

Oracle Utilities Customer Care and Billing Release 2.4.0

Utility Reference Model

4.2.2.12 Manage Payment Arrangement Charges

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Oracle Utilities Customer Care and Billing Utility Reference Model 4.2.2.12, Release 2.4.0

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4.2.2.12 Manage Payment Arrangement Charges

This section provides a description of the “Manage Payment Arrangement Charges” business process. It includes:

- ♦ [Brief Description](#)
 - ♦ [Actors/Roles](#)
- ♦ [Business Process Diagrams](#)
 - ♦ [Manage Payment Arrangement Charges Process Model - Page 1](#)
 - ♦ [Manage Payment Arrangement Charges Process Model - Page 2](#)
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 - ♦ [Manage Payment Arrangement Charges Process Model - Page 4](#)
- ♦ [Manage Payment Arrangement Charges Detailed Process Model Description](#)
- ♦ [Installation Options - Control Central Alert Algorithms](#)
- ♦ [Related Training](#)

Brief Description

Business Process: 4.2.2.12 Manage Payment Arrangement Charges

Process Type: Sub Process

Parent Process: 4.2.2 Manage Bill

Sibling Processes:

- 4.2.2.2 Manage Meter Charges
- 4.2.2.3 Manage Item Charges
- 4.2.2.4 Manage External and Miscellaneous Charges
- 4.2.2.6 Manage Deposit Charges
- 4.2.2.5 Manage Loan Charges
- 4.3.1.1 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.

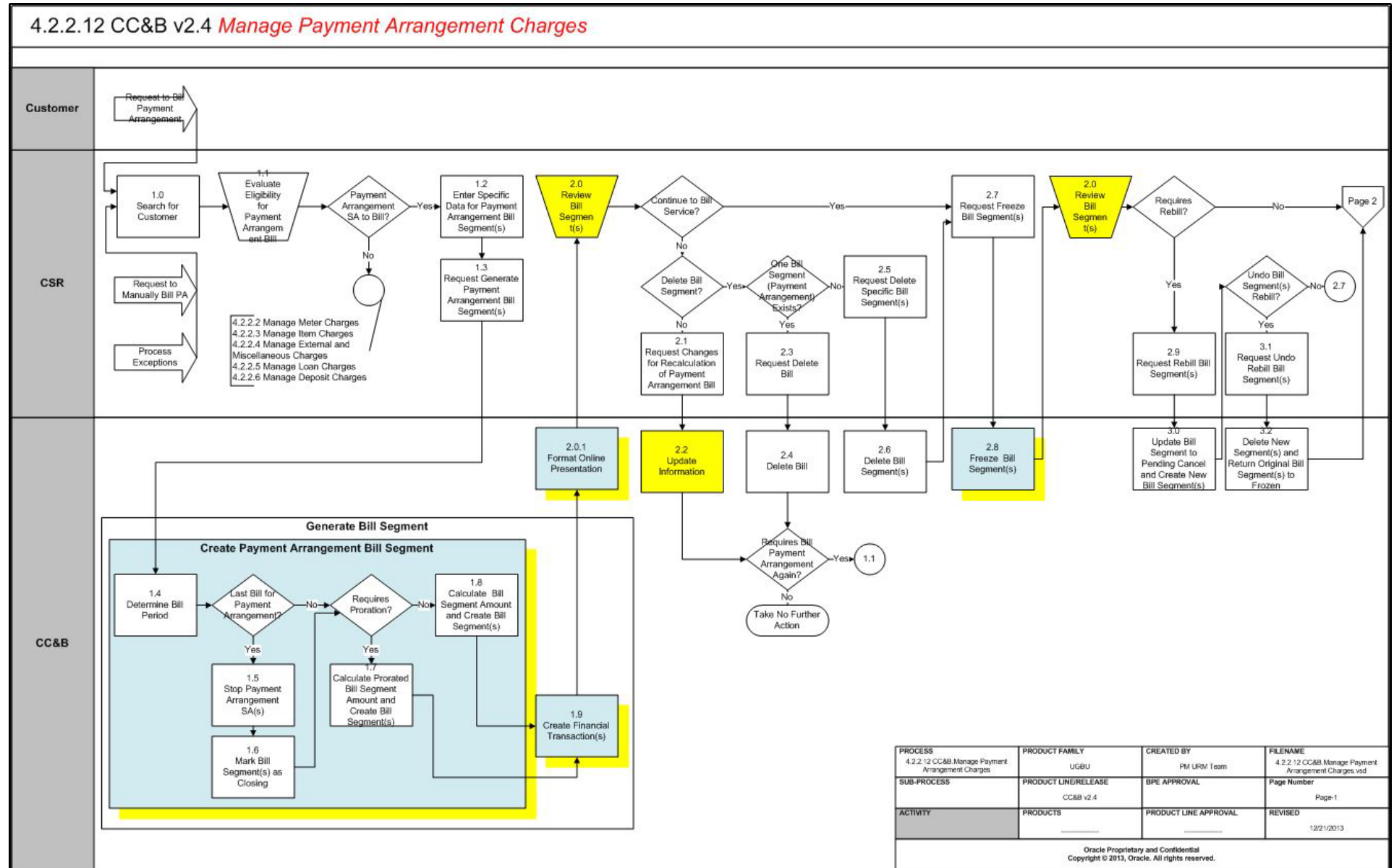
Actors/Roles

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

- **CC&B:** The Customer Care and Billing application.
- **Customer: Utility Company Customer**
- **CSR:** CSR or Authorized User of the Customer Care and Billing application.
- **Document Management Software:** Document Management Software that allows create and maintain paper or paperless documents and manage document workflow.

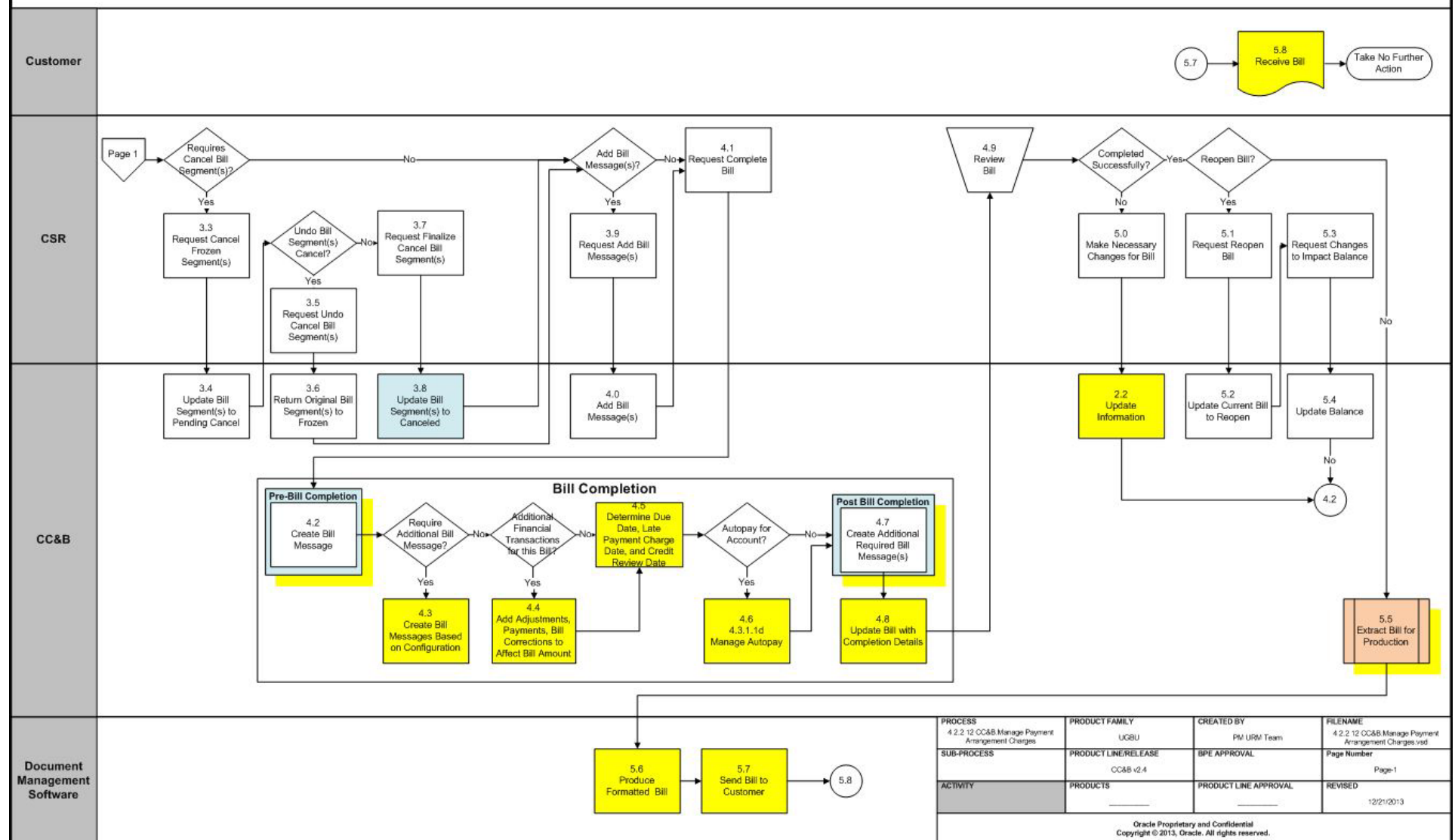
Business Process Diagrams

Manage Payment Arrangement Charges Process Model - Page 1



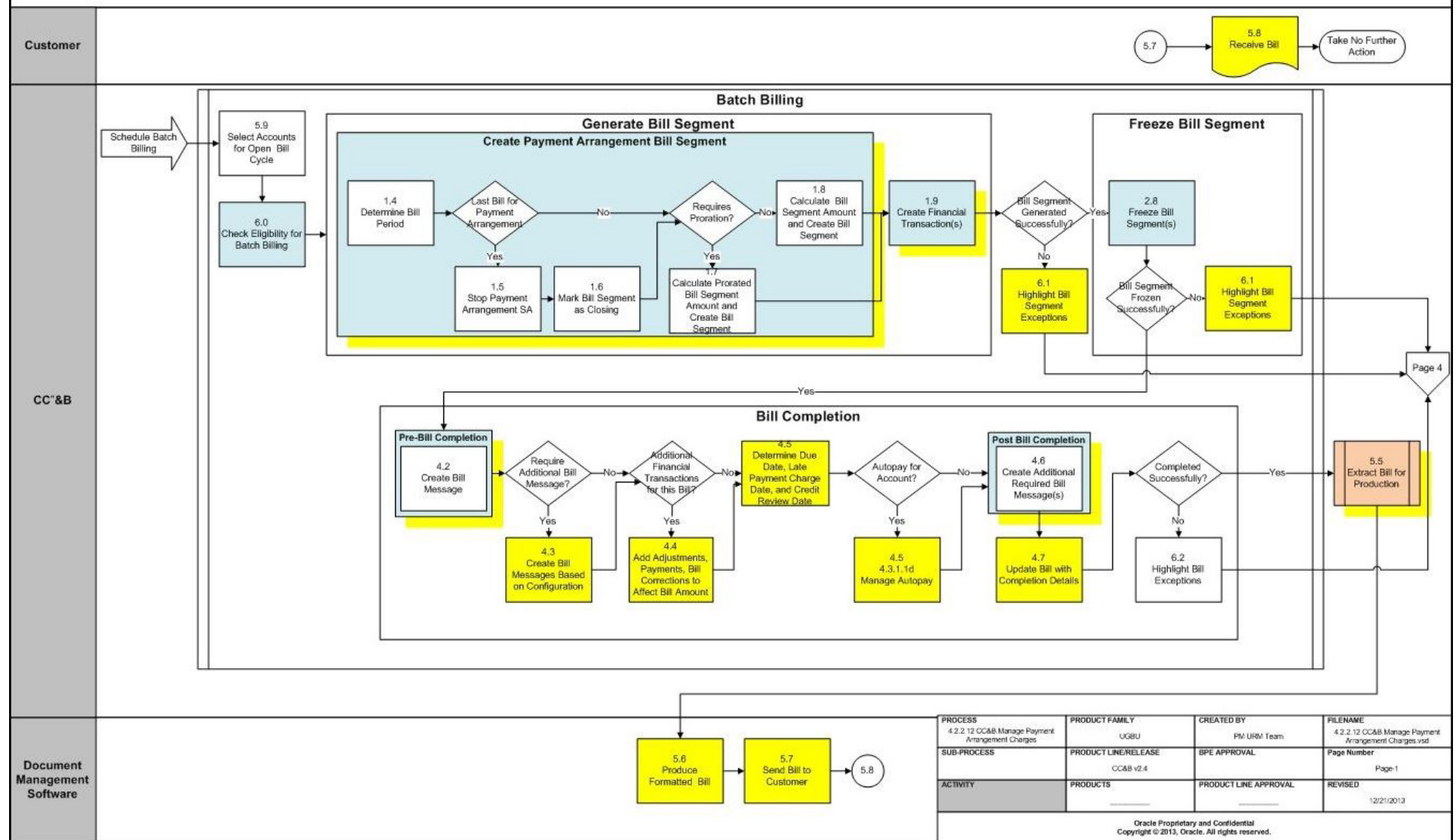
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4.2.2.12 CC&B v2.4 *Manage Payment Arrangement Charges*



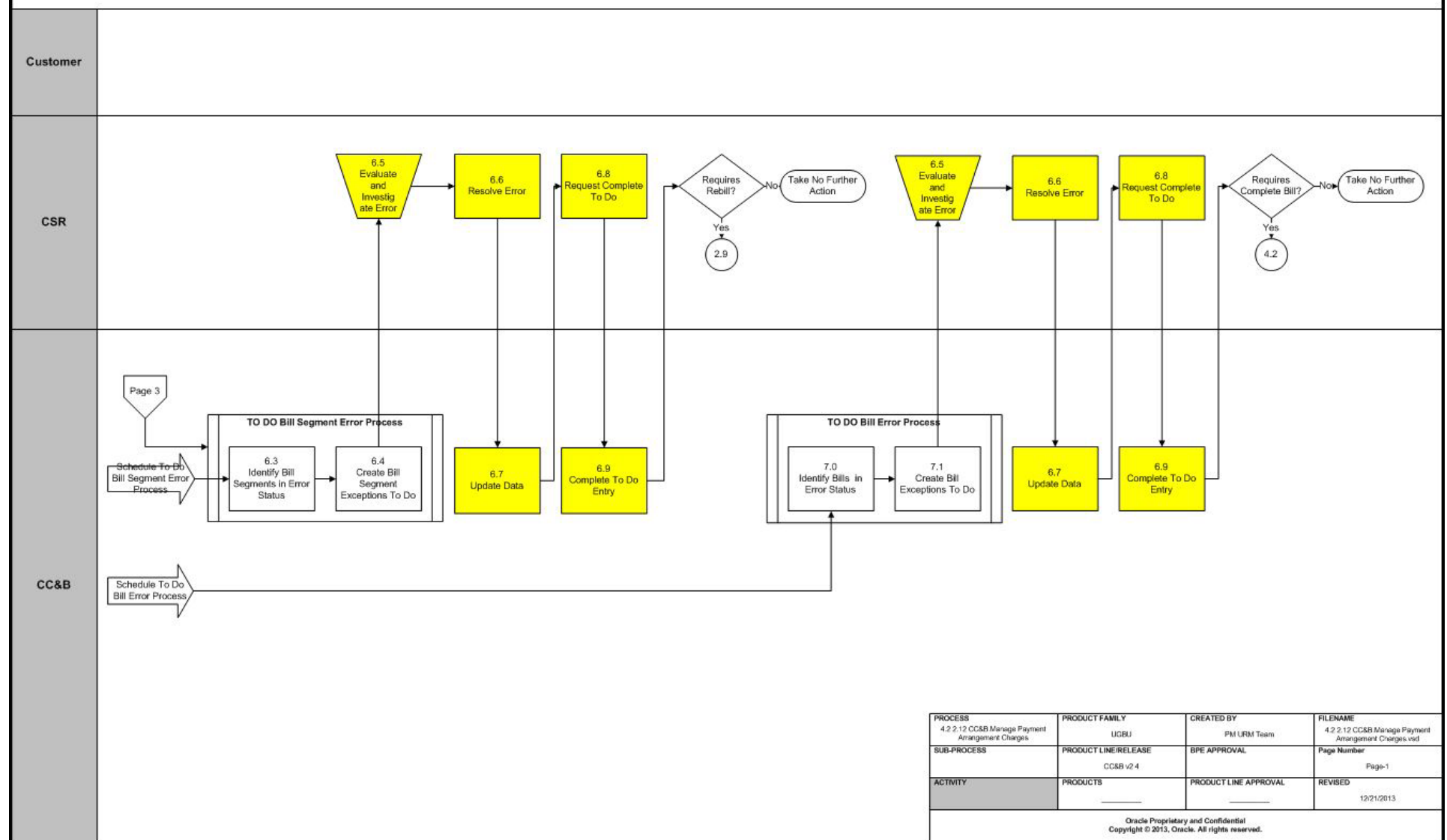
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4.2.2.12 CC&B v2.4 *Manage Payment Arrangement Charges*



Manage Payment Arrangement Charges Process Model - Page 4

4.2.2.12 CC&B v2.4 *Manage Payment Arrangement Charges*



Manage Payment Arrangement Charges Detailed Process Model Description

This section provides a detailed description of the “Manage Payment Arrangement Charges” business process, including:

- ♦ 1.0 Search for Customer
- ♦ 1.1 Evaluate Eligibility for Payment Arrangement Bill
- ♦ 1.2 Enter Specific Data for Payment Arrangement Bill Segments
- ♦ 1.3 Request Generate Payment Arrangement Bill Segments
- ♦ 1.4 Determine Bill Period
- ♦ 1.5 Stop Payment Arrangement SAs
- ♦ 1.6 Mark Bill Segments as Closing
- ♦ 1.7 Calculate Prorated Payment Arrangement Bill Segment Amt and Create Bill Segments
- ♦ 1.8 Calculate Bill Segment Amount and Create Bill Segments
- ♦ 1.9 Create Financial Transactions
- ♦ 2.0.1 Format Online Presentation
- ♦ 2.0 Review Bill Segments
- ♦ 2.1 Request Changes for Recalculation of Payment Arrangement Bill
- ♦ 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 ReBill Bill Segments
- ♦ 3.2 Delete New Segments and Return Original Bill Segments to Frozen
- ♦ 3.3 Request Cancel Frozen Bill 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 4.3.1.1d Manage Autopay
- ♦ 4.7 Create Additional Required Bill Messages
- ♦ 4.8 Update Bill with Completion Details
- ♦ 4.9 Review Bill
- ♦ 5.0 Make Necessary Changes for Bill
- ♦ 5.1 Request Reopen Bill
- ♦ 5.2 Update Current Bill to Reopen
- ♦ 5.3 Request Changes to Impact Balance
- ♦ 5.4 Update Balance
- ♦ 5.5 Extract Bill for Production
- ♦ 5.6 Produce Formatted Bill
- ♦ 5.7 Send Bill to Customer
- ♦ 5.8 Receives Bill
- ♦ 5.9 Select Accounts for Open Bill Cycle
- ♦ 6.0 Check Eligibility for Batch Billing

- ♦ 6.1 Highlight Bill Segment Exceptions
- ♦ 6.2 Highlight Bill Exceptions
- ♦ 6.3 Identify Bill Segments in Error Status
- ♦ 6.4 Create Bill Segment Exceptions To Do
- ♦ 6.5 Evaluate and Investigate Error
- ♦ 6.6 Resolve Error
- ♦ 6.7 Update Data
- ♦ 6.8 Request Complete To Do
- ♦ 6.9 Complete To Do Entry
- ♦ 7.0 Identify Bills in Error Status
- ♦ 7.1 Create Bill Exceptions To Do

1.0 Search for Customer

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Actor/Role: CSR

Description: Upon receipt of request to bill a Payment Arrangement, the CSR or Authorized User locates the customer in CC&B 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.

Available Algorithms

- Installation Options - PERS-INFO-LF Person Information, Installation Options
- NMFM-VALFMT - Person Name Validation
- [Installation Options - Control Central Alert Algorithms](#)

Entities to Configure

- Installation Options

1.1 Evaluate Eligibility for Payment Arrangement Bill

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) 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](#)

Entities to Configure

- Installation Options

1.2 Enter Specific Data for Payment Arrangement Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

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 Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

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

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Group:

- Create Payment Arrangement Bill Segment
- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: The system identifies Bill Period based on information provided online or through Batch Billing.

Entities to Configure

- Bill Segment Type
- SA Type
- Customer Class
- Debt Class

Process Names

- BILLING

Available Algorithms

- 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.

1.5 Stop Payment Arrangement SAs

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Group:

- Create Payment Arrangement Bill Segment
- Generate Bill Segment

- Batch Billing

Actor/Role: CC&B

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.

Entities to Configure

- Bill Segment Type
- SA Type
- Customer Class
- Debt Class

Process Names

- BILLING

Available Algorithms

- 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.

1.6 Mark Bill Segments as Closing

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Group:

- Create Payment Arrangement Bill Segment
- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: If the generated Bill Segment is the last Payment Arrangement Bill Segment, CC&B marks Bill Segment as closing Bill Segment. This step can be executed from online and batch processing.

Entities to Configure

- Bill Segment Type
- SA Type
- Customer Class
- Debt Class

Process Names

- BILLING

Available Algorithms

- 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.

1.7 Calculate Prorated Payment Arrangement Bill Segment Amt and Create Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Group:

- Create Payment Arrangement Bill Segment
- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

Description: CC&B 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.

Entities to Configure

- Bill Segment Type
- SA Type
- Customer Class
- Debt Class

Process Names

- BILLING

Available Algorithms

- 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.

1.8 Calculate Bill Segment Amount and Create Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Group:

- Create Payment Arrangement Bill Segment
- Generate Bill Segment
- Batch Billing

Actor/Role: CC&B

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

Entities to Configure

- Bill Segment Type
- SA Type
- Customer Class
- Debt Class

Process Names

- BILLING

Available Algorithms

- 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.

1.9 Create Financial Transactions

Reference: [Manage Payment Arrangement 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. This step can be executed from online and batch processing.

Entities to Configure

- SA Type
- Bill Segment Type

Process Names

- BILLING

Available Algorithms

- BS-BO-DFT - 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.

2.0.1 Format Online Presentation

Reference: [Manage Payment Arrangement 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

- CI_BSI-STD - This algorithm formats the "Bill Segment Information" that appears throughout the system. It concatenates the fields and delimiters specified as algorithm parameters.
- CI_BST-NSAID - This algorithm formats the "Bill Segment Information" that appears throughout the system. It concatenates the fields and delimiters specified as algorithm parameters.

Process Names

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

Entities to Configure

- Bill Segment Type
- Installation Options - Framework- Bill Segment Information

2.0 Review Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

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.

2.1 Request Changes for Recalculation of Payment Arrangement Bill

Reference: [Manage Payment Arrangement 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 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

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Actor/Role: CC&B

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

2.3 Request Delete Bill

Reference: [Manage Payment Arrangement 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. 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

Reference: [Manage Payment Arrangement 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 records are removed from the database. There is no financial impact to the Customer's Account.

Business Objects

- C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason

2.5 Request Delete Specific Bill Segments

Reference: [Manage Payment Arrangement 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 Bill Segments associated with a given Bill need to be deleted.

2.6 Delete Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Actor/Role: CC&B

Description: The specific Bill Segments is 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 Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

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 Segments

Reference: [Manage Payment Arrangement 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 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.

Entities to Configure

- Installation Options - Bill Freeze Options
- Customer Class
- SA Type

Process Names

- BILLING

Business Objects

- WX-BillSegment - Bill Segment Business Object

Available Algorithms

- C1-FREEZEBS - Bill Segment freeze/cancel algorithm for BO status Enter
- BSFZ-Empty - Bill Segment freeze/cancel algorithm

2.9 Request Re-Bill Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

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.

Entities to Configure

- Bill Cancel Reasons

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

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) 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 in the pending Cancel state.

Entities to Configure

- Bill Cancel Reasons

Business Objects

- C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason

3.1 Request Undo ReBill Bill Segments

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User determines not to freeze the new Bill Segments. If the undo function is used, the newly generated segment is deleted.

3.2 Delete New Segments and Return Original Bill Segments to Frozen

Reference: [Manage Payment Arrangement Charges Process Model - Page 1 on page 3](#) 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.

Business Objects

- C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason

3.3 Request Cancel Frozen Bill Segments

Reference: [Manage Payment Arrangement 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

- Bill Cancel Reasons

3.4 Update Bill Segments to Pending Cancel

Reference: [Manage Payment Arrangement 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 Segments to Pending Cancel.

Entities to Configure

- Bill Cancel Reasons

Business Objects

- C1-BillCancelReasonPhysicalBO - Physical BO for Bill Cancel Reason

3.5 Request Undo Cancel Bill Segments

Reference: [Manage Payment Arrangement 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.

3.6 Return Original Bill Segments to Frozen

Reference: [Manage Payment Arrangement 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.

3.7 Request Finalize Cancel Bill Segments

Reference: [Manage Payment Arrangement 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 Payment Arrangement 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.

Available Algorithms

- BSFZ-Empty - This is a Customer Class Bill Segment freeze/cancel algorithm.

Entities to Configure

- Installation Options - Bill Freeze Options
- Customer Class

3.9 Request Add Bill Messages

Reference: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) for the associated business process diagram.

Actor/Role: CSR

Description: The CSR or Authorized User may add Payment Arrangement 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: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) for the associated business process diagram.

Actor/Role: CC&B

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

Business Objects

- C1-BillMessagePhysicalBO - Physical BO for Bill Message

4.1 Request Complete Bill

Reference: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) for the associated business process diagram.

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

Reference: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) 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 and it's ready for extract and print. This process could be initiated manually and automatically. 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.

- **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.

Available Algorithms

- DEL-BSEG -This Bill pre-completion algorithm 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.

Process Names

- BILLING

Business Objects

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

Entities to Configure

- C1-BillMessagePhysicalBO
- Physical BO for Bill Message

4.3 Create Bill Messages Based on Configuration

Reference: [Manage Payment Arrangement 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 can be executed from online and batch processing.

Process Names

- BILLING

Entities to Configure

- Customer Class Bill Messages
- Account and Service Agreement Bill Messages

Business Objects

- C1-BillMessagePhysicalBO - Physical BO for Bill Message

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

Reference: [Manage Payment Arrangement 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. This step can be executed from online and batch processing.

Process Names

- BILLING

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

Reference: [Manage Payment Arrangement 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. Two algorithms are listed below for information only. This step can be executed from online and batch processing.

Available Algorithms

- BILLPC-Total -calculate the late payment charge amount for a specific service agreement linked to an account.
- BILPE-ALL -used during the late payment charge background process to determine if an account is eligible for late payment charges.

Process Names

- BILLING

Entities to Configure

- SA Type
- Customer Class
- Adjustment Types

4.6 4.3.1.1d Manage Autopay

Reference: [Manage Payment Arrangement 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 Manage Autopay.

Process Names

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

4.7 Create Additional Required Bill Messages

Reference: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) for the associated business process diagram.

Group:

- Post Bill Completion Activity
- 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.

Process Names

- BILLING

Entities to Configure

- SA Type
- Customer Class
- Adjustment Types
- Bill Message

Business Objects

- C1-BillMessagePhysicalBO - Physical BO for Bill Message

4.8 Update Bill with Completion Details

Reference: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) for the associated business process diagram.

Group:

- 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.

Available Algorithms

- C1-COMP-BILL - This is a Bill Completion algorithm for Business Object Status - Enter.

4.9 Review Bill

Reference: [Manage Payment Arrangement 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. 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.

5.0 Make Necessary Changes for Bill

Reference: [Manage Payment Arrangement 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.

5.1 Request Reopen Bill

Reference: [Manage Payment Arrangement Charges Process Model - Page 2 on page 4](#) for the associated business process diagram.

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

Reference: [Manage Payment Arrangement 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.

5.3 Request Changes to Impact Balance

Reference: [Manage Payment Arrangement 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.

5.4 Update Balance

Reference: [Manage Payment Arrangement 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.

5.5 Extract Bill for Production

Reference: [Manage Payment Arrangement Charges Process Model - Page 3 on page 5](#) 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

Process Names

- EMAILRTE - CIPBXBLB
- POSTROUT - CIPBXBLB
- Custom Extract Process

Business Objects

- BillRoutingR - Business object to read bill routing details.

Available Algorithms

- Bill Route Type - BLEX-EX - This algorithm constructs the records that contain the information that appears on a printed Bill (for Doc 1).
- C1-BLEX-CR - This Bill Route Type extract algorithm prepares the report information needed to create a Bill using a Reporting Engine.

5.6 Produce Formatted Bill

Reference: [Manage Payment Arrangement Charges Process Model - Page 3 on page 5](#) for the associated business process diagram.

Actor/Role: Document Management Software

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

Available Algorithms

- ONLN-BL-DSP - Create PDF of bill image by calling Doc 1.
- OBLD-CRYS / C1-ONLN-CR - Create bill image using Crystal / Create bill image using a reporting engine.

5.7 Send Bill to Customer

Reference: [Manage Payment Arrangement Charges Process Model - Page 3 on page 5](#) for the associated business process diagram.

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

Reference: [Manage Payment Arrangement Charges Process Model - Page 3 on page 5](#) for the associated business process diagram.

Actor/Role: Customer

Description: The Customer receives the Bill.

Entities to Configure

- Bill Route Type

5.9 Select Accounts for Open Bill Cycle

Reference: [Manage Payment Arrangement Charges Process Model - Page 3 on page 5](#) for the associated business process diagram.

Group: Batch Billing

Actor/Role: CC&B

Description: This step is the first step of batch billing process. 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. Typically all the Payment Arrangements that require billing when Bill window is "open" are selected.

Entities to Configure

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

Process Names

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

Entities to Configure

- Bill Cycle
- Account

6.0 Check Eligibility for Batch Billing

Reference: [Manage Payment Arrangement Charges Process Model - Page 3 on page 5](#) for the associated business process diagram.

Group: Batch Billing

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. CC&B evaluates the Account, and Payment Arrangement Service Agreement eligibility for billing. This step is executed from the batch process only.

Available Algorithms

- C1-SKIPINACC -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.

Entities to Configure

- SA Type
- Customer Class

6.1 Highlight Bill Segment Exceptions

Reference: [Manage Payment Arrangement 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. This step could be executed from batch only.

Process Names

- BILLING

Available Algorithms

- C1-PROC-BSEX - Process Bill Segment Exceptions - Business Object Status - Enter

Business Objects

- C1-BillSegmentStatus - Bill Segment Status business object.

6.2 Highlight Bill Exceptions

Reference: [Manage Payment Arrangement 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

6.3 Identify Bill Segments in Error Status

Reference: [Manage Payment Arrangement 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.

Process Names

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

Entities to Configure

- To Do Role
- To Do Type

Business Objects

- C1-BillSegmentStatus - Bill Segment Status business object

6.4 Create Bill Segment Exceptions To Do

Reference: [Manage Payment Arrangement 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.

Process Names

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

Entities to Configure

- To Do Role
- To Do Type

6.5 Evaluate and Investigate Error

Reference: [Manage Payment Arrangement 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. 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 Error

Reference: [Manage Payment Arrangement 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.

6.7 Update Data

Reference: [Manage Payment Arrangement 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.

6.8 Request Complete To Do

Reference: [Manage Payment Arrangement Charges Process Model - Page 4 on page 6](#) 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.

6.9 Complete To Do Entry

Reference: [Manage Payment Arrangement Charges Process Model - Page 4 on page 6](#) for the associated business process diagram.

Actor/Role: CC&B

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

7.0 Identify Bills in Error Status

Reference: [Manage Payment Arrangement Charges Process Model - Page 4 on page 6](#) 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.

Process Names

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

Entities to Configure

- To Do Role
- To Do Type

7.1 Create Bill Exceptions To Do

Reference: [Manage Payment Arrangement Charges Process Model - Page 4 on page 6](#) 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.

Process Names

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

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.

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 FA's 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 SA's
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

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, User Tasks
- Oracle Utilities UPK for Customer Care and Billing, Credit and Collections
- 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