payment.	Duration known event
Total Volume	Volume	The total volume of downlink and uplink volumes, usually stored in Kbytes.	Data traffic

Attribute Name	Elementary Type	Description	Event Type
Rounded Total Volume	Volume	The original total volume, which is rounded according to a rounding method and a rounding factor.	Data traffic
Free Total Volume	Volume	The amount of the free total volume.	Data traffic
Total Volume Charge Amount	Monetary Amount	The net charge amount of the total link volume.	Data traffic
Downlink Volume	Volume	The original downlink volume of the event, usually stored in Kbytes.	GPRS base
Rounded Downlink Volume	Volume	The original downlink volume, which is rounded according to a rounding method and a rounding factor.	GPRS base
Free Downlink Volume	Volume	The amount of the free downlink volume.	GPRS base
Uplink Volume	Volume	The original uplink volume of the event, usually stored in Kbytes.	GPRS base
Rounded Uplink Volume	Volume	The original uplink volume, which is rounded according to a rounding method and a rounding factor.	GPRS base
Free Uplink Volume	Volume	The amount of the free uplink volume.	GPRS base
Downlink Volume Charge Amount	Monetary Amount	The charge amount of the downlink volume.	GPRS base
Uplink Volume Charge Amount	Monetary Amount	The charge amount of the uplink volume.	GPRS base
Duration Charge Amount	Monetary Amount	The net charge amount of the duration.	GPRS base
QoS served	QoS	The served quality of service.	GPRS base
APN	APN	The access point name.	GPRS base

Allowance PI

The Allowance PI file contains customer allowance performance indicator records to display on the document.

File Format

ASCII

File Layout

Field	Format	Description
Item ID	Numeric	Pricing Item ID
Offer ID	Numeric	Offer ID
Total Units	Numeric	Total units
Used Units	Numeric	Number of units used
Left Units	Numeric	Number of units left
UOM code	String	The UOM used for the allowance
Expiration Date	Date	The date the allowance expires
Period Name	String	The name of the time period appropriate for the charge amount (for example, Peak or Off-Peak)
Service Receiver ID	Numeric	Identifies the entity that receives the service (offer). For usage charges, it is the agreement ID from the PI.
Service Receiver Customer ID	Numeric	Service receiver customer ID for usage charges
Billing Arrangement	Numeric	The billing arrangement ID
Offer Instance	Numeric	Offer sequence number of the offer ID

Rating – Outgoing

Billing sends the files described below to the Rating component.

Event Extract List

The Event Extract list is produced by the Billing Event Population Extract (EVTPOPX) process. It lists customers and their billing arrangements that participate in the cycle and for which Rating should extract the events. It also holds customers from different cycles that their billing arrangements are billed in current cycle.

File Format

ASCII

File Layout

The file contains following information:

- Name/path of output file and its routing criteria.
- Format name – A pointer to the XML file that describes the output format of the extract.
- Cycle Info – Information on cycle whose events are being extracted.
- Customer & Billing Arrangement List – List of the customers, billing arrangements, and subscribers whose events are to be extracted.

Field	Format	Description
Custom Where Clause	String	Identifies the additional where clause.
Routing Criteria	String	Identifies the routing criteria.
Out File Alias	String	Identifies the out file alias.
Out File Name	String	Identifies the out file name.
Out File Path	String	Identifies the out file path.
Data Group	String	Identifies the data group.
Format Name	String	Identifies the output format to be used by extract.
Cycle Code	Int	Identifies the cycle code.
Cycle Instance	Int	Identifies the cycle instance.
Cycle Year	Int	Identifies the cycle year.
Customer ID	Dlong	Identifies the customer IDs.
Rater Partition	Long	Identifies the Rater partition to which the customer belongs.
BA	Dlong	The billing arrangement IDs.
Subscribers ID	Dlong	The subscriber IDs.

Allowance PI List

The Allowance PI Extract list is produced by the Billing Event Population Extract (EVTPOPX) process. It lists customers and their Billing Arrangements that participate in the cycle and for which Rating should extract the events. It also holds customers from different cycles that their Billing Arrangements are billed in current cycle.

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ASCII

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Routing Criteria	String	Identifies the routing criteria.
Out File Alias	String	Identifies the out file alias.
Out File Name	String	Identifies the out file name.
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Customer ID	Dlong	Identifies the customer IDs.
Rater Partition	Long	Identifies the Rater partition to which the customer belongs.
BA	Dlong	The billing arrangement IDs.
Subscribers ID	Dlong	The subscriber IDs.

3.   TRANSACTIONS

Amdocs Billing generates various events that are sent to other components through a uniform interface. These events comprise requests for maintenance or business activities that Amdocs Billing provides. These events are published via the Transaction Broker, to which other components subscribe.

In addition, Amdocs Billing receives various events that originate in other components through a uniform interface. These events comprise requests for maintenance or business transactions that Amdocs Billing requires. These events are published to the Transaction Broker, to which Billing subscribes.

Transactions, both published and subscribed, are predefined in the system and therefore are generated automatically whenever updates are made to the relevant data.

Amdocs Transaction Broker

Billing uses the Transaction Broker as a publish-and-subscribe tool for asynchronous communication with other components.

The Transaction Broker is responsible for exchanging information among systems. It serves as a communication mediator that transfers information between different applications in asynchronous mode.

The Transaction Broker is based on a publish-and-subscribe operational method, which enables each system to publish its information, to which other systems can subscribe.

Published Transactions

Amdocs Billing publishes the asynchronous transactions described below.

Prepaid Charge Notification Transactions

Billing can create charges for prepaid pay channels in the following ways:

- Bill Preparation (discounts, recurring charges)
- Charge Preparation (one-time charges)
- Create Charge API (one-time charges)

These charges are reported to the Online Charging and Accounts Receivable components through the Transaction Broker. Each credit charge publishes an Increase Prepaid Balance transaction, and each debit charge publishes a Reduce Prepaid Balance transaction.

The charge code dynamic attributes determine whether the transaction is published to the Online Charging component, as well as the Expiration Date Indicator.

Charge code dynamic attributes have the following optional fields:

- Publish to Online Charging – Indicates whether to publish the transaction to the Online Charging component (if the value is No, Billing does not publish the transaction)

- Reduce Type – The default value is `immediate`

- Increase Type – The default value is `adjustment`

- Expiration Date Indicator

Increase Prepaid Balance

When Billing creates a credit charge for a prepaid pay channel, it publishes an Increase Prepaid Balance transaction, with these attributes:

- Amount

- Pay Channel

- Increase Type – Derived from the charge code dynamic attributes

- Currency

- Source Application (Billing)

- Calculate Expiration Date – Derived from the charge code dynamic attributes

- Reason Code – The default value is the charge code

- Entity ID & Type – The customer ID.

Reduce Prepaid Balance

When Billing creates a debit charge for a prepaid pay channel, it publishes a Reduce Prepaid Balance transaction, with these attributes:

- Amount

- Pay Channel

- Reduce Type – Derived from the charge code dynamic attributes

- Currency

- Source Application – Billing

- Reason Code – The default value is the charge code

- Entity ID & Type – The customer ID

Override Recurring Charges

Billing provides an API for overriding recurring charge amounts. The user can override a recurring charge amount for a specific subscriber and offer. The API publishes the overriding recurring charge amount to the Charge Preparation module of Billing, which handles the request and updates the RC Rates table with the overriding amount.

This API publishes the following attributes:

- Subscriber Number or Agreement Number (for a recurring charge of a unit in a customer hierarchy)

- Offer

- Offer Instance
- Recurring Charge Amount
- Proration Indicator – Either Yes or No:
  - Yes – The override amount is effective from the activity date, for example:
    - Original recurring charge = 100
    - Override recurring charge = 80
    - Date = 15-1-2003
    - Subscriber bill day = 1-2-2003
    - RC = 0.5*100+0.5*80 = 90
  - No – The override amount is the amount for the next bill day for the subscriber or agreement. In the previous example, the recurring charge would be 100 at the bill day.

The override amount effective date is determined by the recurring charge policies used by the Charge Preparation process.

Ordering Charge Request

Billing provides an API for ordering a charge request through BTL Quotation Server. The API publishes the Order Charge Request to the Charge Preparation module of Billing, which handles the request and updates the relevant tables.

This API publishes the following attributes:

Quotation Header Info	The Header Information
Activity Origin	The system that sends the request e.g., OMSE.
Activity Code	The order action code for which the quote is.
Request ID	A request ID for control purposes, the default is 0.
Version ID	The version ID of the system that sends a request, the default is 0.
Issue Date	The date when the request is issued, the default is the logical date (today).
Request Effective Date	The date that is used for calculating the charges. The date may be in the future or in the past, the default is the logical date (today).
CROfferInfoList	The list of offers.
Offer ID	The offer ID as defined in the Product Catalog.
Offer Activity ID	The offer related activity ID.
Offer Instance	The offer unique instance.
Offer Agreement ID	The agreement of the offer.

Quotation Header Info	The Header Information
Offer Effective Date	The offer effective date. This parameter value is used in penalty calculation to calculate the period between the time the subscriber got the offer and the time the subscriber wants to remove the offer.
Offer Expiration Date	The offer expiration date. This parameter value is used in order to see whether the offer instance should be included in the charge calculation or not.
Payment Category	The payment category of the PCN of the offer, e.g., prepaid, postpaid.
Pay Channel ID	The pay channel ID.
Offer Activity List	List of names and values of the offer activities.
Offer Customer Parameter List	List of names and values of the offer parameters.
Dynamic Attribute List	List of names and values of the dynamic attributes.
CR Customer Activities Info	The customer activities.
BA ID	The Billing Arrangement ID.
Service Receiver Type	The service receiver type.
Activity Origin	The activity origin code.
Waive Indicator	Indicates whether OC activity should be waived.
CR Customer Activity List	The events.
CR Customer Global Parameters Info	The customer global parameters
Customer ID	The customer ID.
Subscriber ID	The subscriber ID.
Effective Date	The subscriber's effective date, the default is 01-01-1960.
Expiration Date	The subscriber's expiration date, the default is null.
Customer Offer Currency	The currency of the offer.
Customer Business Entity	The customer business entity.
Cycle Code	The cycle code.
Dynamic Attribute List	List of names and values of the dynamic attributes.

Change Cycle Confirmation

The Change Cycle Confirmation process confirms a change cycle request for a customer when all the subscribers, agreements, and billing arrangements are confirmed. The confirmation is published to Customer Management and Accounts Receivable through the Transaction Broker.

The following attributes are published by Billing:

■ Customer ID of the customer whose cycle code has been changed

■ Cycle Code of the new cycle

New Cycle Instance

Billing maintains the cycle instances creation, and publishes the created cycles through the Transaction Broker. The transaction contains the following attributes:

- Cycle code
- Instance
- Cycle year
- Cycle start date
- Cycle end date
- Billing cycle sequence number
- Previous cycle instance
- Next cycle instance
- Creation date

Subscribed Transactions

Amdocs Billing subscribes to the transactions described below.

Billing Arrangement Transactions

Billing subscribes to the transactions that are performed on billing arrangements and published by Customer Management. Billing maintains billing arrangements for their full life cycle.

New Billing Arrangement

This transaction informs Billing that a tentative billing arrangement has been created in the system. A tentative billing arrangement cannot have charges, and is not processed by Billing.

There are two Billing entities associated with the New Billing Arrangement:

- Billing Arrangement Billing Entity

  The Billing Arrangement attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Billing Arrangement No	Identifies the Billing Arrangement.
Billing Arrangement Status	The Billing Arrangement status is changed to "T" (Tentative).
Status Date	The date on which the current Billing Arrangement status was changed.
Account Number	Identifies the account to which the billing arrangement relates.
Customer Number	Identifies the customer to which the billing arrangement relates.
Billing Arrangement Counter	An internal counter in the account that uniquely identifies the billing arrangement's sequence within the account

Entity Attribute Name	Description
External ID	External identifier of the billing arrangement.
Bill Cycle Number	The number of the cycle in which billing should handle this billing arrangement.
Bill Frequency	Identifies the cycle frequency multiplier related to the billing arrangement.
Last Production Date	The date on which the last billing document was produced successfully for the billing arrangement.
Document type	Indicates whether the billing document is an invoice or bill.
External ID	An external identifier of the Billing Arrangement. This attribute is used if the Billing Arrangement is represented in an external system.
Document Type	Indicates whether the billing document is a document or an invoice.
Itemized Tax Indicator	Indicates whether tax is calculated on each charge, or on the total amount of the bill.
Bill Format	Identifies the bill format, e.g., individual, business, or any other format.
Zero Balance Indicator	Indicates whether to zero the balance of the Billing Arrangement at the billing run.
Bill Due Days	Defines the number of days to add to the invoice date to get the due date.
Bill Production Indicator	Indicates whether a document should be produced for the billing arrangement.
Account Currency	The currency of the account.
Business Entity ID	Identifies the business entity to which the customer is related.
Last document id	Identifies the last document produced for the Billing Arrangement.
Creation date	The date that the Billing Arrangement was created.

■ Customer Information Billing Entity

In addition, the customer is inserted to the Billing Customer Info table as follows:

Entity Attribute Name	Description
Customer Number	A number that uniquely identifies the customer
Address Information	The customer's address
Link Type	
Entity ID	The Billing Arrangement number
Entity Type	'B'
Effective Date	Set to past date.

External ID	The external ID of the customer, if represented in external systems.
External Type	The external type of the customer.

Open Billing Arrangement

This transaction informs Billing that a billing arrangement has become active. An active billing arrangement can have new charges.

There are two Billing entities associated with the Open Billing Arrangement:

■ Billing Arrangement Billing Entity

The Billing Arrangement attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Billing Arrangement Status	The billing arrangement status is changed to "O" (Open).
Open Date	The date on which the current billing arrangement status was changed to open.

■ Customer Billing Entity

In addition, the Billing Arrangement's customer weight is updated in the Billing Customer table as follows:

Entity Attribute Name	Description
Weight	Increase the number by one.

Cancel Billing Arrangement

This transaction informs Billing that a billing arrangement has been canceled. A cancelled billing arrangement is processed on bill day to check whether there are charges for the final or revised final bill.

There are two Billing entities associated with the Cancel Billing Arrangement:

■ Billing Arrangement Billing Entity

The Billing Arrangement attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Billing Arrangement Status	The billing arrangement status is changed to N (cancel).
Status Date	The date on which the current billing arrangement status was changed to cancel.

■ Customer Billing Entity

In addition, the Billing Arrangement's customer weight is updated in the Billing Customer table as follows:

Entity Attribute Name	Description
Weight	Decrease the number by one.

Update Billing Arrangement Production Frequency

This transaction informs Billing that a Billing Arrangement has changed its production frequency.

The Billing Arrangement attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Frequency	The frequency multiplier

Update Billing Arrangement External ID

This transaction informs Billing that a billing arrangement's external ID has been modified.

There are two Billing entities associated with the Update Billing Arrangement External ID:

■ Billing Arrangement Billing Entity

The Billing Arrangement attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
External ID	External identifier of the billing arrangement.

■ Customer Billing Entity

In addition, the billing arrangement's external ID is updated in the Billing Customer Info table as follows:

Entity Attribute Name	Description
External ID	External identifier of the Billing Arrangement.
Effective Date	The effective date of the new record.

Update Billing Arrangement Dates

This transaction informs Billing that a billing arrangement's dates have been modified, usually as a result of backdated activities performed on a billing arrangement.

The Billing Arrangement Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Status Date	The date on which the current billing arrangement status was changed.
Creation Date	The date on which the Billing Arrangement was created.

Change Account Management

This transaction informs Billing that the document type of a specific Billing Arrangement has been modified.

The Billing Arrangement Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Document Type	Indicates whether the billing document is an invoice or a bill.

Reopen Billing Arrangement

This transaction informs Billing that a Billing Arrangement status has changed to open from cancel.

The Billing Arrangement Billing entity pay channel attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Status	The status of the Billing Arrangement
Status date	The date of the status – set to creation date

Pay Channel Transactions

Billing subscribes to the transactions described below, which are performed on pay channels and published by Customer Management. Billing maintains pay channel payment information for a billing document. The main information used by Billing is whether the pay channel is prepaid or postpaid.

New Pay Channel

This transaction informs Billing that a new pay channel was created in the system.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Pay Channel Number	A unique identifier of the pay channel.
Customer Number	Identifies the customer of the Billing Arrangement and pay channel.
Account Number	Identifies the owner account of the Billing Arrangement and pay channel.
Billing Arrangement Number	Identifies the Billing Arrangement to which the pay channel relates.
Payment Category	Indicates if the pay channel is prepaid or postpaid.
External ID	An external identifier of the pay channel.
Payment Method	The method of payment.
Status	The pay channel status is changed to "O" (Open). It means that the pay channel is active.
Status Date	The date on which the current pay channel became active.

Open Pay Channel

This transaction informs Billing that a pay channel has become active in the system.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Pay Channel Number	A unique identifier of the pay channel.
Status	The pay channel status is changed to O (Open). It means that the pay channel is active.
Status Date	The date on which the current pay channel became active.

If the published Bill Due Days is not null, then the pay channel's billing arrangement is updated as follows:

Entity Attribute Name	Description
Bill Due Days	Defines the number of days to add to the invoice date to get the due date.

The Bill Due Day's value is optional, and might not be published.

Cancel Pay Channel

This transaction informs Billing that a pay channel was canceled.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Status	The pay channel status is changed to C (Canceled). It means that the pay channel is canceled.
Status Date	The pay channel cancellation date.

Update Pay Channel Dates

This transaction informs Billing that a pay channel has changed its status date.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Status Date	The pay channel status date.

Update Pay Channel External ID

This transaction informs Billing that a pay channel's External ID has been modified.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
External ID	An external identifier of the payment channel.

Change Pay Channel

This transaction informs Billing that a pay channel payment category has changes.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Payment category	The payment category of the pay channel

Reopen Pay Channel

This transaction informs Billing that a pay channel status has changed to Open from Cancel.

The Pay Channel Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Status	The status of the pay channel
Status date	The date of the status – set to creation date

Customer Transactions

Billing maintains customers' billing information.

Billing subscribes to the transactions described below that are performed on customers, or that affect the customer attributes maintained by Billing.

New Customer

This transaction informs Billing that a new customer has been added to the system.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Customer Number	A number uniquely identifying the customer.
Bill Cycle Number	The number of the cycle in which the bill should be prepared for all the billing arrangements of this customer.
External ID	External identifier of the customer.
Partition ID	Customer partition id in the Rater machine.
Customer Currency	The currency of the customer.
Business Entity ID	Identifies the business entity to which the customer relates.
Weight	The customer weight is changed to 0.
Status	The customer status is changed to O (Open). It means that the customer is active.
Status Date	The date on which the current customer became active.

In addition, the customer is inserted to the Billing Customer Info table as follows:

Entity Attribute Name	Description
Customer Number	A number uniquely identifying the customer
Address Information	The customer's address
Link type	
Entity ID	The Customer Number
Entity Type	'C'
Effective Date	Set to past date.
External ID	The external id of the customer, if represented in external systems.
External Type	The external type of the customer.

Update Customer External ID

This transaction informs Billing that a customer's external ID has been changed.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
External ID	External identifier of the customer.

In addition, the customer's external ID is updated in the Billing Customer Info table as follows:

Entity Attribute Name	Description
External ID	External identifier of the customer.
Effective Date	The effective date of the new record.

Update Customer Name and Address

This transaction informs Billing that a customer's name or address has been changed.

The customer's name and address are updated in the Billing Customer Info table.

Update Billing Arrangement Name and Address

This transaction informs Billing that a Billing Arrangement name or address has been changed.

The Billing Arrangement name and address are updated in the Billing Customer Info table.

Update Subscriber Name and Address

This transaction informs Billing that a Subscriber name or address has been changed.

The Subscriber name and address are updated in the Billing Customer Info table.

Update Customer Dates

This transaction informs Billing that a Customer has changed its status date.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Status Date	The customer status date.

New Subscriber

This transaction informs Billing that a new subscriber has been added to the system. The customer weight in the Customer table is increased to reflect the new subscriber.

The number of subscribers per customer is maintained in the Billing customer entity, to be used for balancing parallel groups on bill day.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Weight	Increase the value by one.

The subscriber is inserted to the Billing Customer Info table as follows:

Entity Attribute Name	Description
Customer Number	A number uniquely identifying the customer
Address Information	The customer's address
Link Type	
Entity ID	The Subscriber number
Entity Type	'S'
Effective Date	Set to past date.
External ID	The primary resource value of the Subscriber.
External Type	The primary resource type of the Subscriber.

Cancel Subscriber

This transaction informs Billing that a subscriber has been canceled in the system. The customer weight in the Customer table is decreased to reflect the canceled subscriber.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Weight	Decrease the value by one.

Change Bill Cycle

This transaction informs Billing that Customer Management has initiated a Change Bill Cycle request for a specific customer.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
New Billing Cycle	The number of the cycle in which the bill should be prepared for all the billing arrangements of this customer.
Old Cycle Expiration Date	The old cycle expiration date.

The new billing cycle is updated only if the logical date is less than the cycle close date.

Cancel Cycle Change Request

This transaction informs Billing that Customer Management has initiated a Cancel Bill Cycle request for a specific customer.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
New Billing Cycle	The number of the cycle in which the bill should be prepared for all the billing arrangements of this customer. Set the new cycle to null.
Old Cycle Expiration Date	The old cycle expiration date. Set the old cycle expiration date to null.

The new billing cycle is canceled only if the logical date is less than the cycle close date.

Change Customer Type

This transaction informs Billing that a customer's type has been changed. This may cause changes in the customer's billing arrangement information.

The Billing Arrangement Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Document Type	Indicates whether the billing document is an invoice or a bill.
Itemized Tax Indicator	Indicates whether the tax is calculated on each charge, or on the total amount of the bill.
Bill Format	Identifies the bill format, e.g., individual, business, or any other format.
Zero Balance Indicator	Indicates whether to zero the balance of the billing arrangement at the billing run.

Entity Attribute Name	Description
Bill Due Days	Defines the number of days to add to the invoice date to get the due date.
Bill Production Indicator	Indicates if a document should be produced for the billing arrangement.

In addition, the customer is updated in the Billing Customer Info table as follows:

Entity Attribute Name	Description
Customer Number	A number uniquely identifying the customer
Dynamic Attributes	A set of dynamic attributes, defined in the mapping definition: Customer Type, Customer Sub type, Change Cycle Indication
Entity ID	The customer number
Entity Type	'C'
Effective Date	Set to past date.
External ID	The external id of the customer, if represented in external systems.

Change Cycle Immediate

This transaction informs billing that Customer Management has initiated an immediate Change Bill Cycle request for a specific customer.

The Customer Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
New Billing Cycle	The number of the cycle in which the bill should be prepared for all the billing arrangements of this customer.

Cross-Distribution Transactions

Billing maintains information on cross-customer distributions initiated by Customer Management Charge Distribution.

Billing subscribes to the transactions described below regarding the payer relation life cycle.

Cross-Distribution Activated

This transaction informs Billing that Customer Management has initiated a cross-customer distribution.

The Payer Customer Relation Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Payer Customer ID	Identifies the customer who pays
Billing Arrangement Number	The billing arrangement to which the pay channel belongs.
Pay Channel Number	Identifies the pay channel.

Entity Attribute Name	Description
Distributing Customer ID	The customer that added distribution to the given pay channel.
Effective Date	The date the cross-customer distribution is added.

Cross-Distribution Removed

This transaction informs Billing that Customer Management has canceled a cross-customer distribution.

The Payer Customer Relation Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Expiration Date	The cross-customer distribution is canceled by expiring the payer relation.

Financial Transactions

Billing maintains receiver's pending charges and rates of recurring charges.

Billing subscribes to the transactions described below regarding the receiver's services.

Financial transactions result with updating the four tables below:

- Charge Requests
- RC Rates
- Backdate Requests
- Activity History

New Subscriber

This transaction informs Billing that a new subscriber has been added to the system.

The Activity History Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Customer Key	The partition key of the receiver customer.
Activity Sequence	A unique identifier for the history record.
Entity ID	The receiver id.
Entity Type	The type of the receiver – Subscriber, Unit.
Activity ID	The activity group id published by the external application.
Activity Origin	The application that published the activity.
Activity Date	The effective date of the event.
Customer ID	The customer ID of the receiver.
Dynamic Attributes	A set of dynamic attributes published with the event, as defined in the transaction mapping definitions.
Transaction ID	The transaction ID of the event.

In case the event is backdated, e.g., when the event is effective before it is issued, it is also inserted to the Backdate Requests Billing entity, as followed:

Entity Attribute Name	Description
Customer Key	The partition key of the receiver customer.
Entity ID	The Subscriber ID
Entity type	The receiver type
Backdating date	The effective date of the backdated event
Process status	Set to 'PN' (Pending)
Customer ID	The receiver customer

The Charge Requests Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Customer Key	The partition key of the receiver customer.
Requests Sequence Number	A unique sequence for the created request.
Correction Sequence Number	Set to zero
Charge Type	The type of the charge- credit or debit
Pay Channel Number	The identifier of the pay channel to which the Charge is associated.
Charge Code	The code identifying the charge
Effective Date	The date the charge becomes effective
Amount Currency	The currency of the charge amount
Amount	The amount of the charge
Service Receiver Type	Identifies the type of the receiver – Subscriber or Unit.
Service Receiver ID	Identifies the charge receiver
Receiver Customer	The customer of the service receiver
Offer	Offer according to which the charge was calculated
Offer Item	Item according to which the charge was calculated
Offer Instance	Uniquely identifies the offer given to the receiver
Charge Origin	The process that created the charge – 'CC'
Waiving Indicator	Indicates whether the current request should be waived
Dynamic attributes	This attribute holds a list of dynamic attributes, according to the charge type
Origin activity sequence	The sequence of the activity that created the charge request. A reference to the Activity History table.
Event type	The event type of the charge requests.

The Charge Requests Billing entity attributes, published by Customer Management, that are modified are listed in the table below.

Entity Attribute Name	Description
Customer Key	The partition key of the receiver customer.
RC Rates Sequence Number	A unique sequence for the created request.
Charge Type	The type of the charge- credit or debit
Effective Date	The date the rate becomes effective, calculated in the Charge Analyzer step
Expiration Date	The date the rate becomes expired, calculated in the Charge Analyzer step
Pay Channel Number	The identifier of the pay channel to which the Charge is associated.
Charge Code	The code identifying the charge
Amount Currency	The currency of the charge amount
Amount	The amount of the charge
Service Receiver Type	Identifies the type of the receiver – Subscriber or Unit.
Service Receiver ID	Identifies the charge receiver
Receiver Customer	The customer of the service receiver
Offer	Offer according to which the charge was calculated
Offer Item	Item according to which the charge was calculated
Offer Instance	Uniquely identifies the offer given to the receiver
Charge Origin	The process that created the charge – 'CC'
Agreement Number	Identifies the Agreement id
Dynamic attributes	This attribute holds a list of dynamic attributes, according to the charge type
Insert activity sequence	The sequence of the activity that created the RC rates.
Expire activity sequence	The sequence of the activity that expired the RC rates.
Manual override amount	Indicates the rate, when the receiver gets a special rate.
Proration Indicator	Indicates whether proration needs to be done for the rate.
RC Type	Indicates whether the RC needs to be calculated in Advance or in Arrears.
Cycle Code	The cycle code of the receiver customer.
Price Plan Indicator	Indicates whether the rate is for the receiver PP
First Cycle Effective Date	The expiration date for the first cycle at which the rate is charged.
Last Cycle Expiration Date	The expiration date for the last cycle at which the rate is charged.

Entity Attribute Name	Description
Generation Frequency	Indicates how many cycle instances to generate the RC charge.
Multiple Charge Indicator	Indicates whether to create multiple charges or a single charge.
Frequency	The frequency type of the rate – monthly, weekly.
Frequency Multiplier	The multiplier of the Frequency.

Move Subscriber

This transaction informs Billing that a Subscriber has changed its organizational unit. This transaction may also be published because of a backdating activity. The activity may result in:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Addition of new services and removal of expired services from RC Rates.
- Creation of set-up and penalty charges.

Change Subscriber Ownership – Cancel Subscriber

This transaction informs Billing that a Subscriber has changed its Customer, and therefore the old Subscriber is canceled. This transaction may also be published because of a backdating activity. The activity may result in:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Expiration of old services and price plans from RC Rates.
- Creation of penalty charges and activity one-time charges.

Change Subscriber Ownership – New Subscriber Activation

This transaction informs Billing that a Subscriber has changed its Customer, and therefore a new Subscriber is activated. This transaction may also be published because of a backdating activity. The activity may result in:

- Insertion of the activity to the Activity History table.
- Insertion of the Subscriber to the Backdate Requests table.
- Insertion of new services and price plans into RC Rates.
- Creation of activation charges and activity one-time charges.

Agreement Service Change

This transaction informs Billing that services of an agreement have been changed. This transaction may also be published because of a backdating activity. It may result in the following:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Addition of new services and removal of expired services from RC Rates.
- Creation of set-up and penalty charges.

Service Change Deployed from Agreement

This transaction informs Billing that services of an agreement have been changed. This transaction may also be published because of a backdating activity. It may result in the following:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Addition of new services and removal of expired services from RC Rates.
- Creation of set-up and penalty charges.

Service Change

This transaction informs Billing that services of a Subscriber have been changed. This transaction may also be published because of a backdating activity. It may result in the following:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Addition of new services and removal of expired services from RC Rates.
- Creation of set-up and penalty charges.

Activate a Pre-Active Subscriber

This transaction informs Billing that a Subscriber has been added. This transaction may also be published because of a backdating activity. It may result in the following:

- Insertion of the activity to the Activity History table.
- Insertion of the subscriber to the Backdate Requests table.
- Addition of a new price plan and new services to RC Rates.
- Creation of set-up and activation one-time charges.

Agreement Change Price Plan

This transaction informs Billing that the price plan of a Billing Agreement has been changed. This transaction may also be published because of a backdating activity. It may result in the following:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Addition of new services and removal of expired services from RC Rates.
- Creation of set-up and penalty charges.

Change Price Plan Deployed from an Agreement

This transaction informs Billing that the price plan of a Billing Agreement has been changed. This transaction may also be published because of a backdating activity. It may result in the following:

- Insertion of the activity to the Activity History table.
- Insertion of the agreement to the Backdate Requests table.
- Addition of new services and removal of expired services from RC Rates.
- Creation of set-up and penalty charges.

Override RC

This transaction informs Billing that the rate of a service of a receiver has been overridden. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Changing the manual override amount in RC Rates.

Change Price Plan

This transaction informs Billing that the Price Plan of a subscriber has been changed. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the agreement to the Backdate Requests table.

■ Adding new services and removing expired ones from RC Rates.

■ Creation of set-up, penalty charges.

Migrate Prepaid to Postpaid

This transaction informs Billing that a subscriber has moved from a prepaid pay channel to a postpaid pay channel. This transaction may also be published as the result a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Adding new services and removing expired ones from RC Rates, changing pay channel of existing rates.

■ Creation of set-up, penalty charges.

Migrate Postpaid to Prepaid

This transaction informs Billing that a subscriber has moved from a postpaid pay channel to a prepaid pay channel. This transaction may also be published as the result a backdating activity. It may result with the following:

■ Insertion of the activity to the Activity History table.

■ Adding new services and removing expired ones from RC Rates, changing pay channel of existing rates.

■ Creation of set-up, penalty charges.

Create Agreement

This transaction informs Billing that a new agreement has been created in the system. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the activity into the Backdate Requests table.

■ Adding new services to RC Rates.

■ Creation of set-up charges.

Cancel Subscriber

This transaction informs Billing that a subscriber has been canceled. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the subscriber to the Backdate Requests table.

■ Expiration of rates in RC Rates.

■ Creation of penalty charges.

Restore Subscriber

This transaction informs Billing that a subscriber has been restored. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the subscriber to the Backdate Requests table.

■ Change the rate of restored rates: expiration of rates in RC Rates, and insertion of new ones.

Suspend Subscriber

This transaction informs Billing that a subscriber has been suspended. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the subscriber to the Backdate Requests table.

■ Change the rate of suspended rates: expiration of rates in RC Rates, and insertion of new ones.

Resume Subscriber

This transaction informs Billing that a subscriber has been resumed from suspension. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Creation of a one-time charge due to the activity.

■ Change the rate of resumed rates: expiration of rates in RC Rates, and insertion of new ones.

Update Parameters

This transaction informs Billing that the parameters of a Billing Agreement have been changed. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the subscriber to the Backdate Requests table.

■ Changing the rate of RC Rates entries – expiration of the existing rates, and insertion of new ones.

Agreement Update Parameters

This transaction informs Billing that the parameters of a Billing Agreement have been updated. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of the agreement to the Backdate Requests table.

■ Changing the rate of RC Rates entries – expiration of the existing rates, and insertion of new ones.

Agreement Change Charge Distribution

This transaction informs Billing that charge distribution of a Billing Agreement has changed. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Changing the pay channel of RC Rates entries – expiration of the existing rates, and insertion of new ones.

Subscriber Change Charge Distribution

This transaction informs Billing that the charge distribution of a subscriber has changed. This transaction may also be published because of a backdating activity. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Changing the pay channel of RC Rates entries – expiration of the existing rates, and insertion of new ones.

Nice Resource

This transaction informs Billing that a Subscriber's resource has been changed. This may cause a one-time charge request. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Creation of a one-time charge in Charge Requests.

Order Charge

This transaction informs Billing that a charge event should be created. It may result in the following:

■ Insertion of the activity to the Activity History table.

■ Insertion of new rates or expiring of old rates.

■ Insertion of the immediate credit to the Charge Adjustment table.

■ Insertion of charge requests.

Document Release Information

Case No.	Service Pack No.	Description of Change
CR 302340-060506	SP7	"Complex Entities" was changed to "Extract Entities" throughout the document.