



C2M.CCBv2.6

4.2.2.12 Manage Payment Arrangement Charges

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Brief Description

Business Process: 4.2.2.12 C2M.CCB.Manage Payment Arrangement Charges
Process Type: Sub Process
Parent Process: 4.2.2 C2M.CCB.Manage Bill
Sibling Processes: 4.2.2.2 C2M.CCB.Manage Meter Charges, 4.2.2.3 C2M.CCB.Manage Item Charges, 4.2.2.4 C2M.CCB.Manage External and Miscellaneous Charges, 4.2.2.6 C2M.CCB.Manage Deposit Charges, 4.2.2.5 C2M.CCB.Manage Loan Charges, 4.3.1.1 C2M.CCB.Manage Payments

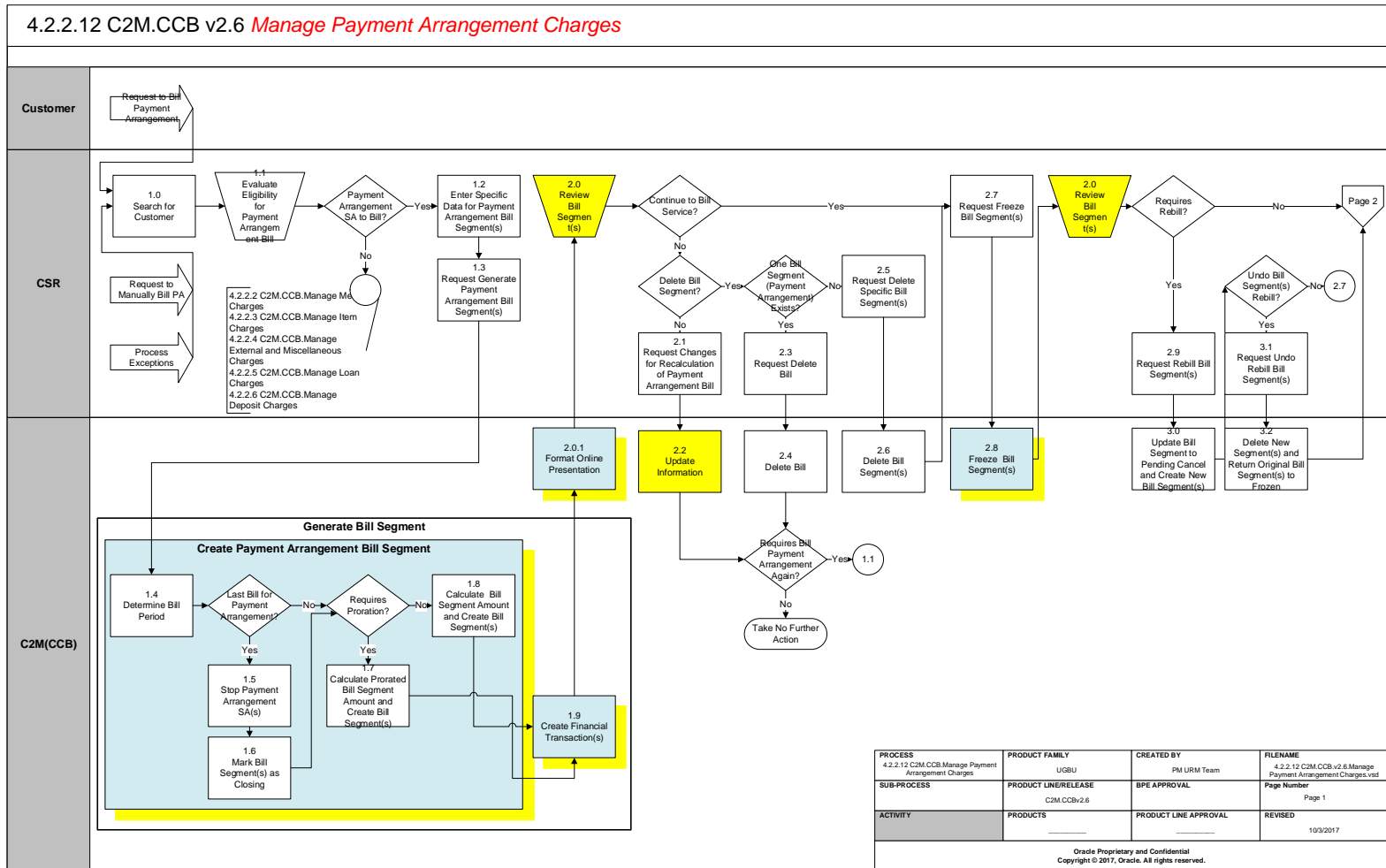
This process describes Billing for Payment Arrangements. This process takes place if the Customer has entered into a Payment Arrangement agreement with the organization. The [Payment Arrangement Service Agreement](#) typically contains overdue debt that the customer has agreed to pay in installments over time.

Payment Arrangements are billed on a regular basis similar to other services provided by the utility.

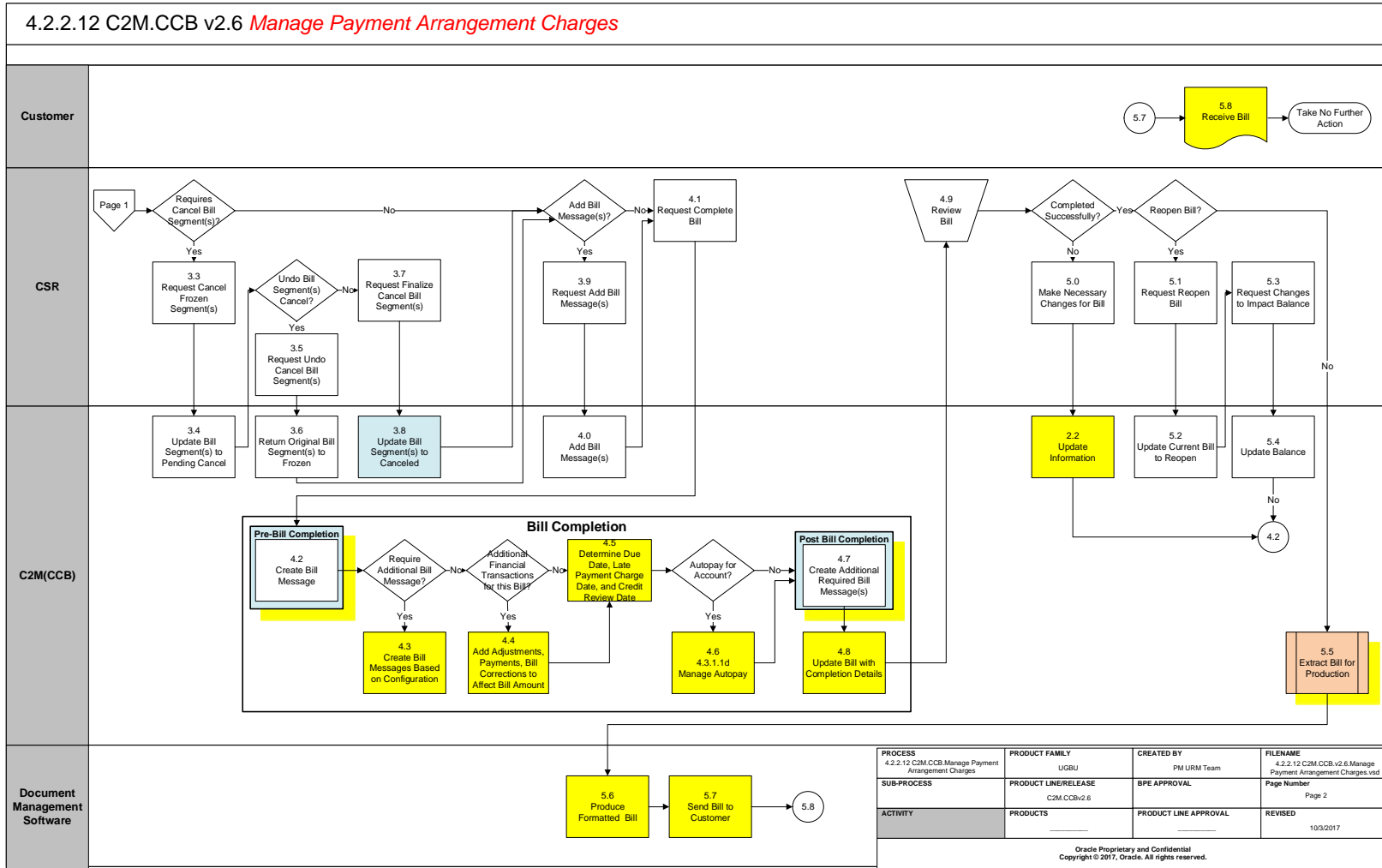
Most bills are produced in a Batch Billing process. However, the CSR or Authorized User can create Bills for Payment Arrangements manually if required. If a [Bill](#) is generated as valid but has missing or incomplete information, the CSR or Authorized User has the ability to modify the bill.

When bill is successfully completed it is made available for Customer.

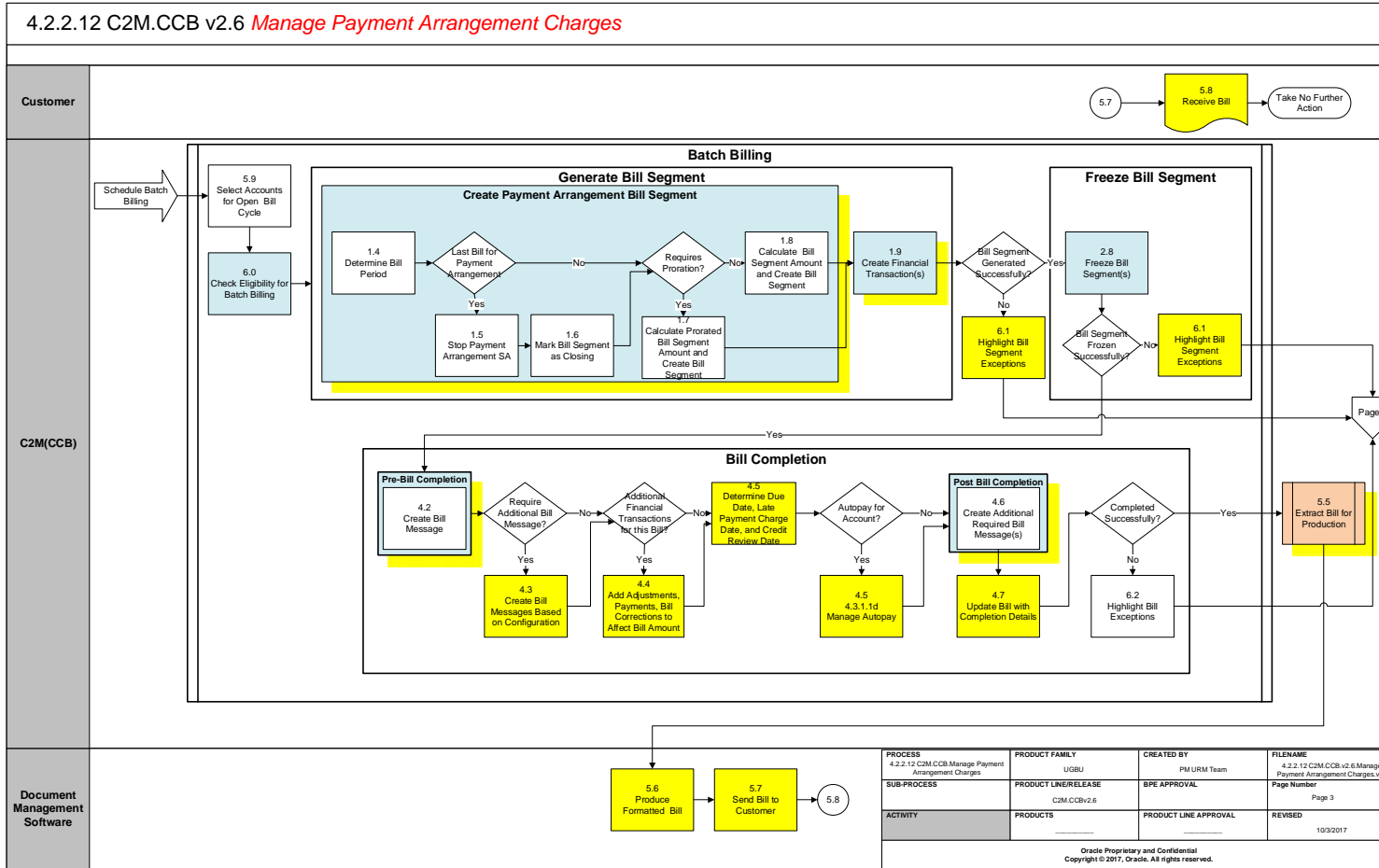
Business Process Model Page 1



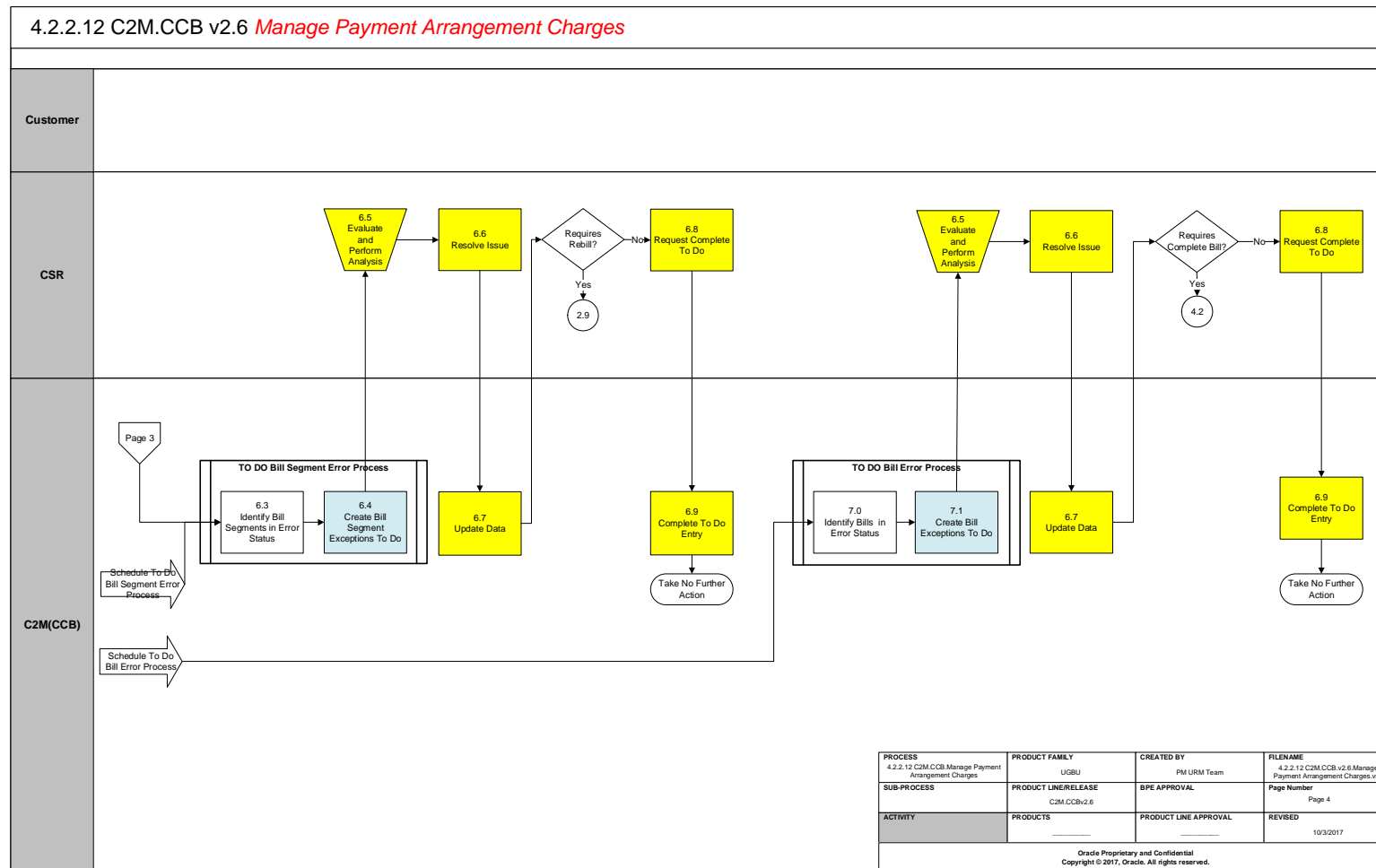
Business Process Model Page 2



Business Process Model Page 3



Business Process Model Page 4



Detail Business Process Model Description

1.0 Search for Customer

Actor/Role: CSR

Description:

Upon receipt of request to bill [a Payment Arrangement](#), the CSR or Authorized User locates the customer in C2M(CCB) using [Control Central Search](#). When a customer is selected, the CSR or Authorized User is automatically transferred to Control Central - Account Information refreshed with the selected customer's data.

Process Plug-in enabled Y

Available Algorithm(s):

Installation Options - Control Central Alerts
Installation Options - C1-BILL-INFO This algorithm type formats the Bill Information that appears throughout the system. Four different formats are used.
Installation Options - C2M-BILLINFO - This algorithm formats the "Bill that appears throughout the system. It concatenates the fields and delimiters specified as algorithm parameters.

Configuration required Y

Entities to Configure:

Installation Options

1.1 Evaluate Eligibility for Payment Arrangement Bill

Actor/Role: CSR

Description:

C2M(CCB) provides the CSR or Authorized User with valuable insight and overall analysis of the Customer's financial situation. The CSR or Authorized User evaluates the Customer's Account. Account Financial History, Premise and Service Agreement Billing History, Credit Rating, and Credit and Collection History may be reviewed. [Control Central Alerts](#) and other [Dashboard](#) information assist the CSR or Authorized User in determining eligibility for adding new Bill or any rebilling based on established business rules.

Process Plug-in enabled Y

Available Algorithm(s):

Process Plug-in enabled Y Available
Algorithm(s):
Installation Options - Control Central Alerts
Installation Options - C1-BILL-INFO This algorithm type formats the Bill Information that

appears throughout the system. Four different formats are used.

Installation Options - C2M-BILLINFO - This algorithm formats the "Bill that appears throughout the system. It concatenates the fields and delimiters specified as algorithm parameters.

Configuration required Y Entities to Configure:

Installation Options

1.2 Enter Specific Data for Payment Arrangement Bill Segment(s)

Actor/Role: CSR

Description:

If the CSR or Authorized User identifies a need to create a Payment Arrangement [Bill](#) for the customer, the CSR or Authorized User provides the system with information for the bill to be created. The CSR or Authorized User must specify Cutoff Date or Use Schedule to determine the end date of each Bill Segment Bill period. The Accounting Date defaults to current date however the CSR or Authorized User may change this date based on established business rules.

1.3 Request Generate Payment Arrangement Bill Segment(s)

Actor/Role: CSR

Description:

The Manual Billing process consists of several steps. The first step is to request the system to calculate and create the Bill and Bill Segment for the Payment Arrangement. The CSR or Authorized User requests to generate a new online [Bill](#). This online Bill may contain one or more segments. If only one Payment Arrangement Service Agreement exists for the Account, then only one Payment Arrangement Bill Segment is created.

Note: The "Generate" function is used when creating a new Bill, Bill Segment, or re-generating an existing freezable or error segment. A deleted [Bill Segment](#) may be generated again once information is changed.

1.4 Determine Bill Period Group: Create Payment Arrangement Bill Segment

Group: Generate Bill Segment

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

The System identifies Bill Period based on information provided online or through Batch Billing.

C1-BSBS-RA - Bill recurring charge amount until

Process Plug-in enabled Y	Available Algorithm(s):	payoff bal = 0. (Algorithm Type - BSBS-RA) - This bill segment creation algorithm creates a bill segment using the service agreement's Recurring Charge Amount (or the remaining amount) and the Description On Bill from the service agreement's SA Type. The system automatically stops the service agreement
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Customizable process N	Process Name:	BILLING
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Configuration required Y	Entities to Configure:	<table border="1"> <tr><td>Bill Segment Type</td></tr> <tr><td>SA Type</td></tr> <tr><td>Customer Class</td></tr> <tr><td>Debt Class</td></tr> </table>	Bill Segment Type	SA Type	Customer Class	Debt Class
Bill Segment Type						
SA Type						
Customer Class						
Debt Class						

1.5 Stop Payment Arrangement SA(s) Group: Create Payment Arrangement Bill Segment

Group: Generate Bill Segment

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

If the [Payment Arrangement](#) is billing for the last time, the system initiates the stop process for the Payment Arrangement Service Agreement. The installment billing obligations are met and the Payoff Balance is 0.

Note: The Payment Arrangement SA can then be stopped by the user or by the SA activation background process. Refer to 3.3.2.4 Stop a Non-Premise-Based Service for details

Process Plug-in enabled Y	Available Algorithm(s):	C1-BSBS-RA - Bill recurring charge amount until payoff bal = 0. (Algorithm Type - BSBS-RA) - This bill segment creation algorithm creates a bill segment using the service agreement's Recurring Charge Amount (or the remaining amount) and the Description On Bill from the service agreement's SA Type. The system automatically stops the service agreement
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Customizable process N **Process Name:**

BILLING

Configuration required Y **Entities to Configure:**

Bill Segment Type
SA Type
Customer Class
Debt Class

1.6 Mark Bill Segment(s) as Closing Group: Create Payment Arrangement Bill Segment

Group: Generate Bill Segment

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

If the generated Bill Segment is the last Payment Arrangement Bill Segment, C2M(CCB) marks Bill Segment as closing Bill Segment. This step could be executed from online and batch processing.

Process Plug-in enabled Y **Available Algorithm(s):**

C1-BSBS-RA - Bill recurring charge amount until payoff bal = 0. (Algorithm Type - BSBS-RA) - This bill segment creation algorithm creates a bill segment using the service agreement's Recurring Charge Amount (or the remaining amount) and the Description On Bill from the service agreement's SA Type. The system automatically stops the service agreement

Customizable process N **Process Name:**

BILLING

Configuration required Y **Entities to Configure:**

Bill Segment Type
SA Type
Customer Class
Debt Class

1.7 Calculate Prorated Payment Arrangement Bill Segment Amount and Create Bill Segment(s)

Group: Create Payment Arrangement Bill Segment

Group: Generate Bill Segment

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

C2M(CCB) calculates and creates the Payment Arrangement Bill Segment based on the supplied prorated Bill Period.

Manual Process: CSR or Authorized User provides the Bill period details if required. If not, the system defaults Bill period dates following the business rules:

Start date:

- If this is the first Bill Segment for the Service Agreement, the start date is set to the start date of the Service Agreement
- If this is the regular Bill Segment the start date is the previous Bill Segment's end date.

End Date

- If this is the last Bill Segment for the Service Agreement, Bill Segment's the end date is the Service Agreement's end date
- If this is the regular Bill Segment end date is the end date of Bill Cycle schedule window.
-

Automated Process: System identifies start and end date for the billing period using the same business rules as described in manual process.

Note: Every SA type defines the minimum number of days on a Bill Segment. Whenever the system attempts to create a Bill Segment other than the final Bill Segment, it checks if the number of days is at least as great as the minimum defined on the SA type.

Process Plug-in enabled Y

Available Algorithm(s):

C1-BSBS-RA - Bill recurring charge amount until payoff bal = 0. (Algorithm Type - BSBS-RA) - This bill segment creation algorithm creates a bill segment using the service agreement's Recurring Charge Amount (or the remaining amount) and the Description On Bill from the service agreement's SA Type. The system automatically stops the service agreement

Customizable process N

Process Name:

BILLING

Configuration required Y

Entities to Configure:

Bill Segment Type
SA Type
Customer Class
Debt Class

1.8 Calculate Bill Segment Amount and Create Bill Segment(s) Group: Create Payment Arrangement Bill Segment
Group: Generate Bill Segment
Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

The system creates a bill segment and Bill Segment's Bill lines for the Payment Arrangement Service Agreement. This step could be executed from online and batch processing

Process Plug-in enabled Y	Available Algorithm(s):	C1-BSBS-RA - Bill recurring charge amount until payoff bal = 0. (Algorithm Type - BSBS-RA) - This bill segment creation algorithm creates a bill segment using the service agreement's Recurring Charge Amount (or the remaining amount) and the Description On Bill from the service agreement's SA Type. The system automatically stops the service agreement
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Customizable process N	Process Name:	BILLING
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Configuration required Y	Entities to Configure:	<table border="1"> <tr><td>Bill Segment Type</td></tr> <tr><td>SA Type</td></tr> <tr><td>Customer Class</td></tr> <tr><td>Debt Class</td></tr> </table>	Bill Segment Type	SA Type	Customer Class	Debt Class
Bill Segment Type						
SA Type						
Customer Class						
Debt Class						

1.9 Create Financial Transaction(s) Group: Generate Bill Segment
Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

C2M(CCB) creates the associated financial details related to the [Bill Segment](#). The Financial Transaction contains the financial effects of the Bill Segment on the Service Agreement's current and payoff balances and on the General Ledger. This step could be executed from online and batch processing.

Process Plug-in enabled Y	Available Algorithm(s):	BS-BO-DFT - C1-BSBF-B0 - This bill segment financial transaction algorithm creates a financial transaction for a bill segment where: - Payoff amount = 0 - Current amount = bill amount - The general ledger is not affected. This algorithm should be plugged-in on all bill segment types that only affect a service agreement's current balance
Customizable process N	Process Name	BILLING
Configuration required Y	Entities to Configure:	SA Type Bill Segment Type

2.0.1 Format Online Presentation

Actor/Role: C2M(CCB)

Description:

Formatting information to be presented Online.

Process Plug-in enabled Y	Available Algorithm(s):	<p>C1-BL-DISP - This algorithm is used to generate a bill image using the Documaker software product. The algorithm works as follows:</p> <ul style="list-style-type: none"> - It calls the bill print extract algorithm (see BLEX-EX for an example) associated with the bill route type. That algorithm returns the various records that contain the information that appear on the customer's printed bill. - It passes these records to the Documaker software. This software reconstructs the bill's image (in a PDF). - This PDF is returned to the calling program. This program then displays it in a separate page on the user's browser. <p>C1-ONLIN-CR - This algorithm formats a bill for display when interacting with 3rd party software like Crystal Reports or BI Publisher</p> <p>ONLN-BL-DSP - This algorithm is used to generate a bill image using the Doc 1 software product.</p>
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Customizable process N	Process Name	BILLING - The Bill cycle Batch processing creates Bills and Bill Segments for accounts with an "open" Bill cycle.
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Configuration required Y	Entities to Configure:	Bill Segment Type - Bill Segment Information Installation Options - Framework- Bill Segment Information
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2.0 Review Bill Segment(s)

Actor/Role: CSR

Description:

The CSR or Authorized User reviews the Bill Segment for accuracy and determines the next action. The CSR or Authorized User decides if the billing process could be continued. The Bill Segment may be incorrect, or created by mistake and needs to be deleted, rebilled or canceled.

Business Object Y	Business Object	C1-BillSegmentStatus- Bill Segment Status This business object is used to retrieve the status of a bill segment
		WX-Bill - Bill business object (simple bill elements only) This business object is used for simple access to bill information
		C1-BillSegmentRead - This business object is used to read the details related to a bill segment.

2.1 Request Changes for Recalculation of Payment Arrangement Bill

Actor/Role: CSR

Description:

After review CSR or Authorized User identifies a problem with the generated Payment Arrangement Bill segment. The CSR or Authorized User, based on established business rules, then adds or changes the data used for the Bill Segment calculation. Typical changes may include a change to dates, or recurring charge information.

2.2 Update Information

Actor/Role: C2M(CCB)

Description:

Changes by the CSR or Authorized User are updated in C2M(CCB).

2.3 Request Delete Bill

Actor/Role: CSR

Description:

During the review process it is determined the Bill Segment was created incorrectly or by mistake. Based on established business rules CSR or Authorized User requests to delete the Bill or Bill Segment. When a [Bill](#) has only one segment the Bill and the corresponding segment are deleted at the Bill level.

2.4 Delete Bill

Actor/Role: C2M(CCB)

Description:

The Bill is deleted in C2M(CCB) and the financial record(s) are removed from the database. There is no financial impact to the Customer's Account.

Business Object Y

Business Object:

C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason

2.5 Request Delete Specific Bill Segment(s)

Actor/Role: CSR

Description:

The CSR or Authorized User determines specific Bill Segment(s) associated with a given Bill need to be deleted.

2.6 Delete Bill Segment(s)

Actor/Role: C2M(CCB)

Description:

The specific Bill Segment(s) is deleted in C2M(CCB) and the financial records are removed from the database. There is no financial impact to the Customer's Account.

2.7 Request Freeze Bill Segment(s)

Actor/Role: CSR

Description:

If CSR or Authorized User does not identify any problem and decides to continue the Billing process, he/she requests to Freeze the Bill Segment.

2.8 Freeze Bill Segment(s) Group: Freeze Bill Segment Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

The [Bill Segment\(s\)](#) and associated Financial Transaction are frozen in C2M(CCB). The Bill Freeze Option on the Installation Options controls when a Service Agreement's balance and General Ledger is affected by the Bill Segment and must be configured to meet the organization's accounting practices.

Manual Process- This is initiated by CSR or Authorized User when he/she requests to Freeze Bill Segments created for the Service Agreement.

Automated Process-This is a component of batch billing process and gets executed as a part of scheduled batch billing process that runs periodically. Functionality is the same as described in Manual process.

Process Plug-in enabled Y	Available Algorithm(s):	C1-BSFZ-BCH - Cancel Bill Segment Billable Charges
		C1-FREEZEBS - Freeze Bill Segments . Bill Segment freeze/cancel algorithm for BO status Enter

Customizable process N	Process Name:	BILLING
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Configuration required Y	Entities to Configure:	Installation Options - Bill Freeze Options
		Customer Class
		SA Type

Business Object Y	Business Object:	WX-BillSegment - Bill Segment
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2.9 Request Re-Bill Bill Segment(s)

Actor/Role: CSR

Description:

If the problem identified in the frozen Bill Segment has been resolved, the CSR or Authorized User requests to Cancel and Rebill the Bill Segment.

Configuration required Y	Entities to Configure:	Bill Cancel Reasons
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3.0 Update Bill Segment(s) to Pending Cancel and Create New Bill Segment(s)**Actor/Role:** C2M(CCB)**Description:**

The original Bill Segment(s) is updated to Pending Cancel, and new Bill Segment(s) created. A new Financial Transaction is associated with the new Bill Segment and the original Financial Transaction is in the pending Cancel state.

Configuration required Y	Entities to Configure:	Bill Cancel Reasons
Business Object Y	Business Object:	C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason

3.1 Request Undo ReBill Bill Segment(s)**Actor/Role:** CSR**Description:**

The CSR or Authorized User determines not to freeze the new Bill Segment(s). If the undo function is used, the newly generated segment is deleted.

3.2 Delete New Segment(s) and Return Original Bill Segment(s) to Frozen**Actor/Role:** C2M(CCB)**Description:**

C2M(CCB) deletes the newly generated segment and returns the original Bill Segment to frozen. There is no impact to Financial Transactions.

Business Object Y	Business Object:	C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason
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3.3 Request Cancel Frozen Bill Segment(s)**Actor/Role:** CSR**Description:**

The Bill Segment(s) may need to be canceled and not created again. The customer's balance should not be impacted by the original transaction. The CSR or Authorized User initiates the Cancel function

Configuration required Y	Entities to Configure:	Bill Cancel Reasons
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3.4 Update Bill Segment(s) to Pending Cancel**Actor/Role:** C2M(CCB)

Description:

When the CSR or Authorized User requests Initiate Cancel, the system updates the Bill Segment(s) to Pending Cancel.

Configuration required Y **Entities to Configure:**

Business Object Y **Business Object:**

3.5 Request Undo Cancel Bill Segment(s)

Actor/Role: CSR

Description:

The CSR or Authorized User has the option to undo the pending Cancel Bill Segment(s). Prior to the cancellation the CSR or Authorized User determines the [Bill Segment\(s\)](#) should not be canceled, and uses the Undo function.

3.6 Return Original Bill Segment(s) to Frozen

Actor/Role: C2M(CCB)

Description:

The original [Bill Segment\(s\)](#) is returned to Frozen in C2M(CCB). There is no impact to financial transactions.

3.7 Request Finalize Cancel Bill Segment(s)

Actor/Role: CSR

Description:

The CSR or Authorized User confirms the cancellation of Bill Segment(s).

Configuration required Y **Entities to Configure:**

3.8 Update Bill Segment(s) to Canceled

Actor/Role: C2M(CCB)

Description:

The existing Bill Segment(s) is updated to Canceled status in C2M(CCB). If a Bill Segment is cancelled, another Financial Transaction is created to reverse the original Financial Transaction. The cancellation Financial Transaction appears on the next Bill produced for the account as a Bill correction.

Process Plug-in enabled Y	Available Algorithm(s):	BSFZ-Empty - This is a Customer Class Bill Segment freeze/cancel algorithm C1-CB-EMPTY- This is a cancel bill algorithm; however, it does not perform any cancellation logic. It does contain logic to cause the bill page hide the cancel button if the bill is in pending status and show the button otherwise.
Configuration required Y	Entities to Configure:	Installation Options - Bill Freeze Options Customer Class
Business Object Y	Business Object:	C1-BillCancelReasonPhysicalBO

3.9 Request Add Bill Message(s)

Actor/Role: CSR

Description:

The CSR or Authorized User may add Payment Arrangement Service Agreement related Bill Messages for a given [Bill Segment\(s\)](#). The CSR or Authorized User may also add Bill Messages at the Account Level. The CSR or Authorized User adds these Bill Messages for an online Bill.

Configuration required Y	Entities to Configure:	Bill Messages
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4.0 Add Bill Message(s)

Actor/Role: C2M(CCB)

Description:

The Bill Message is added to the bill in C2M(CCB).

Business Object Y	Business Object:	C1-BillMessagePhysicalBO - Physical BO for Bill Message. C1-AccountBillMessage - Account Bill Message
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4.1 Request Complete Bill**Actor/Role:** CSR**Description:**

When CSR or Authorized User cannot find any problem with Frozen Payment Arrangement Bill Segment as well as with other Bill Segments (if any) that belong to the same bill, he/she initiates the Complete Bill function.

4.2 Create Bill Message Group: Pre-Bill Completion**Group:** Bill Completion**Group:** Batch Billing**Actor/Role:** C2M(CCB)**Description:**

Bill Completion is the last and one of the most critical components of the Billing process. The system completes the Bill and it's ready for extract and print. This process could be initiated manually and automatically. C2M(CCB) makes use of Pre-Bill Completion algorithms. Based on configuration, one such algorithm can delete Bill Segments in error, create Bill messages for the deleted segments, and create a To Do entry.

Manual Process: Based on configuration, additional Bill Messages can be added

Automated Process: (Batch billing) If required, such algorithms can:

- Delete Bill Segments in error, create Bill messages for the deleted segments, and create a To Do entry
- Delete bill certain type of financial transactions linked to the bill, for example, if only payments exist for newly created Bill

Process Plug-in enabled Y Available Algorithm(s):

C1-DELBILPY - C2M-DELBILPS - This customer class pre-bill completion algorithm type determines to delete a bill if it only contains frozen financial transactions of given types
C1-CPBC-TAXT - This customer class pre-bill completion algorithm type checks if taxes should be charged by comparing the bill's accumulated tax amount with the tax threshold amount.
CPBC-DMCH - Apply De Minimis Rule (UK VAT Only)
C1-CSB-EBC - This customer class pre-bill completion algorithm This algorithm skips completion of a bill until the bill cycle schedule end date. The algorithm is normally used with summary billing.
C1-SUP-PR-BL - Suppress Printing of Bills after

Final Bill
CREDIT-XFER - C2M-CR-XFER – This Bill Segment completion algorithm type will transfer the balance of a credit SA to other SAs linked to the account.
C1-PYOF-DBT - This algorithm checks the input credit SA's balance. If the balance amount is a credit, it looks for all frozen payments linked to this SA. These frozen payments are used to pay-off the account's outstanding debt via payment transfer. Payment cancel reason is used when excess credit payment is cancelled during payment transfer. Match type code is used only for open item accounting suggested match type to use is one for matching bills. If a refund adjustment type is specified and a credit amount remains on the SA after transferring the credit to other SAs, the algorithm will then determine if any other billable, pending start, active, pending stop or stopped SAs exist for the account. If no such SAs exist, a refund adjustment will be created to relieve the remaining credit on the SA. By default, payments ordered by descending payment amount are used to pay-off the account's outstanding debt to minimize the number of payment cancellations in case there are many payments that contribute to the credit SA's balance. If Transfer Excess Credit by Payment Date is Y (Yes), payments are transferred based on the payment date so that the oldest payment is used first to pay-off the account's outstanding debt.

Customizable process N

Process Name:

BILLING

Configuration required Y

Entities to Configure:

To Do Type
To Do Role
Bill Message
SA Type
Customer Class

Business Object Y	Business Object:	C1-BillMessagePhysicalBO - Physical BO for Bill Message.
		C1-AccountBillMessage - Account Bill Message

4.3 Create Bill Messages Based on Configuration Group: Bill Completion **Group: Batch Billing**

Actor/Role: C2M(CCB)

Description:

C2M(CCB) can also automatically add Bill Messages during Bill completion. Bill Messages come from a variety of sources:

- Account Bill Messages
- Customer Class Bill Messages
- Service Agreement related Messages that are linked to Bill Segments
- Rate Schedule Bill Messages
- Service Provider Bill Messages
- Meter Reader Remark Bill Messages
- Ad hoc Messages by CSR or Authorized User
- Custom Background Processes and Algorithm Bill Messages

This step could be initiated from online or billing batch process

Customizable process N	Process Name:	BILLING
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Configuration required Y	Entities to Configure:	Customer Class Bill Messages
		Account and Service Agreement Bill Messages

Business Object Y	Business Object:	C1-BillMessagePhysicalBO - Physical BO for Bill Message.
		C1-AccountBillMessage - Account Bill Message

4.4 Add Adjustments, Payments, and Bill Corrections to Affect Bill Amount Group: Bill Completion **Group: Batch Billing**

Actor/Role: C2M(CCB)

Description:

During Bill Completion C2M(CCB) adds Adjustments, Payments or Bill corrections not included in the previous Bills to the newly created Bill

This step could be executed from online and batch processing.

Customizable process N Process Name:

BILLING.

4.5 Determine Due Date, Late Payment Charge Date, and Credit Review Date Group: Bill Completion
Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

During Bill Completion the Due Date, Late Payment Charge Date, and next Credit Review Date are determined and made available as information for the Bill and Account. Some Companies require Late Payment Charges calculated and added to the Bill. If this is the case, the system allows doing so. Two algorithms are listed below for information only. This step could be executed from online and batch processing

Process Plug-in enabled Y	Available Algorithm(s):	BILPC-TOTAL- This algorithm type is used to calculate the late payment charge amount for a specific service agreement linked to an account. BILPE-ALL - C2M-LPC-EL5 - This algorithm determines if an account is eligible for late payment charge assessment by comparing the account's current amount against a Threshold Amount. If the current amount is greater than the threshold amount, the account's service agreements will be levied a late payment charge using the respective late payment charge algorithm defined on each SA's SA type. Determine if the amount is sufficient to levy LPCs. BILPC-SPRC - LPC method for service provider
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Customizable process N Process Name:

BILLING.

Configuration required Y	Entities to Configure:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>SA Type</td></tr> <tr><td>Customer Class</td></tr> <tr><td>Adjustment Types</td></tr> </table>	SA Type	Customer Class	Adjustment Types
SA Type					
Customer Class					
Adjustment Types					

4.6 4.3.1.1d Manage Autopay Group: Bill Completion
Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

An Autopay payment may be created during Bill Completion. Refer to 4.3.1.1d Manage Autopay.

Customizable process N	Process Name:	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.
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4.7 Create Additional Required Bill Message(s) Group: Post Bill Completion Activity
Group: Bill Completion
Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

C2M(CCB) can perform various post Bill completion activities. Additional custom Bill Message(s) can be added to the specific bill.

Note: Post completion activity allows for adding various custom functionality based on business rules to impact/modify the bill overall.

Process Plug-in enabled Y	Available Algorithm(s):	WX-SSBNOTIFY - This customer class post Bill completion algorithm set Bill Notifications for Self-Service
		C1-CR-BLRVWS - This customer class post Bill completion algorithm create Bill Review Schedule
		C1-MULT-DUDT - This customer class post Bill completion algorithm Additional Bill Due Dates

Customizable process N	Process Name:	BILLING.
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Configuration required Y	Entities to Configure:	SA Type
		Customer Class
		Adjustment Types
		Bill Message

Business Object Y	Business Object:	C1-BillMessagePhysicalBO - Physical BO for Bill Message.
		C1-AccountBillMessage - Account Bill Message

4.8 Update Bill with Completion Details Group: Bill Completion **Group: Batch Billing**

Actor/Role: C2M(CCB)

Description:

All Bill completion details are now updated in C2M(CCB)

Process Plug-in enabled Y	Available Algorithm	C1-COMP-BILL - Complete Bill. This is a Bill Completion algorithm for Business Object Status - Enter.
Customizable process N	Process Name:	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

4.9 Review Bill

Actor/Role: CSR

Description:

The CSR or Authorized User evaluates the Account and reviews the Bill for accuracy. At times it may be necessary to reopen the most recent Bill. Possibly a payment or adjustment was not included in the original Bill. A Bill Segment may need rebilling and the changes should be reflected in a new Bill.

Business Object Y	Business Object:	<p>WX-Bill - Bill business object (simple bill elements only) This business object is used for simple access to bill information</p> <p>C1-BillLite - This business object can be used to read the fields (except CLOB) of the MO's primary table - Bill.</p> <p>CI_BillDocumentNumber - This business object is used by the bill print extract algorithm (CI_BLEX-XML) to retrieve a bill's document number and document type.</p> <p>C1-BillSegmentStatus - Bill Segment Status This business object is used to retrieve the status of a bill segment</p> <p>C1-BillSegmentCalcHeaders - Bill Segment Calc Headers</p>
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C1-BillSegmentRead - Bill Segment Read
WX-BillSegment - Bill Segment
C1-BillSegmentLite - This business object can be used to read the fields (except CLOB) of the MO's primary table - Bill Segment.

5.0 Make Necessary Changes for Bill

Actor/Role: CSR

Description:

During Bill Completion information may be missing or incomplete. One example is the mailing address may be missing. The CSR or Authorized User reviews and resolves the error, enters correct data, and completes the Bill as needed.

5.1 Request Reopen Bill

Actor/Role: CSR

Description:

The CSR or Authorized User determines to reopen a Bill for the Customer's account.

5.2 Update Current Bill to Reopen

Actor/Role: C2M(CCB)

Description:

The current Bill is reopened in C2M(CCB) and available for applicable changes.

5.3 Request Changes to Impact Balance

Actor/Role: CSR

Description:

Based on investigation and established business rules, the CSR or Authorized User requests various changes that impact the balance. Typically these changes can be: creation of a new Bill Segment, Rebill of a Bill Segment, Cancellation of a Bill Segment, Creation of a Payment or Adjustment, or Cancellation of a Payment or Adjustment.

5.4 Update Balance

Actor/Role: C2M(CCB)

Description:

The financial balance is updated in C2M(CCB).

5.5 Extract Bill for Production

Actor/Role: C2M(CCB)

Description:

Typically C2M(CCB) prepares required billing data and makes data available for the Document Management application.

Note: An additional custom process may be created to interface with the Document Management Software as needed.

Process Plug-in enabled Y Available Algorithm(s):

Bill Route Type - C1-BLEX-EX - This algorithm constructs the records that contain the information that appears on a printed Bill for Documaker.
BLEX-EX - This algorithm constructs the flat file records that contain the information that appears on a printed bill.
C1-BLEX-CR - This Bill Route Type extract algorithm prepares the report information needed to create a Bill using a Reporting Engine.
C1-BLEX-BIP - This Bill Route Type extract algorithm schedules report job in BI Publisher to generate Bill Reports in range.
C1-BLEX-XML C2M-BLEX-XML - The Bill Route Type extract algorithm creates billing information in an XML format as an alternative to a fixed flat file format.

Customizable process N Process Name:

EMAILRTE - CIPBXBLB
POSTROUT - CIPBXBLB

Customizable process Y Process Name:

Custom Extract Process

Configuration required Y Entities to Configure:

Bill Route Type

Business Object Y Business Object:

C2M-BillRoutingR- This business object is used on the billing history zone displayed on control central - account information. Note: This BO is currently used for reprint Bills
WX-BillRouteType - Bill business object to read bill routing details. Note: This BO is currently used for reprint Bills

C1-BillRouteTypePhysicalBO - Physical BO for Bill Route Type

5.6 Produce Formatted Bill

Actor/Role: Document Management Software

Description:

Document Management Software reads and processes bill information produced by C2M(CCB). It prints actual bills or prepares bills in another format (e-mail, PDF online format, short message service (SMS)).

Process Plug-in enabled Y

Available Algorithm(s):

C1-BL-DISP - This algorithm is used to generate a bill image using the Documaker software product. The algorithm works as follows:

- It calls the bill print extract algorithm (see BLEX-EX for an example) associated with the bill route type. That algorithm returns the various records that contain the information that appear on the customer's printed bill.
- It passes these records to the Documaker software. This software reconstructs the bill's image (in a PDF).
- This PDF is returned to the calling program. This program then displays it in a separate page on the user's browser.

C1-ONLIN-CR - This algorithm formats a bill for display when interacting with 3rd party software like Crystal Reports or BI Publisher

ONLN-BL-DSP - This algorithm is used to generate a bill image using the Doc 1 software product.

5.7 Send Bill to Customer

Actor/Role: Document Management Software

Description:

The printed Bill is sent or made available to the Customer. It could also be e-mailed to the Customer if e-mail is a bill routing type.

5.8 Receives Bill

Actor/Role: Customer

Description:

The Customer receives the Bill.

Configuration required Y **Entities to Configure:**

Bill Route Type

5.9 Select Accounts for Open Bill Cycle Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

This step is the first step of batch billing process. Using the established Bill Cycle Schedule, C2M(CCB) selects Accounts defined within a specific Open Bill Cycle. The Bill Cycle's schedule controls when the system attempts to create Bills for the account. Typically all the Payment Arrangements that require billing when Bill window is "open" are selected.

Configuration required Y **Entities to Configure:**

Bill Segment Type
SA Types
Customer Class
Debt Class
Bill Cycle
Bill Schedule

Customizable process N **Process Name:**

BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

Business Object Y **Business Object:**

C1-BillSegmentStatus - This business object is used to retrieve the status of a bill segment.

6.0 Check Eligibility for Batch Billing Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

Normally, most [Bills](#) are created and completed automatically. At Billing time, C2M(CCB) attempts to produce a Bill for an account and create one or more Bill Segments for every non-cancelled / non-closed service agreement linked to the account. C2M(CCB) evaluates the Account, and [Payment Arrangement Service Agreement](#) eligibility for billing. This step is executed form the batch process only.

<p>C1-SKIPINACC -This Customer Class Bill eligibility algorithm stops processing an account if all the following conditions are true: - There are no Billable service agreements - There are no eligible Financial Transactions for the Bill - There are no temporary</p>

Process Plug-in enabled Y	Available Algorithm(s):	account messages to be swept onto the Bill C1-SKIPACCCB - This Customer Class Bill eligibility algorithm stops processing an account if completed bill exists.
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Customizable process N	Process Name:	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.
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Configuration required Y	Entities to Configure:	SA Type Customer Class
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6.1 Highlight Bill Segment Exceptions Group: Create Bill Segment
Group: Freeze Bill Segment
Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

If a Bill Segment cannot be created, C2M(CCB) creates a [Bill Segment](#) in "error" status with a message can be analyzed by a CSR or Authorized User. Typically errors are caused by missing or incomplete data. The error may be reviewed at this time or not. Data may be changed before Batch Billing next runs. When the Batch Billing process next runs, it deletes all "error" Bill Segment(s) and attempts to recreate them. It continues this throughout the Bill window. If a Bill Segment(s) is in error at the end of the Bill window, a user must intervene and fix them. If the Bill Segment(s) is still in error when the cycle's next window opens, a Billing error is generated. This step could be executed from batch only.

Customizable process N	Process Name:	BILLING
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Process Plug-in enabled Y	Available Algorithm(s):	C1-PROC-BSEX - Process Bill Segment Exceptions. Business Object Status - Enter
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Business Object Y	Business Object:	C1-BillSegmentStatus - Bill Segment Status.
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6.2 Highlight Bill Exceptions Group: Bill Completion Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

If a Bill cannot be completed, C2M(CCB) creates a Bill in “error” status with a message that is analyzed by a CSR or Authorized User. Typically errors are caused by missing or incomplete data.

Customizable process N **Process Name:**

BILLING

6.3 Identify Bill Segments in Error Status Group: TO DO Bill Segment Error Process

Actor/Role: C2M(CCB)

Description:

C2M(CCB) identifies Bill Segments in error status. C2M(CCB) can create a To Do Entry for every [Bill Segment](#) in error status.

Customizable process N **Process Name:**

TD-BSERR - To Do for Bill Segment in Error. This background process creates a To Do entry for every Bill Segment that's in error. (Batch Control)

Configuration required Y **Entities to Configure:**

To Do Role
To Do Type

Business Object Y **Business Object:**

C1-BillSegmentStatus - Bill Segment Status.

6.4 Create Bill Segment Exceptions To Do Group: TO DO Bill Segment Error Process

Actor/Role: C2M(CCB)

Description:

C2M(CCB) can create a To Do Entry for every Bill Segment in error status. The To Do functionality allows for online review by a user or group of users. To Do Lists summarize and total entries for different To Do Types. Status of To Do Entries is available for evaluation.

Process Plug-in enabled Y **Available Algorithm(s):**

To Do Type - Calculate Priority
To Do Type - External Routing
To Do Type - To Do Information
To Do Type - To Do Post Processing

Customizable process N	Process Name:	TD-BSERR - To Do for Bill Segment in Error. This background process creates a To Do entry for every Bill Segment that's in error. (Batch Control)
Configuration required Y	Entities to Configure:	To Do Role To Do Type

6.5 Evaluate and Perform Analysis

Actor/Role: CSR

Description:

The CSR or Authorized User will review the [Bill Segment](#) error and supporting information in C2M(CCB). Account, Service Agreement, and Billing History are some of the areas reviewed. Typically errors are caused by missing or incomplete information. Based on established business rules, the CSR or Authorized User investigates possible solutions or workarounds for the missing or incomplete information.

6.6 Resolve Issue

Actor/Role: CSR

Description:

The CSR or Authorized User resolves the error and enters information in C2M(CCB).

6.7 Update Data

Actor/Role: C2M(CCB)

Description:

Information required for resolution is updated in C2M(CCB).

6.8 Request Complete To Do

Actor/Role: CSR

Description:

The CSR or Authorized User marks the To Do Entry as complete and requests completion of the To Do Entry. The CSR or Authorized User may add comments or a log entry for future reference.

6.9 Complete To Do Entry

Actor/Role: C2M(CCB)

Description:

The To Do Entry is updated to Complete Status in C2M(CCB).

7.0 Identify Bills in Error Status Group: TO DO Bill Error Process

Actor/Role: C2M(CCB)**Description:**

C2M(CCB) identifies Bills in error status. C2M(CCB) can create a To Do Entry for every Bill in error status.

Customizable process N**Process Name:**

TD-BIERR - To Do for Bills in Error. This background process creates a To Do entry for every Bill that's in error.
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Configuration required Y**Entities to Configure:**

To Do Role
To Do Type

7.1 Create Bill Exceptions To Do Group: TO DO Bill Error Process**Actor/Role: C2M(CCB)****Description:**

C2M(CCB) can create a To Do Entry for every [Bill](#) in error status. The To Do functionality allows for online review by a user or group of users. To Do Lists summarize and total entries for different To Do Types. Status of To Do Entries is available for evaluation.

Process Plug-in enabled Y**Available Algorithm(s):**

To Do Type - Calculate Priority
To Do Type - External Routing
To Do Type - To Do Information
To Do Type - To Do Post Processing

Customizable process N**Process Name:**

TD-BIERR - To Do for Bills in Error. This background process creates a To Do entry for every Bill that's in error.
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Configuration required Y**Entities to Configure:**

To Do Role
To Do Type

At times the organization is made aware of a possible anomaly with a particular Batch of Bills. There are two background processes for canceling or reopening an entire batch of Bills. Refer to 4.2.2.2 Manage Meter Charges.

Test Documentation related to the Current Process

ID	Document Name	Test Type

Document Control

Change Record

Date	Author	Version	Change Reference
10/21/09	Colleen King	Draft	No Previous Document
10/23/09	Colleen King		Changes after Review
10/21/10	Geir Hedman		Updated Title and Content page
2/9/11	Geir Hedman		Updated Document and Visio
9/27/13	Ahad G Abbasi		Updated for CCB v2.4
10/21/2013	Galina Polonsky		Reviewed, Approved
04/01/2016	Chris Brewster		Updated for CCB v2.5
08/18/2017	Isuru Ranasinghe		Updated formatting for v2.6
10/3/2017	Colleen King		Updated for C2M Document and Visio
10/24/2017	Galina Polonsky		Reviewed, Approved

Attachments:

Bill



Bill-Payment
Arrangement.doc

Bill Segment



Bill
Segment-Payment Arr

Admin Menu/Installation Options/Control Central Alerts



Installation Options
Framework Control C

Control Central Search



Control Central
Search.doc

Dashboard



Dashboard-Payment
Arrangement Alert.do

Payment Arrangement Service Agreement



Service Agreement -
Payment Arrangemen