Oracle UtilitiesCustomer Care and Billing Release 2.5.0

Utility Reference Model

4.2.2.3 Manage Item Charges

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Oracle Utilities Customer Care and Billing Release 2.5.0 Utility Reference Model 4.2.2.3 Manage Item Charges

Contents

4.2.2.3 Manage Item Charges

This section provides a description of the "Manage Item Charges" business process, including:

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- Manage Item Charges Detailed Process Model Description
- Installation Options - Control Central Alert Algorithms
- Various Rate Schedule Algorithms and Major Configuration Information
- Related Training

Brief Description

Business Process: 4.2.2.3 CC&B v2.5 Manage Item Charges

Process Type: Sub Process

Parent Process: 4.2.2 CC&B v2.5 Manage Bill

Sibling Processes:

- 4.2.2.2 CC&B v2.5 Manage Meter Charges
- 4.2.2.4 CC&B v2.5 Manage External and Miscellaneous Charges
- 4.2.2.5 CC&B v2.5 Manage Loan Charges
- 4.2.2.6CC&B v2.5 Manage Deposit Charges
- 4.3.1.1 CC&B v2.5 Manage Payments

This process describes Billing for Item-based services. Utility Companies may charge for some equipment - budged and non-budged items installed on Service Points Premises due to various reasons. When such an items installed Utility Company expects to get paid for these items usage.

Billing process evaluates type and amount (if multiple items are installed), apply appropriate rates and generate Bills. Most bills are produced in a Batch Billing process. However the CSR or Authorized User can create Bills manually if required. If a Bill is generated, but contains errors the CSR or Authorized User has the ability to modify the Bill or Bill Segment.

As soon as Bill is created, Company makes it available for Customer and every person linked to the Customer's Account who requires a copy of the Bill.

Actors/Roles

The Manage Item Charges business process involves the following actors and roles:

- **CSR**: CSR or Authorized User of the Customer Care and Billing application.
- **CC&B**: The Customer Care and Billing application. Steps performed by this actor/role are performed automatically by the application, without the need for user initiation or intervention.
- **Customer**: Utility Company's Customer
- **Field Operations**: Company or department that provides operational support, coordinates and performs field work (installation, repair, maintenance, investigations etc. that allows Utilities to provide services to customers).
- **Document Management Software:** Document Management Software that allows create and maintain paper or paperless documents and manage document workflow.

Business Process Diagrams

Manage Item Charges Process Model - Page 1

4.2.2.3 CC&B v2.5 *Manage Item Charges*
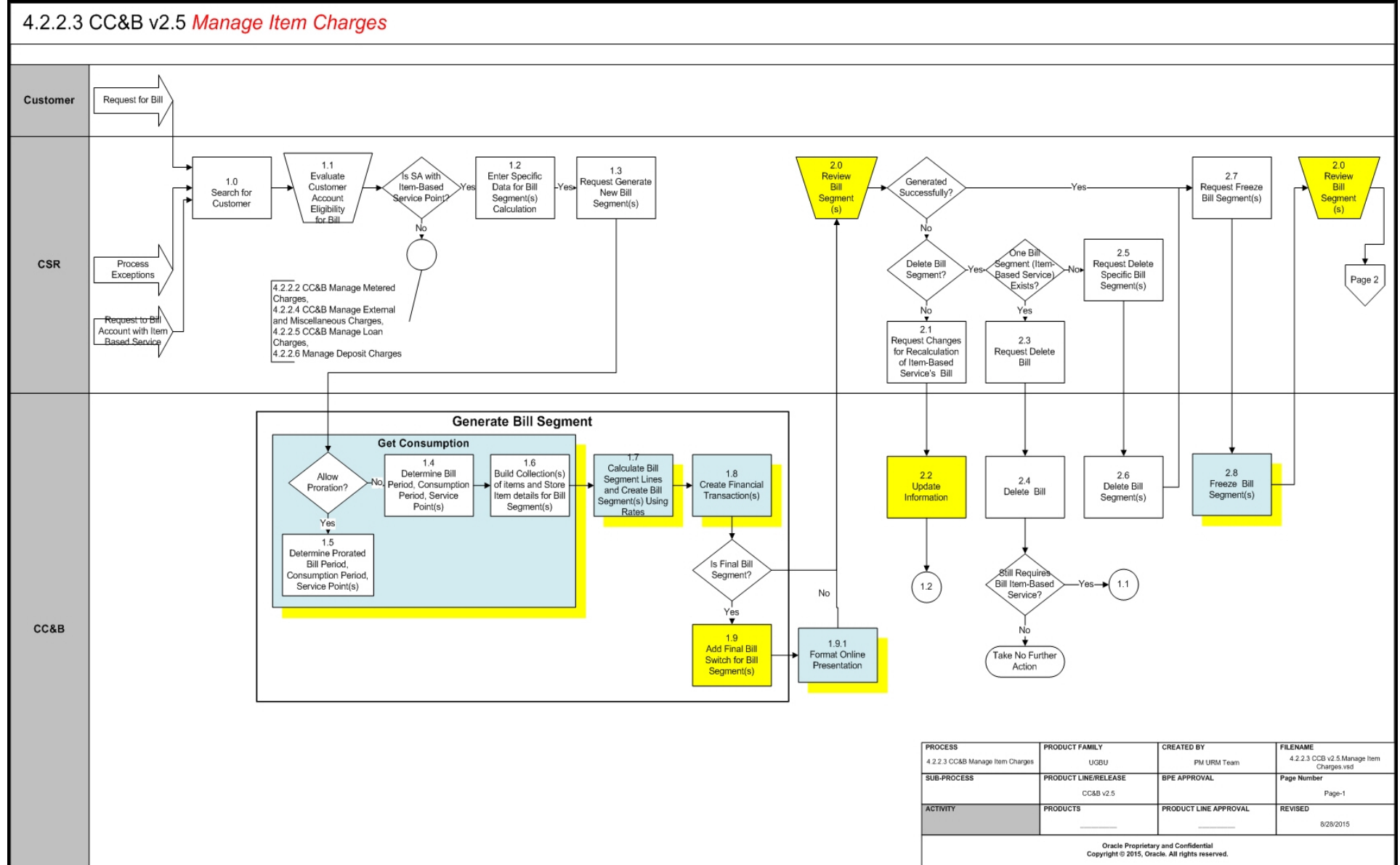
Manage Item Charges Process Model - Page 2

4.2.2.3 CC&B v2.5 *Manage Item Charges*

Customer

6.0 → **6.1 Receive Bill** → Take No Further Action

CSR

Page 1 → Requires Rebill? —No→ Requires Cancel Bill Segment(s)? —No→ Add Bill Message(s)? —No→ 4.1 Request Complete Bill → 5.2 Review Bill → Completed Successfully? —Yes→ Reopen Bill? —No→

Requires Rebill? —Yes→ 2.9 Request Rebill Bill Segment(s) → Undo Bill Segment(s) Rebill? —No→ 2.7

Undo Bill Segment(s) Rebill? —Yes→ 3.1 Request Undo Rebill Bill Segment(s)

Requires Cancel Bill Segment(s)? —Yes→ 3.3 Request Cancel Frozen Segment(s) → Undo Bill Segment(s) Cancel? —No→ 3.7 Request Finalize Cancel Bill Segment(s)

Undo Bill Segment(s) Cancel? —Yes→ 3.5 Request Undo Cancel Bill Segment(s)

Add Bill Message(s)? —Yes→ 3.9 Request Add Bill Message(s)

Completed Successfully? —No→ 5.3 Make Necessary Changes for Bill

Reopen Bill? —Yes→ 5.4 Request Reopen Bill

5.6 Request Changes to Impact Balance

CC&B

3.0 Update Bill Segment to Pending Cancel and Create New Bill Segment(s)

3.2 Delete New Segment(s) and Return Original Bill Segment(s) to Frozen

3.4 Update Bill Segment(s) to Pending Cancel

3.6 Return Original Bill Segment(s) to Frozen

3.8 Update Bill Segment to Canceled(s)

4.0 Add Bill Message(s)

2.2 Update Information

5.5 Update Current Bill to Reopen

5.7 Update Balance

—No→ 4.1

Pre-Bill Completion

4.2 Create Bill Message → Requires Additional Bill Message(s)? —No→ Additional Financial Transactions for this Bill? —No→

Bill Completion

4.5 Determine Due Date, Late Payment Charge Date, and Credit Review Date → Requires LPC Calculation? —No→ Autopay for Account? —No→ Requires Cancel Severance Process? —No→ Requires Cancel Write Off Process? —No→

Post Bill Completion

5.0 Create Additional Required Bill Message(s)

Requires Additional Bill Message(s)? —Yes→ 4.3 Create Bill Messages Based on Configuration

Additional Financial Transactions for this Bill? —Yes→ 4.4 Add Adjustments, Payments, Bill Corrections to Affect Bill Amount

Requires LPC Calculation? —Yes→ 4.6 4.3.2.5a Manage Late Payment Charge

Autopay for Account? —Yes→ 4.7 4.3.1.1d Manage Autopay

Requires Cancel Severance Process? —Yes→ 4.8 4.3.2.2 Manage Severance Process

Requires Cancel Write Off Process? —Yes→ 4.9 4.3.2.5 Write Off Uncollectible Receivables

5.1 Update Bill with Completion Details

5.8 Extract Bill for Delivery (print, email, web, etc.)

Document Management Software

5.9 Produce Bill → 6.0 Send Bill to Customer → 6.1

PROCESS	PRODUCT FAMILY	CREATED BY	FILENAME
4.2.2.3 CC&B Manage Item Charges	UGBU	PM URM Team	4.2.2.3 CCB v2.5.Manage Item Charges.vsd
SUB-PROCESS	PRODUCT LINE/RELEASE	BPE APPROVAL	Page Number
	CC&B v2.5		Page-2
ACTIVITY	PRODUCTS	PRODUCT LINE APPROVAL	REVISED
			8/28/2015

Manage Item Charges Process Model - Page 3

4.2.2.3 CC&B v2.5 *Manage Item Charges*

Customer

6.0 → 6.1 Receive Bill → Take No Further Action

CC&B

Batch Billing

Generate Bill Segment

6.2 Select Accounts for Open Bill Cycle → 6.3 Check Eligibility for Batch Billing → Allow Proration?

Get Consumption

No → 1.4 Determine Bill Period, Consumption Period, Service Point(s) → 1.6 Build Collection(s) of items and Store Item details for Bill Segment(s) → 1.7 Calculate Bill Segment Lines and Create Bill Segment(s) Using Rates → Is Final Bill Segment? → No → Bill Segment Generated Successfully? → Yes

Allow Proration? Yes → 1.5 Determine Prorated Bill Period, Consumption Period, Service Point(s)

1.8 Create Financial Transaction(s)

Is Final Bill Segment? Yes → 2.1 Add Final Bill Switch for Bill Segment(s)

Bill Segment Generated Successfully? No → 6.4 Highlight Bill Segment Exceptions

Freeze Bill Segment

2.6 Freeze Bill Segment(s) → Bill Segment Generated Successfully? → No → 6.4 Highlight Bill Segment Exceptions

→ Page 4

Yes →

Bill Completion

Pre-Bill Completion

4.2 Create Bill Message → Requires Additional Bill Message(s)? → No → Additional Financial Transactions for this Bill? → No → 4.5 Determine Due Date, Late Payment Charge Date, and Credit Review Date → Requires LPC Calculation? → No → Autopay for Account? → No → Requires Cancel Severance Process? → No → Requires Cancel Write Off Process? → No

Post Bill Completion

5.0 Create Additional Required Bill Message(s)

Requires Additional Bill Message(s)? Yes → 4.3 Create Bill Messages Based on Configuration

Additional Financial Transactions for this Bill? Yes → 4.4 Add Adjustments, Payments, Bill Corrections to Affect Bill Amount

Requires LPC Calculation? Yes → 4.6 4.3.2.5a Manage Late Payment Charge

Autopay for Account? Yes → 4.7 4.3.1.1d Manage Autopay

Requires Cancel Severance Process? Yes → 4.8 4.3.2.2 Manage Severance Process

Requires Cancel Write Off Process? Yes → 4.9 4.3.2.5 Write Off Uncollectible Receivables

5.1 Update Bill with Completion Details → Completed Successfully? → Yes → 5.8 Extract Bill for Delivery (print, email, web, etc.)

Completed Successfully? No → 6.5 Highlight Bill Exceptions

Schedule Batch Billing

Document Management Software

5.9 Produce Bill → 6.0 Send Bill to Customer → 6.1

PROCESS	PRODUCT FAMILY	CREATED BY	FILENAME
4.2.2.3 CC&B Manage Item Charges	UGBU	PM URM Team	4.2.2.3 CCB v2.5.Manage Item Charges.vsd
SUB-PROCESS	PRODUCT LINE/RELEASE	BPE APPROVAL	Page Number
	CC&B v2.5		Page-3
ACTIVITY	PRODUCTS	PRODUCT LINE APPROVAL	REVISED
			8/28/2015

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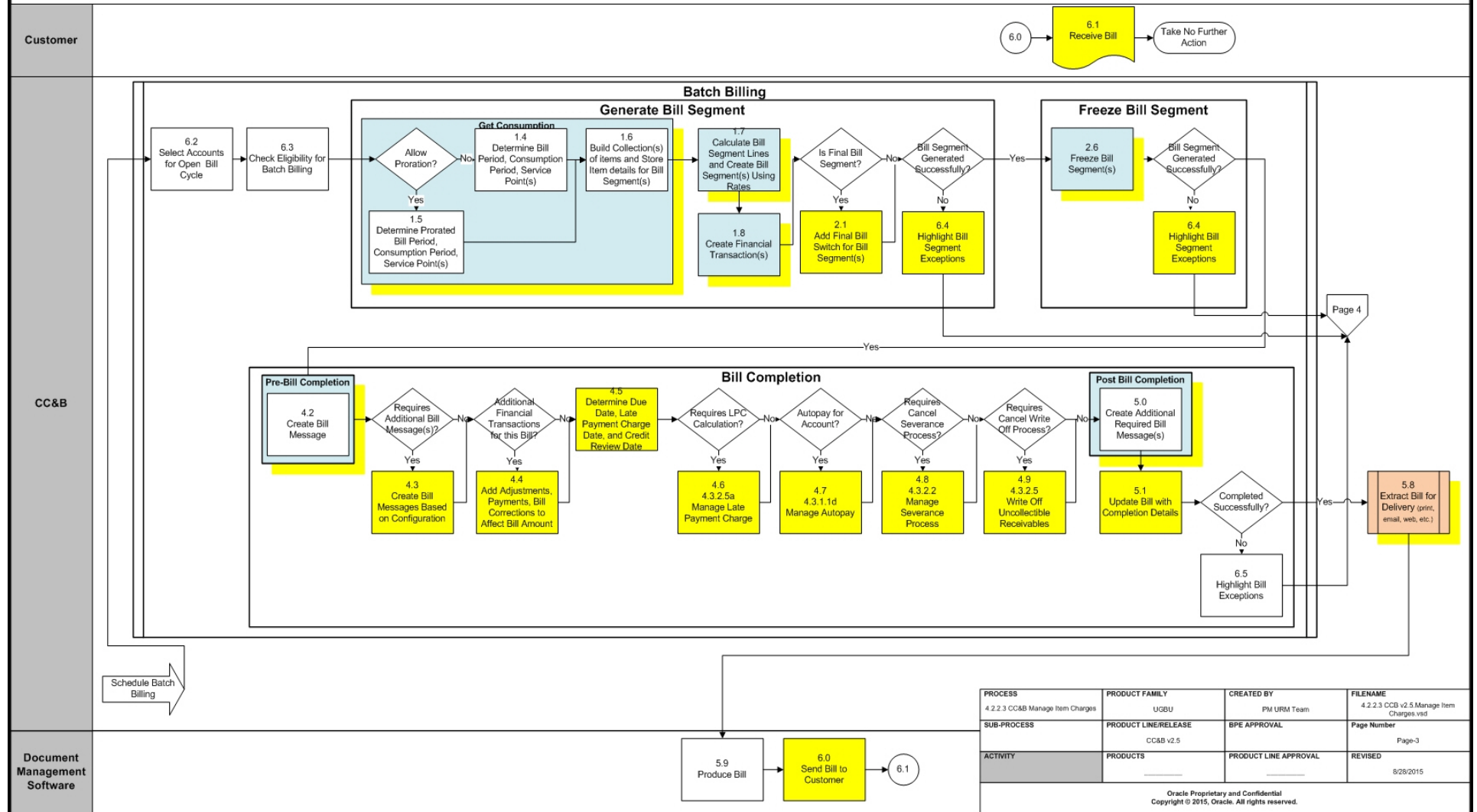
Manage Item Charges Process Model - Page 4

4.2.2.3 CC&B v2.5 *Manage Item Charges*

Customer

CSR

6.8
Evaluate and
Investigate
Error

6.9
Resolve Error

7.1
Request Complete
To Do

Requires
Rebill?

No ► Take No Further
Action

Yes

2.9

6.8
Evaluate
and
Investigate Error

6.9
Resolve Error

7.1
Request Complete
To Do

Requires
Complete Bill?

No ► Take No Further
Action

Yes

4.1

7.0
Update Data

7.2
Complete To Do
Entry

7.0
Update Data

7.2
Complete To Do
Entry

CC&B

Page 3

Schedule To Do
Bill Segment
Error Process

TO DO Bill Segment Error Process

6.6
Identify Bill
Segments in Error
Status

6.7
Create Bill
Segment
Exceptions To Do

Schedule To Do
Bill Error Process

TO DO Bill Error Process

7.3
Identify Bills in
Error Status

7.4
Create Bill
Exceptions To Do

Document Management Software

PROCESS	PRODUCT FAMILY	CREATED BY	FILENAME
4.2.2.3 CC&B Manage Item Charges	UGBU	PM URM Team	4.2.2.3 CCB v2.5.Manage Item Charges.vsd
SUB-PROCESS	PRODUCT LINE/RELEASE	BPE APPROVAL	Page Number
	CC&B v2.5		Page-4
ACTIVITY	PRODUCTS	PRODUCT LINE APPROVAL	REVISED
			8/28/2015

Manage Item Charges Detailed Process Model Description

This section provides a detailed description of the "Manage Item Charges" business process, including:

- 1.0 Search for Customer
- 1.1 Evaluate Customer Account Eligibility for Bill
- 1.2 Enter Specific Data for Bill (Segment)s Calculation
- 1.3 Request Generate New Bill Segments
- 1.4 Determine Bill Period, Consumption Period, Service Points
- 1.5 Determine Prorated Bill Period, Consumption Period, Service Points
- 1.6 Build Collection of Items and Store Item Details for Bill Segments
- 1.7 Calculate Bill Segments Lines and Create Bill Segments Using Rates
- 1.8 Create Financial Transactions
- 1.9 Add Final Bill Switch for Bill Segments
- 1.9.1 Format Online Presentation
- 2.0 Review Bill Segments
- 2.1 Request Changes for Recalculation of Item Bill Segment
- 2.2 Update Information
- 2.3 Request Delete Bill
- 2.4 Delete Bill
- 2.5 Request Delete Specific Bill Segments
- 2.6 Delete Bill Segments
- 2.7 Request Freeze Bill Segments
- 2.8 Freeze Bill Segments
- 2.9 Request Re-Bill Bill Segments
- 3.0 Update Bill Segments to Pending Cancel and Create New Bill Segments
- 3.1 Request Undo Re-Bill Bill Segments
- 3.2 Delete New Segments and Return Original Bill Segments to Frozen
- 3.3 Request Cancel Frozen Segments
- 3.4 Update Bill Segments to Pending Cancel
- 3.5 Request Undo Cancel Bill Segments
- 3.6 Return Original Bill Segments to Frozen
- 3.7 Request Finalize Cancel Bill Segments
- 3.8 Update Bill Segments to Canceled
- 3.9 Request Add Bill Messages
- 4.0 Add Bill Messages
- 4.1 Request Complete Bill
- 4.2 Create Bill Message
- 4.3 Create Bill Messages Based on Configuration
- 4.4 Add Adjustments, Payments, and Bill Corrections to Affect Bill Amount
- 4.5 Determine Due Date, Late Payment Charge Date, and Credit Review Date
- 4.6 4.3.2.5a CC&B v2.5 Manage Late Payment Charge
- 4.7 4.3.1.1d CC&B v2.5 Manage Auto-payments
- 4.8 4.3.2.2 CC&B v2.5 Manage Severance Process
- 4.9 4.3.2.6 Write Off Uncollectible Receivables
- 5.0 Create Additional Required Bill Messages
- 5.1 Update Bill with Completion Details
- 5.2 Review Bill
- 5.3 Make Necessary Changes for Bill
- 5.4 Request Reopen Bill

1.0 Search for Customer

Reference: for the associated business process diagram.

Actor/Role: CSR

Description: Upon receipt of request or inquiry for Billing the CSR or Authorized User accesses Control Central Search to locate the customer in CC&B.

1.1 Evaluate Customer Account Eligibility for Bill

Reference: for the associated business process diagram.

Actor/Role: CSR

Description: CC&B 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.

Available Algorithms
- Installation Options - Control Central Alert Algorithms
- BIFN-BL INFO - This algorithm formats the Bill Information that appears throughout the system. Four different formats are used.

Entities to Configure
- Installation Options

1.2 Enter Specific Data for Bill (Segment)s Calculation

Reference: for the associated business process diagram.

Actor/Role: CSR

Description: If the CSR or Authorized User identifies a need to create a Bill for the customer, the CSR or Authorized User provides information about the Billing period 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 New Bill Segments

Reference: for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User requests a new online Bill created. This online Bill may contain one or more segments. The Manual billing process consists of several steps. The first step is to request system to calculate and create the Bill and Bill Segment for the Items. If only one Item based Service Agreement exists for the Account, then only one 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, Consumption Period, Service Points

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Get Consumption
- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: This step could be executed from online and batch billing process. The system first determines the Bill Period boundary. The end date is either the end date of Bill cycle schedule window, the Service Agreement's end date, or, determined by the CSR or Authorized User for online Billing.

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 a 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, the Bill Segment's the end date is the Service Agreement's end date.
  - If this is a regular Bill Segment the 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.

Available Algorithms
- BSGC-SP - Get consumption from metered Service Points and Item-Based Service Points linked to the SA.
- BSGC-MS - This bill segment get consumption algorithm simply copies the read and item details from the master SA's bill segment.

Process Names
- Billing

Entities to Configure
- Frequency
- Bill Cycles
- Bill Segment Type
- Rates
- SA Types

1.5 Determine Prorated Bill Period, Consumption Period, Service Points

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Get Consumption
- Generate Bill Segment

- Batch Billing

Actor/Role: CC&B

Description: The system first determines the prorated Bill Period boundary. The end date is either the end date of Bill cycle schedule window, the Service Agreement's end date, or, determined by the CSR or Authorized User for manual Billing. If this is the first Bill Segment for the Service Agreement, the Bill Segment start date is set to the start date of the Service Agreement, otherwise the start date is the previous Bill Segment's end date. The system next determines the Consumption Period boundary.

If this is the first or final Bill Segment for the customer, the number of days may be more or less than the normal Bill period. Based on established business rules, the system allows for proration of first or final Bill Segment as well as other Bill Periods outside the normal time period.

> **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. If the minimum number of days is not met, the Bill Segment will not be created at this time. The system waits until the number of days in the Bill Segment is at least as large as the minimum and the account's Bill cycle must be open.

This step is executed from online and batch billing process

Available Algorithms
- BSGC-SP - Get consumption from the Metered and item-Based Service Points linked to the SA.
- BSGC-MS - This bill segment get consumption algorithm simply copies the read and item details from the master SA's bill segment.

Process Names
- Billing

Entities to Configure
- Frequency
- Bill Cycles
- Bill Segment Type and associated algorithms
- Rates
- SA Types

1.6 Build Collection of Items and Store Item Details for Bill Segments

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Get Consumption
- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: System creates collection of billed and non-billed Items installed at the SA's SPs during the identified Billing Period.

> **Note**: The system ignores Service Points that are not billable, disconnected before the Bill period started, or are yet to be connected as of the Bill end date.

This step is executed from online and batch billing process.

Available Algorithms
- BSGC-SP - Get consumption from the Metered and item-Based Service Points linked to the SA.
- BSGC-MS - This bill segment get consumption algorithm simply copies the read and item details from the master SA's bill segment.

Process Names
- Billing

Entities to Configure
- Frequency
- Bill Cycles
- Bill Segment Type
- Rates
- SA Types
- Item

1.7 Calculate Bill Segments Lines and Create Bill Segments Using Rates

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: CC&B passes the consumption information (Item details) to Rates to calculate the Bill Segment and build the Bill Segment calculation lines.

This step is executed from online and batch billing process.

Available Algorithms
- BSBS-RT - This Bill Segment creation algorithm creates a Bill Segment using the service agreement's rate. This option would typically be used for metered services and ratable non-metered services.

Process Names
- Billing

Entities to Configure
- Bill Segment Type
- Rates
- SA Type

1.8 Create Financial Transactions

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: CC&B 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.

Available Algorithms
- BSBF-BA - creates Financial Transaction for a Bill Segment where: - Payoff amount = Bill amount - Current amount = Bill amount / zero / recurring charge amount.
- BSBF-CU - This bill segment financial transaction algorithm creates a financial transaction for a bill segment where: - Payoff amount = 0 - Current amount = 0 (company usage).
- BSFZ-EMPTY - This is a Customer Class Bill Segment freeze/cancel algorithm; it is a sample algorithm type to indicate that a custom algorithm type can be built.
- CI_BSGFTDIST - Payoff Amt = Bill Amt / Current Amt = Amt Due (Checks bill segment CLOB for GL details)

Process Names
- Billing

Entities to Configure
- Rates
- Customer Class
- Bill Segment Type
- SA Type

1.9 Add Final Bill Switch for Bill Segments

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: If this is the final Bill Segment for this Service Agreement it is marked as a closing Bill Segment.

Note: The Service Agreement must be stopped for this switch to be turned on.

Process Names
- Billing

1.9.1 Format Online Presentation

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CC&B

Description: Formatting information to be presented Online.

Available Algorithms
- C1-BSI-INFO - This algorithm formats the "Bill Segment Information" that appears throughout the system. It concatenates the fields and delimiters specified as algorithm parameters. This is an Installation Option algorithm type.
- C1-BST-INFO - This algorithm formats the "Bill Segment Information" that appears throughout the system. It concatenates the fields and delimiters specified as

algorithm parameters. This is a Bill Segment Type algorithm type which overrides C1-BSI-INFO if configured for a bseg type.

- C1-BL-DISP - This algorithm is used to generate an on-line bill image using the Documaker software product.

Entities to Configure
- Bill Segment Type - Bill Segment Information
- Installation Options - Framework- Bill Segment Information

2.0 Review Bill Segments

Actor/Role: CSR

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

Business Objects
- WX-Bill - Bill business object (simple bill elements only). This business object is used for simple access to bill information.
- BillRoutingR - Bill Routing Details. This business object is used on the billing history zone displayed on control central - account information.
- C1-BillLite - This business object can be used to read the fields (except CLOB) of the MO's primary table - Bill.
- 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.
- C1_BillSegmentStatus - Bill Segment Status. This business object is used to retrieve the status of a bill segment.
- WX-BillSegment - Bill Segment. This business object is used to read the details related to a bill segment.
- C1-BillSegmentRead - Bill Segment Read
- C1-BillSegmentLite - This business object can be used to read the fields (except CLOB) of the MO's primary table - Bill Segment.
- CI_BillSegmentException - This business object is used to read the exception related to a bill segment.
- CI_BillSegmentCLOB - This business object is used to read the CLOB details related to a bill segment.
- C1-BillSegmentCalcHeaders - This business object is used to read details related to a bill segment. The following is returned:
    - Bill Segment's SA ID
    - Bill ID
    - Bill Segment Period
    - Usage Period
    - Calculation Header List

2.1 Request Changes for Recalculation of Item Bill Segment

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CSR

Description: After review CSR or Authorized User identifies a problem with the generated 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 for an Item based Service Agreement may include a change to the number of Items, or date information. There are no specific restrictions on changes that need to be done across the application to calculate the correct Bill Segment.

2.2 Update Information

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CC&B

Description: Changes made by the CSR or Authorized User are applied in CC&B.

2.3 Request Delete Bill

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CSR

Description: During the review process it is determined the Bill Segment was created incorrectly or by mistake. The CSR or Authorized User requests to delete the Bill or Bill Segment. When a Bill has only one Bill segment, the Bill and the corresponding segment are deleted at the Bill level.

> **Note**: The Bill can be deleted prior to completion when Bill Segments are Freezable or in Error status.

2.4 Delete Bill

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CC&B

Description: The Bill is deleted in CC&B and the financial record is removed from the database. There is no financial impact to the Customer's Account.

2.5 Request Delete Specific Bill Segments

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User determines specific Item based Service Bill Segments associated with a given Bill require deletion and request to delete the Bill Segments.

2.6 Delete Bill Segments

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CC&B

Description: The specific Bill Segments are deleted in CC&B and the financial records are removed from the database. There is no financial impact to the Customer's Account.

2.7 Request Freeze Bill Segments

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Actor/Role: CSR

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

2.8 Freeze Bill Segments

Reference: Manage Item Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Freeze Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: The Bill Segments and associated Financial Transaction are frozen in CC&B. 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 process is initiated by CSR or Authorized User when he/she requests to Freeze Bill Segments created for the Item based 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.

Available Algorithms
- BSFZ-EMPTY - This is a Customer Class Bill Segment freeze/cancel algorithm; it is a sample algorithm type to indicate that a custom algorithm type can be built.

Process Names
- Billing

Entities to Configure
- Installation Options - Bill Segment Freeze Options

2.9 Request Re-Bill Bill Segments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: As more information is available, or there is further review or investigation, the CSR or Authorized User now determines a need to Cancel and Rebill the Bill Segments. If the problem identified in frozen Bill Segment has been resolved, CSR or Authorized User requests to Rebill the Bill Segment.

Note. When something has been wrong for an extended period of time with Billing, the CSR or Authorized User may use Multi Cancel/Rebill page to request Cancel/Rebill.

Entities to Configure
- Bill Cancel Reasons

3.0 Update Bill Segments to Pending Cancel and Create New Bill Segments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: The original Bill Segments is updated to Pending Cancel, and new Bill Segments created. A new Financial Transaction is associated with the new Bill Segment and the original Financial Transaction is Pending Cancel.

Entities to Configure
- Bill Cancel Reasons

3.1 Request Undo Re-Bill Bill Segments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User has the option to undo the pending Cancel Bill Segments. Prior to cancellation, the CSR or Authorized User determines the Bill Segments should not be canceled, and uses the Undo function.

3.2 Delete New Segments and Return Original Bill Segments to Frozen

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: CC&B deletes the newly generated segment and returns the original Bill Segment to frozen. There is no impact to Financial Transactions.

3.3 Request Cancel Frozen Segments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: The Bill Segments 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.

Entities to Configure
- Cancel Reasons

3.4 Update Bill Segments to Pending Cancel

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: When the CSR or Authorized user requests Initiate Cancel, the system updates the Bill Segment Status to Pending Cancel.

3.5 Request Undo Cancel Bill Segments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User has the option to undo the pending Cancel Bill Segments. Prior to the cancellation the CSR or Authorized User determines the Bill Segments should not be canceled, and uses the Undo function.

Entities to Configure
- Cancel Reasons

3.6 Return Original Bill Segments to Frozen

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: The original Bill Segments is returned to Frozen in CC&B. There is no impact to financial transactions. The Billing process could be resumed.

3.7 Request Finalize Cancel Bill Segments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User confirms the cancellation of Bill Segments.

Entities to Configure
- Cancel Reasons

3.8 Update Bill Segments to Canceled

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: The existing Bill Segments is updated to Canceled status in CC&B. 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.

Entities to Configure
- Configuration required Y

Available Algorithms
- BSFZ-EMPTY - This is a Customer Class Bill Segment freeze/cancel algorithm; it is a sample algorithm type to indicate that a custom algorithm type can be built.

3.9 Request Add Bill Messages

Reference: for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User may add Service Agreement related Bill Messages for a given Bill Segments. 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.

Entities to Configure
- Bill Messages

4.0 Add Bill Messages

Reference: for the associated business process diagram.

Actor/Role: CC&B

Description: The Bill Message is added in CC&B.

4.1 Request Complete Bill

Reference: for the associated business process diagram.

Actor/Role: CSR

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

4.2 Create Bill Message

Reference: for the associated business process diagram.

Group:

- Pre-Bill Completion
- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: Bill Completion is the last and one of the most critical components of the Billing process. The system completes the Bill, making it ready for extract and print. CC&B 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. Process could be initiated from online or from Batch billing.

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.

Entities to Configure
- To Do Type
- To Do Role
- Bill Message
- SA Type
- Customer Class

Business Objects
- C1-AccountBillMessage - Account Bill Message

Available Algorithms
- DEL BSEG - This SA Type pre-bill completion algorithm type deletes bill segments that are in Error.
- CPBC-DB - Pre-bill completion algorithm 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 checks if taxes should be charged by comparing the bill's accumulated tax amount with the tax threshold amount.
- C1-CSB-EBC - This algorithm skips completion of a bill until the bill cycle schedule end date, for summary billing.
- C1-CHKBLELIG - This algorithm checks if all Bill Segments on the Bill are Freezable, Frozen or Cancelled. If not, return Skip Bill Completion Action.
- CPBC-DMCH - Apply De Minimis Rule (UK VAT Only)

Process Names
- Billing

4.3 Create Bill Messages Based on Configuration

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: CC&B 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 and batch.

Entities to Configure
- Customer Class Bill Messages
- Rate Schedule Bill Messages
- Meter Reader Remark Bill Messages

- Account and Service Agreement Bill Messages
- Service Provider Bill Messages

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

Process Names
- Billing

4.4 Add Adjustments, Payments, and Bill Corrections to Affect Bill Amount

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: During Bill Completion CC&B adds Adjustments, Payments or Bill corrections not included in the previous Bills to the newly created Bill.

Step could be initiated from online and batch.

Available Algorithms
- C1-SUP-PR-BL - This customer class bill completion algorithm checks if the current bill being completed is for an account that has already been final billed in a previous run. If the account has been final billed, and if the current bill is not the final bill, the bill will not be included in the bill extract.

Process Names
- Billing

4.5 Determine Due Date, Late Payment Charge Date, and Credit Review Date

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

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. This step could be initiated from online and batch.

Entities to Configure
- Late Payment Profile on SA Type
- Customer Class - Due Date, LPC eligibility, Late Payment Charge Grace Days
- Adjustment Types
- Rates

Available Algorithms
- 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 - This algorithm type is used during the late payment charge background process to determine if an account is eligible for late payment charges.

Process Names
- Billing

4.6 4.3.2.5a CC&B v2.5 Manage Late Payment Charge

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: Late Payment Charges may be calculated during Bill Completion. Refer to 4.3.2.5a CC&B v2.5 Manage Late Payment Charge.

Process Names
- Billing - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

4.7 4.3.1.1d CC&B v2.5 Manage Auto-payments

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: An Autopay payment may be created during Bill Completion. Refer to 4.3.1.1d CC&B v2.5 Manage Autopay.

Process Names
- Billing - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

4.8 4.3.2.2 CC&B v2.5 Manage Severance Process

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: The status of a Severance Process can change due to Bill Completion. Refer to 4.3.2.2 CC&B v2.5 Manage Severance Process.

Process Names
- Billing - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

4.9 4.3.2.6 Write Off Uncollectible Receivables

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: The status of a Write Off Process or Write Off SA can change due to Bill Completion. Refer to 4.3.2.5 Write Off Uncollectible Receivables.

Process Names
- Billing - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

5.0 Create Additional Required Bill Messages

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Post Bill Completion
- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: CC&B can perform various post Bill completion activities. Additional custom Bill Messages 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. This step could be initiated from online and batch.

Entities to Configure
- SA Type
- Customer Class
- Adjustment Types

Available Algorithms
- C1-CN-ADNB - This customer class post Bill completion algorithm recreates adjustments after a credit note is completed.
- C1-CR-BLRVWS - This algorithm type will create a bill review record if a bill has financial transactions with FT GL lines that reference a distribution code with an accounting method of either 'Bill Due Date' or 'Earlier of Bill Due Date and Payment Date'.
- C1-MULT-DUDT - This algorithm derives a second and third due date for a bill and captures these as bill characteristics. The second due date is only captured if the account's customer class denotes that the customer is eligible for late payment charges.
- WX-SSBNOTIFY - This algorithm sets the corresponding Self-Service Notification tasks of the account that are due for notification.

Process Names
- Billing

5.1 Update Bill with Completion Details

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Group:

- Post Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: All Bill completion details are now updated in CC&B.

Process Names
- Billing - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

5.2 Review Bill

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User evaluates the Account and reviews the Bill for accuracy. The Bill may not be in a Complete status. Some data may be missing or has incomplete information. 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 changes reflected in a new Bill.

Business Objects
- WX-Bill - Bill business object (simple bill elements only). This business object is used for simple access to bill information.
- BillRoutingR - Bill Routing Details. This business object is used on the billing history zone displayed on control central - account information.
- C1-BillLite - This business object can be used to read the fields (except CLOB) of the MO's primary table - Bill.
- 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.
- C1_BillSegmentStatus - Bill Segment Status. This business object is used to retrieve the status of a bill segment.
- WX-BillSegment - Bill Segment. This business object is used to read the details related to a bill segment.
- C1-BillSegmentRead - Bill Segment Read
- C1-BillSegmentLite - This business object can be used to read the fields (except CLOB) of the MO's primary table - Bill Segment.
- CI_BillSegmentException - This business object is used to read the exception related to a bill segment.
- CI_BillSegmentCLOB - This business object is used to read the CLOB details related to a bill segment.
- C1-BillSegmentCalcHeaders - This business object is used to read details related to a bill segment. The following is returned:
  - Bill Segment's SA ID

- Bill ID
- Bill Segment Period
- Usage Period
- Calculation Header List

5.3 Make Necessary Changes for Bill

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

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.

5.4 Request Reopen Bill

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CSR

Description: After review the CSR or Authorized User determines to reopen a Bill for the Customer's account.

5.5 Update Current Bill to Reopen

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: The current Bill is reopened in CC&B and available for applicable changes.

5.6 Request Changes to Impact Balance

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

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.

5.7 Update Balance

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: The financial balance is updated in CC&B.

5.8 Extract Bill for Delivery (print, email, web, etc.)

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: CC&B

Description: Typically CC&B 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.

Entities to Configure
- Bill Route Type

Business Objects
- BillRoutingR - Bill business object to read bill routing details.
  Note: This BO is currently used for reprint Bills.
- 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.

Available Algorithms
- BLEX-EX - This bill route type algorithm type constructs the records that contain the information that appears on a printed Bill (for Documaker).
- C1-BLEX-CR - This Bill Route Type extract0020algorithm prepares the report information needed to create a Bill using a Reporting Engine.
- C1-BLEX-XML - This algorithm constructs the XML file records that contain the information that appears on a printed bill (for Documaker).
- C1-BLEX-BIP - This Bill Route Type extract algorithm schedules report job in BI Publisher to generate Bill Reports in range.

Process Names
- POSTROUT - CIPBXBLB
- Custom Extract Process

5.9 Produce Bill

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: Document Management Software

Description: Document Management Software reads and process bill information produced by CC&B. It prints actual bills or prepare bills in another format (e-mail, PDF online format, short message service (SMS)).

6.0 Send Bill to Customer

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: Document Management Software

Description: The printed Bill is sent or made available for the Customer.

6.1 Receives Bill

Reference: Manage Item Charges Process Model - Page 2 on page 4 for the associated business process diagram.

Actor/Role: Customer

Description: The customer receives the Bill.

Entities to Configure
- Bill Route Type

6.2 Select Accounts for Open Bill Cycle

Reference: Manage Item Charges Process Model - Page 3 on page 5 for the associated business process diagram.

Group: Batch Billing

Actor/Role: CC&B

Description: Using the established Bill Cycle Schedule, CC&B 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. Every Bill cycle has a Bill cycle schedule that defines the dates when a cycle's accounts are to be billed. Rather than attempt to create Bills on one evening, most Bill cycles use a concept of "Window Billing" where the system attempts to produce Bills for accounts over a few nights. The first night (opening date) should be the earliest day that meter reads for the account are available in CC&B. The last night (closing date) should be the last possible day that meter reads are available for this Bill cycle window.

Entities to Configure
- Bill Cycle

Process Names
- Billing

6.3 Check Eligibility for Batch Billing

Reference: Manage Item Charges Process Model - Page 3 on page 5 for the associated business process diagram.

Actor/Role: CC&B

Description: Normally, most Bills are created and completed automatically. At Billing time, CC&B 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. The Bill Cycle must be defined for the Account. The Service Agreement must be defined as eligible for Billing and met the minimum number of days defined for Billing. If defined, CC&B will not create a Bill for accounts with no Billable service agreements, no eligible Financial Transactions, and no temporary account messages.

Entities to Configure
- SA Type
- Customer Class

Available Algorithms
- 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 account messages to be swept onto the Bill.

Process Names
- Billing - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

6.4 Highlight Bill Segment Exceptions

Reference: Manage Item Charges Process Model - Page 3 on page 5 for the associated business process diagram.

Group:

- Create Bill Segment
- Freeze Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: If a Bill Segment cannot be created, CC&B 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 Segments and attempts to recreate them. It continues this throughout the Bill window. If a Bill Segments is in error at the end of the Bill window, a user must intervene and fix them. If the Bill Segments is still in error when the cycle's next window opens, a Billing error is generated.

Process Names
- Billing

6.5 Highlight Bill Exceptions

Reference: Manage Item Charges Process Model - Page 3 on page 5 for the associated business process diagram.

Group:

- Bill Completion
- Batch Billing

Actor/Role: CC&B

Description: If a Bill cannot be completed, CC&B 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.

Process Names
- Billing

6.6 Identify Bill Segments in Error Status

Reference: Manage Item Charges Process Model - Page 4 on page 6 for the associated business process diagram.

Group: TO DO Bill Segment Error Process

Actor/Role: CC&B

Description: CC&B identifies Bill Segments in error status. CC&B can create a To Do Entry for every Bill Segment in error status.

Entities to Configure
- To Do Role
- To Do Type

Process Names
- • TD-BSERR- This background process creates a To Do entry for every Bill Segment that's in error.

6.7 Create Bill Segment Exceptions To Do

Reference: Manage Item Charges Process Model - Page 4 on page 6 for the associated business process diagram.

Group: TO DO Bill Segment Error Process

Actor/Role: CC&B

Description: CC&B 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.

Entities to Configure
- • To Do Role
- • To Do Type

Process Names
- • TD-BSERR- This background process creates a To Do entry for every Bill Segment that's in error.

6.8 Evaluate and Investigate Error

Reference: Manage Item Charges Process Model - Page 4 on page 6 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User will review the Bill Segment error and supporting information in CC&B SP/Item History, Item Configuration, Field Activity History, 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.

6.9 Resolve Error

Reference: Manage Item Charges Process Model - Page 4 on page 6 for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User resolves the error and enters information in CC&B.

7.0 Update Data

Reference: Manage Item Charges Process Model - Page 4 on page 6 for the associated business process diagram.

Actor/Role: CC&B

Description: Information required for resolution is updated in CC&B.

7.1 Request Complete To Do

Reference: for the associated business process diagram.

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.

7.2 Complete To Do Entry

Reference: for the associated business process diagram.

Actor/Role: CC&B

Description: The To Do Entry is updated to Complete Status in CC&B.

7.3 Identify Bills in Error Status

Reference: for the associated business process diagram.

Group: TO DO Bill Error Process

Actor/Role: CC&B

Description: CC&B identifies Bills in error status. CC&B can create a To Do Entry for every Bill in error status.

Entities to Configure
- To Do Role
- To Do Type

Process Names
- TD-BIERR - This background process creates a To Do entry for every Bill that's in error.

7.4 Create Bill Exceptions To Do

Reference: for the associated business process diagram.

Group: TO DO Bill Error Process

Actor/Role: CC&B

Description: CC&B 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.

Entities to Configure
- To Do Role
- To Do Type

Process Names
- TD-BIERR - This background process creates a To Do entry for every Bill that's in error.

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. For more information, refer to 4.2.2.2 CC&B v2.5 Manage Metered Charges.

Installation Options - Control Central Alert Algorithms

The following installation options are available:

Value	Description
PP-Active	Show Count of Active Pay Plans
PP-Broken	Show Count of Broken Pay Plans
PP-Kept	Show Count of Kept Pay Plans
CC-PPDENIAL	Count Pay Plan Denial Customer Contacts
CCAL WFACCTX	Display Active WF for Account Based on Context
CCAL WFPREMX	Display Active WF for Premise Based on Context
CCAL-TD	Highlight Outstanding To Do Entries
CCAL-DECL	Highlight Effective Declarations for Account and Premise
CCAL-CASE	Highlight Open Cases
CCAL-FAERMSG	Highlight FAs with outstanding outgoing messages
CI_WO_BILL	Highlight Written off Bills
CI_OD-PROC	Highlight Active Overdue Processes
CI_OMF_DF	Highlight Open and Disputed Match Even
CI_STOPSA-DF	Highlight Stopped SAs
C1-CCAL-CLM	Highlight Open Rebate Claims
C1-COLL-DF	Highlight Active Collection Processes
C1_COLLRF-DF	Highlight Active Collection Agency Referral
C1_PENDST-DF	Highlight Pending Start Service Agreements
C1_CASH-DF	Cash Only Account
C1_CRRT-DF	Credit Rating Alert
C1_LSSL-DF	Highlight Life Support/Sensitive Load on Person
C1_LSSLPR-DF	Highlight Life Support/Sensitive Load on Premise
C1_SEVPR-DF	Highlight Active Severance Processes
C1-CCAL-OCBG	Highlight Open Off Cycle Bill Generators
F1-SYNRQALRT	Retrieve Outstanding Sync Request
C1-STASKALRT	Retrieve Open Service Tasks
C1-STSKALSAC	Service Task Alert by SA Characteristic

Various Rate Schedule Algorithms and Major Configuration Information

Available Algorithms (Configured in DEMO environment)

The following algorithms are available to configure in DEMO environment:

Value	Description
Bill Factor Rate Selection Date	
C1-BFRACCTG	Bill Factor Date based on Accounting Date
C1-BFRBEND	Bill Factor Date based on Bill Segment End Date
C1-BFRBSTRT	Bill Factor Date based on Bill Segment Start Date
Rate Component Calculation	
C1-RC-CLAMT	Sum Calc Line Amounts
C1-BACKINREV	Back Into Revenue
C1-PCTGVNTOT	Determine Percent Given Total
RCAM-CCL	Calculate CCL
RCAM-MAPDEEM	Map usage using deemed profile curve
RCAM-VAT	Apply VAT To Cross-Referenced RCs
RCCL-CVTOSC	Produce Scalar Value From Interval Curve
Rate Component Criteria Comparison	
RECC-TIMESPN	Timespan Comparison
Rate Component Criteria Field	
C1-RCE-APAY	Return True If On Autopay
RECF-SRVTY	Check If Account Has SA's With A Service Type
Rate Component Interval Pricing	
RCIPRS	Interval Pricing - Same Interval Size
Rate Component Interval Pricing Audit	
RCIPRS-ADT	Interval Pricing Audit - Same Interval Size
Rate Component Step Algorithm	
RCSTEPMULTSQ	Step Multiplier "Multiply by step by SQ"
Rate Component Time of Use (TOU) Pricing	
RCTMPS	TOU Mapping & Pricing - Same Interval Size
RCTMS	TOU Mapping Only - Same Interval Size
Rate Component Time of Use (TOU) Pricing Audit	
RCTPRS-ADT	TOU Pricing Audit - Same Interval Size

Value	Description
Rate Component Value Algorithm	
PX VALUE	Extract Average Price From Interval Prices
RCVALTHRSHSQ	Calc Rate Component Value - Threshold Price based on SQ
RCVL-RNDXRF	Round Cross-Reference Amount
Calculation Rule Step Multiplier Algorithm	
MULTBYKW	Multiply step by KW
Calculation Rule BO Apply Calculation Rule Algorithm	
C1-ACALR-RFG	Execute Calculation Group
C1-APPLYTO	Apply To
C1-CALC-SQ	Calculate Service Quantity
CALCFNVL	Calculate Final Reading Value
C1-FLAT-CHRG	Flat Charge
C1-ITEMTYPE	Item Type
C1-MATH	Math Rule
C1-MAXIMUM	Maximum Charge
C1-MINIMUM	Minimum Charge
C1-SIMP-SUMM	Simple Summary
C1-SQ	Service Quantity
C1-STPD-SQ	Stepped Service Quantity
C1-SUMMARY	Summary
Calculation Rule Criteria BO Apply Criteria Algorithm	
C1-ECF-APCRT	Evaluate Criteria Field - Apply Eligibility Criteria
Calculation Rule Derive Value Algorithm	
C1-CALCBLDYS	Calculate days in billing period
CI_GETMIN	Derive Minimum Amount
CI_SABAL	Calculate SA Balance
Other Algorithms Related to Rates	
C1-BSBS-RT	Create bill segment using rate application
ADJG-RT	Adjustment generation - apply rate
C1-CBSPSA-RA	Apply the rate to each billing scenario
C1-RS-DTMBO	Determine Rate Schedule BO
CI_EVPRQ-APR	EV Pricing Request Apply Rate
C1-RSINFO	Rate Schedule Information

Entities to Configure

The following entities are available to configure:

- Classic and Java Rate Configuration
    - Bill Factors
    - Unit of Measure
    - Frequency
    - Characteristics
    - Distribution Codes
    - Rate Schedule
    - Define Rates on Applicable SA Types
    - Meter Configuration Type
    - Bill Messages
    - Eligibility Rules
    - Master Configuration
- Classic Rate Configuration
    - Rate Version
    - Rate Component
    - Service Quantity Rules
    - Register Rules
    - Service Quantity Identifiers
    - Various Algorithm Parameters
- Java Rate Configuration
    - Calculation Group
    - Calculation Line Category Type
    - Calculation Rule

Related Training

The following User Productivity Kit (UPK) modules provide training related to this business process:

- Oracle Utilities UPK for Customer Care and Billing, Administrative Setup
- Oracle Utilities UPK for Customer Care and Billing, Rating and Billing
- Oracle Utilities UPK for Customer Care and Billing, Rating and Billing for Interval Data
- Oracle Utilities UPK for Customer Care and Billing, User Tasks
- Oracle Utilities UPK for Customer Care and Billing, Credit and Collections