C2M.v2.7.CCB

4.2.2.5 C2M.CCB.Manage Loan Charges

Creation Date: Dec 10, 2010

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Contents

Brief Description

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

This process describes Loan Billing. This process takes place if the Customer has a loan from the Utility Company. There are many reasons why the Utility Company practices to loan money to customers. For example,
- Finance service upgrades (e.g., to change to dual fuel)
- Support economic development (e.g., to extend a power line)
- Promote energy conservation (e.g., customers borrow to insulate their house)

 Loans are billed on regular basis similar to other services provided by Utility Company. When the loan billing process is initiated, system bills the customer for the periodic payment amount that calculated based on the specific Utility company business rules and typically contains principal and calculated interest amount.

Most bills are produced in a Batch Billing process. However, the CSR or Authorized User can create Bills for loans 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 the Utility Company makes it available for Customer.

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4.2.2.5 C2M.v2.7.CCB *Manage Loan Charges*

Customer

Request for Bill

CSR

Process Exceptions

Request to Bill Loan Manually

1.0 Search for Customer

1.1 Evaluate Customer Account Eligibility for Bill

Loan Charge? — Yes

No

4.2.2.2 CC&B Manage Metered Charges,
4.2.2.3 CC&B Manage Item Charges,
4.2.2.4 CC&B Manage External and Miscellaneous Charges,
4.2.2.6 CC&B Manage Deposit Charges

1.2 Enter Specific Data for Bill Segment(s) Generation

1.3 Request Calculate New Bill Segment(s)

2.2 Review Bill Segment(s)

Generated Successfully? — Yes

No

Delete Bill or Bill Segment? — Yes

No

2.3 Request Changes for Recalculation of Loan Bill

One Bill Segment (Loan) Exists? — No

Yes

2.5 Request Delete Bill

2.7 Request Delete Specific Bill Segment(s)

2.9 Request Freeze Bill Segment(s)

2.2 Review Bill Segment(s)

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C2M(CCB)
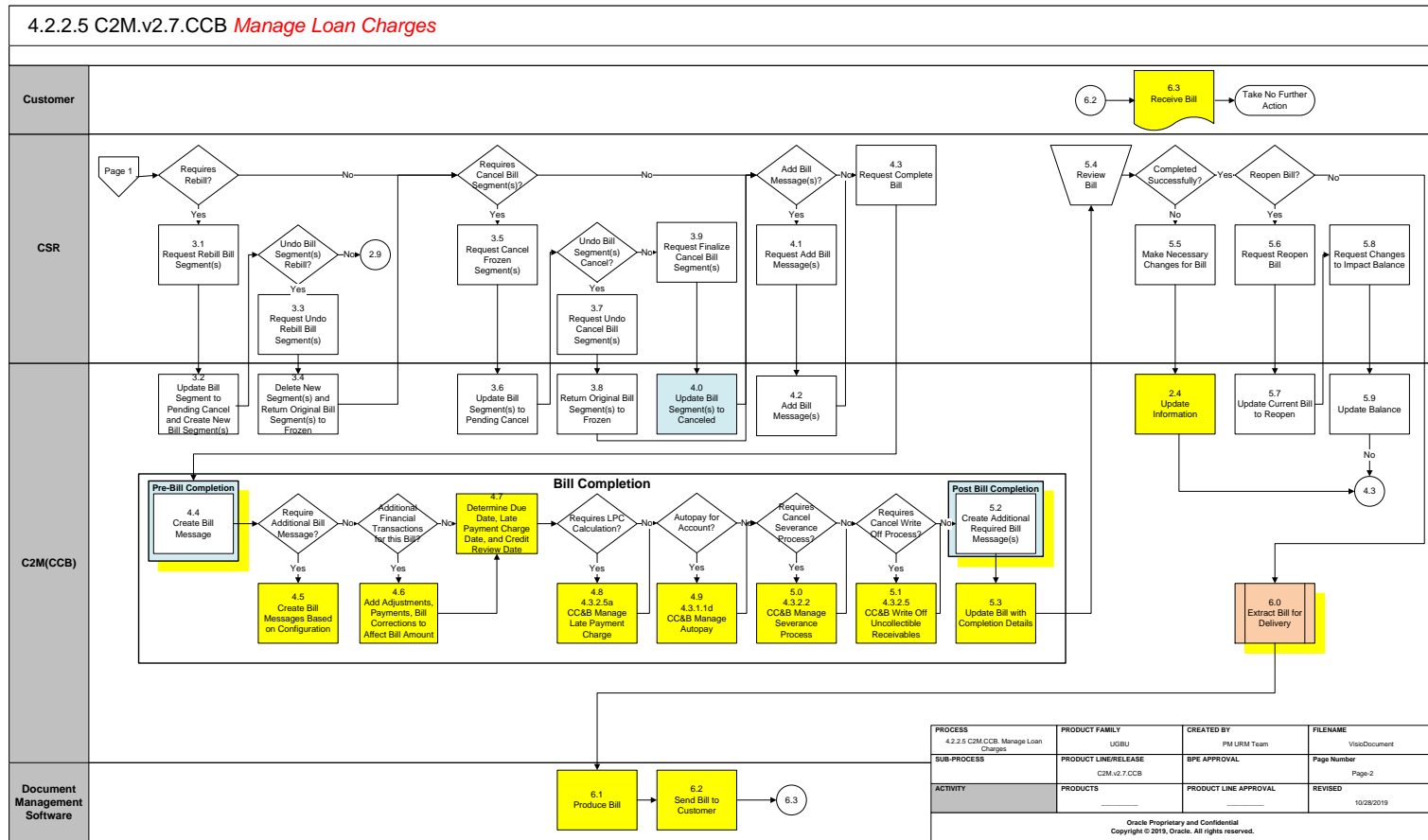
Generate Bill Segment

Create Bill Segment

1.4 Identify Loan to be Billed

1.5 Determine Bill Period, Consumption Period

1.6 Calculate Payment Amount and Loan Balances

1.7 Calculate and Apply Loan Interest

Last Loan Bill? — No

Yes

1.9 Mark Bill Segment(s) as Closing Bill Segment

2.0 Stop Loan Service Agreement

1.8 Create Bill Segment Lines and Bill Segment(s)

2.1 Create Financial Transaction(s)

2.1.1 Format Online Presentation

2.4 Update Information

1.2

2.6 Delete Bill

Still Requires Bill Loan? — Yes — 1.1

No

Take No Further Action

2.8 Delete Bill Segment(s)

3.0 Freeze Bill Segment(s)

PROCESS	PRODUCT FAMILY	CREATED BY	FILENAME
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SUB-PROCESS	**PRODUCT LINE/RELEASE**	**BPE APPROVAL**	**Page Number**
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4.2.2.5 C2M.v2.7.CCB *Manage Loan Charges*

Customer

6.2 → 6.3 Receive Bill → Take No Further Action

CSR

Page 1 → Requires Rebill? → No → Requires Cancel Bill Segment(s)? → No → Add Bill Message(s)? → No → 4.3 Request Complete Bill

5.4 Review Bill → Completed Successfully? → Yes → Reopen Bill? → No

Requires Rebill? Yes → 3.1 Request Rebill Bill Segment(s) → Undo Bill Segment(s) Rebill? → No → 2.9

Undo Bill Segment(s) Rebill? Yes → 3.3 Request Undo Rebill Bill Segment(s)

Requires Cancel Bill Segment(s)? Yes → 3.5 Request Cancel Frozen Segment(s) → Undo Bill Segment(s) Cancel? → Yes → 3.9 Request Finalize Cancel Bill Segment(s)

Undo Bill Segment(s) Cancel? Yes → 3.7 Request Undo Cancel Bill Segment(s)

Add Bill Message(s)? Yes → 4.1 Request Add Bill Message(s)

Completed Successfully? No → 5.5 Make Necessary Changes for Bill

Reopen Bill? Yes → 5.6 Request Reopen Bill

5.8 Request Changes to Impact Balance

C2M(CCB)

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

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

3.6 Update Bill Segment(s) to Pending Cancel

3.8 Return Original Bill Segment(s) to Frozen

4.0 Update Bill Segment(s) to Canceled

4.2 Add Bill Message(s)

2.4 Update Information

5.7 Update Current Bill to Reopen

5.9 Update Balance → No → 4.3

Pre-Bill Completion

4.4 Create Bill Message → Require Additional Bill Message? → Additional Financial Transactions for this Bill? → No

Bill Completion

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

Post Bill Completion

5.2 Create Additional Required Bill Message(s)

Require Additional Bill Message? Yes → 4.5 Create Bill Messages Based on Configuration

Additional Financial Transactions for this Bill? Yes → 4.6 Add Adjustments, Payments, Bill Corrections to Affect Bill Amount

Requires LPC Calculation? Yes → 4.8 4.3.2.5a CC&B Manage Late Payment Charge

Autopay for Account? Yes → 4.9 4.3.1.1d CC&B Manage Autopay

Requires Cancel Severance Process? Yes → 5.0 4.3.2.2 CC&B Manage Severance Process

Requires Cancel Write Off Process? Yes → 5.1 4.3.2.5 CC&B Write Off Uncollectible Receivables

5.3 Update Bill with Completion Details

6.0 Extract Bill for Delivery

Document Management Software

6.1 Produce Bill → 6.2 Send Bill to Customer → 6.3

PROCESS	PRODUCT FAMILY	CREATED BY	FILENAME
4.2.2.5 C2M.CCB. Manage Loan Charges	UGBU	PM URM Team	VisioDocument
SUB-PROCESS	PRODUCT LINE/RELEASE	BPE APPROVAL	Page Number
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4.2.2.5 C2M.v2.7.CCB *Manage Loan Charges*

Customer

6.2 → 6.3 Receive Bill → Take No Further Action

C2M(CCB)

Batch Billing

Generate Bill Segment

Create Bill Segment

6.4 Select Accounts for Open Bill Cycle → 6.5 Check Eligibility for Batch Billing → 1.4 Identify Loan to be Billed → 1.5 Determine Bill Period, Consumption Period → 1.6 Calculate payment amount and Loan balances → 1.7 Calculate and apply Loan interest → Last Loan Bill? → 1.8 Create Bill Segment Lines and Bill Segment(s) → 2.1 Create Financial Transaction(s) → Bill Segment Generated Successfully?

1.9 Mark Bill Segment(s) as closing Bill Segment → 2.0 Stop Loan Service Agreement

6.6 Highlight Bill Segment Exceptions

Freeze Bill Segment

2.8 Freeze Bill Segment(s) → Bill Segment Generated Successfully?

6.6 Highlight Bill Segment Exceptions

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Bill Completion

Pre-Bill Completion

4.4 Create Bill Message → Require Additional Bill Message? → Additional Financial Transactions for this Bill? → 4.7 Determine Due Date, Late Payment Charge Date, and Credit Review Date → Requires LPC Calculation? → Autopay for Account? → Requires Cancel Severance Process? → Requires Cancel Write Off Process?

Post Bill Completion

5.2 Create Additional Required Bill Message(s) → 5.3 Update Bill with Completion Details → Completed Successfully? → Yes → 6.0 Extract Bill for Delivery

4.5 Create Bill Messages Based on Configuration

4.6 Add Adjustments, Payments, Bill Corrections to Affect Bill Amount

4.8 4.3.2.5a Manage Late Payment Charge

4.9 4.3.1.1d Manage Autopay

5.0 4.3.2.2 Manage Severance Process

5.1 4.3.2.5 Write Off Uncollectible Receivables

6.7 Highlight Bill Exceptions

Schedule Batch Billing

Document Management Software

6.1 Produce Bill → 6.2 Send Bill to Customer → 6.3

PROCESS 4.2.2.5 C2M.CCB. Manage Loan Charges	PRODUCT FAMILY UGBU	CREATED BY PM URM Team	FILENAME VisioDocument
SUB-PROCESS	PRODUCT LINE/RELEASE C2M.v2.7.CCB	BPE APPROVAL	Page Number Page3
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4.2.2.5 C2M.v2.7.CCB *Manage Loan Charges*

Customer

CSR

2.9

7.0 Evaluate and Perform Analysis → 7.1 Resolve Issue → Requires Rebill? —No→ 7.3 Request Complete To Do

Yes
3.1
Refer to Cancellation steps and then return to complete To Do

4.3

7.0 Evaluate and Perform Analysis → 7.1 Resolve Issue → Requires Complete Bill? —No→ 7.3 Request Complete To Do

Yes
4.3
Refer to Bill Completion Steps in this Process and then return to complete To Do

C2M(CCB)

Page 3

Schedule To Do Bill Segment Error Process

TO DO Bill Segment Error Process
6.8 Identify Bill Segments in Error Status → 6.9 Create Bill Segment Exceptions To Do

7.2 Update Data

7.4 Complete To Do Entry → Take No Further Action

Schedule To Do Bill Error Process

TO DO Bill Error Process
7.5 Identify Bills in Error Status → 7.6 Create Bill Exceptions To Do

7.2 Update Data

7.4 Complete To Do Entry → Take No Further Action

Document Management Software

PROCESS	PRODUCT FAMILY	CREATED BY	FILENAME
4.2.2.5 C2M.CCB.Manage Loan Charges	UGBU	PM URM Team	VisioDocument
SUB-PROCESS	PRODUCT LINE/RELEASE	BPE APPROVAL	Page Number
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Detail Business Process Model Description

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

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

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

Configuration required Y   **Entities to Configure:**

Installation Options

1.2 Enter Specific Data for Bill Segment(s) Generation
Actor/Role: CSR
Description:
If the CSR or Authorized User identifies a need to create a Loan Bill for the customer, the CSR or Authorized User provides the system with 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 Calculate New Bill Segment(s)
Actor/Role: CSR
Description:
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 Loan. The CSR or Authorized User requests to generate a new online Bill. This online Bill may contain one or more segments. If only one Loan Service Agreement exists for the Account, then only one Loan 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 Identify Loan to be Billed Group: Create Bill Segment
                              Group: Generate Bill Segment
                              Group: Batch Billing
Actor/Role: C2M(CCB)
Description:
This task could be initiated from online and from batch billing.
Manual process: System identifies the specific Customer's loan based on the request criteria specified in step 1.2 of the current process
Automated process: System identifies Customer's Loan(s) that needs to be billed based on billing method specified for Loan. Typically all the loans that require billing when Bill window is "open" are selected.
Note: Typically loans are billed in advance and it's a common practice to use Future Anniversary Billing method for Companies to bill Loans. Loan Bill Segment creation does not allow for prorated Interest Rate – Bill Factor

Process Plug-in enabled Y	**Available Algorithm(s):**	C1-BSBS-LO Algorithm creates a bill segment for a loan SA
		C1-LPDA-SI (Calculate Number of Periods or Payment Amount)

Customizable process N	**Process Name:**	BILLING - The Bill cycle Batch processing creates Bills and Bill Segments for accounts with an "open" Bill cycle.

Configuration required Y	**Entities to Configure:**	Bill Segment Type
		SA Types
		Customer Class
		Bill Cycle
		Bill Schedule

1.5 Determine Bill Period, Consumption Period Group: Create Bill Segment
 Group: Generate Bill Segment
 Group: Batch Billing

Actor/Role: C2M(CCB)
Description:
 System identifies Bill Period and Consumption Period.

Process Plug-in enabled Y	Available Algorithm(s):	C1-BSBS-LO Algorithm creates a bill segment for a loan SA
		C1-LPDA-SI (Calculate Number of Periods or Payment Amount)

Customizable process N	Process Name:	BILLING - The Bill cycle Batch processing creates Bills and Bill Segments for accounts with an "open" Bill cycle.

Configuration required Y	Entities to Configure:	Bill Segment Type
		SA Types
		Customer Class

1.6 Calculate Payment Amount and Loan Balances Charges Group: Create Bill Segment
 Group: Generate Bill Segment
 Group: Batch Billing

Actor/Role: C2M(CCB)
Description:
 C2M(CCB)makes appropriate calculations to determine Loan's payment amount that needs to be billed.

Process Plug-in enabled Y	Available Algorithm(s):	C1-BSBS-LO Algorithm creates a bill segment for a loan SA

Customizable process N	Process Name:	BILLING

		Bill Segment Type

Configuration required Y	**Entities to Configure:**	SA Types
		Customer Class
		Bill Factor

1.7 Calculate and Apply Loan Interest Group: Create Bill Segment
Group: Generate Bill Segment
Group: Batch Billing

Actor/Role: C2M(CCB)
Description:
C2M(CCB)calculates and creates the Loan segment and applies interest to the Service Agreement.
This step could be executed from online and batch processing.

Process Plug-in enabled Y	**Available Algorithm(s):**	C1-BSBS-LO Algorithm creates a bill segment for a loan SA
		C1-LINT-SI Calculate Simple Interest for a Loan SA. The interest calculation is based on: 1) unbilled principal (i.e., the service agreement's payoff balance minus the current balance), 2) the number of billing periods covered by the bill, and 3) the interest rate.

Customizable process N	**Process Name:**	BILLING

Configuration required Y	**Entities to Configure:**	Bill Segment Type
		SA Types
		Bill Factor

1.8 Create Bill Segment(s) Lines and Bill Segment(s) Group: Create Bill Segment
Group: Generate Bill Segment
Group: Batch Billing

Actor/Role: C2M(CCB)
Description:

The system creates a bill segment and Bill Segment's Bill lines. One bill line shows the amount of interest in the payment (Line 1), and another bill line shows the amount of principal (2nd line).
Note: The principal amount is equal to the service agreement's periodic payment amount minus the amount of calculated interest.
This step could be executed from online and batch processing

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

C1-BSBS-LO Algorithm creates a bill segment for a loan SA

Customizable process N   **Process Name:**

BILLING

Configuration required Y   **Entities to Configure:**

Bill Segment Type
SA Type

1.9 Mark Bill Segment(s) as Closing Bill Segment Group: Create Bill Segment
                Group: Generate Bill Segment
                Group: Batch Billing
Actor/Role: C2M(CCB)
Description:
If generated Bill Segment is a last Loan bill, C2M(CCB)marks Bill Segment as closing Bill Segment.
Note: C2M(CCB)consider bill segment as last Bill Segment for Loan if the remaining principal balance (plus accrued interest) is less than or equal to the loan payment amount.

Customizable process N   **Process Name:**

BILLING

2.0 Stop Loan Service Agreement Group: Create Bill Segment
                Group: Generate Bill Segment
                Group: Batch Billing
Actor/Role: C2M(CCB)
Description:
If generated Bill Segment is a last loan bill, C2M(CCB)initiates stop SA process for Loan Service Agreement and changes the status or Loan SA to Pending Stop.
Note: The Loan SA can then be stopped by the user or by the SA activation background process. (See process 3.3.2.4 C2M(CCB)Stop Non-Premise-Based Service for details)

Customizable process N	Process Name:	BILLING

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

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

Process Plug-in enabled Y	Available Algorithm(s):	C1-BSBF-LO - This bill segment financial transaction algorithm creates financial transactions for a loan service agreement. **-** Payoff Amt = Interest / Current Amt = Bill Amount.

Customizable process N	Process Name:	BILLING

Configuration required Y	Entities to Configure:	Bill Segment Type
		SA Type

2.1.1 Format Online Presentation
Actor/Role: C2M(CCB)
Description:
Formatting information to be presented Online.

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.
ONLN-BL-DSP - This algorithm is used to generate a bill image using the Doc 1 software product.
C1-BL-DISP - This algorithm is used to generate a bill image using the Documaker software product. The algorithm works as follows:

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

Customizable process N	**Process Name**	
		BILLING

Configuration required Y	**Entities to Configure:**	Bill Segment Type – Bill Segment Information
		Installation Options – Framework- Bill Segment Information

2.2 Review Bill Segment(s)
Actor/Role: CSR
Description:
The CSR or Authorized User reviews the Bill Segment for accuracy and determines the next action. The CSR or Authorized User decides if the billing process could be continued. The Bill Segment may be incorrect, or created by mistake and needs to be deleted, rebilled or canceled.

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

2.3 Request Changes for Calculation of Loan Bill
Actor/Role: CSR
Description:

After review CSR or Authorized User identifies a problem with the generated Loan 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 a Loan Service Agreement may include a change to dates or recurring charge information.

2.4 Update Information
Actor/Role: C2M(CCB)
Description:
Changes by the CSR or Authorized User are updated in C2M(CCB).

2.5 Request Delete Bill
Actor/Role: CSR
Description:
During the review process it is determined the Bill Segment was created incorrectly or by mistake. Based on established business rules CSR or Authorized User requests to delete the Bill or Bill Segment. When a Bill has only one segment the Bill and the corresponding segment are deleted at the Bill level.

2.6 Delete Bill
Actor/Role: C2M(CCB)
Description:
The Bill is deleted in C2M(CCB) and the financial record(s) are removed from the database. There is no financial impact to the Customer's Account.

2.7 Request Delete Specific Bill Segment(s)
Actor/Role: CSR
Description:
The CSR or Authorized User determines specific Billable Charge Bill Segment(s) associated with a given Bill need to be deleted.

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

2.9 Request Freeze Bill Segment(s)

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

3.0 Freeze Bill Segment(s) Group: Freeze Bill Segment
<div align="center">

Group: Batch Billing
</div>

Actor/Role: C2M(CCB)
Description:
The Bill Segment(s) and associated Financial Transaction are frozen in C2M(CCB). The Bill Freeze Option on the Installation Options controls when a Service Agreement's balance and General Ledger is affected by the Bill Segment and must be configured to meet the organization's accounting practices.
Manual Process- This is initiated by CSR or Authorized User when he/she requests to Freeze Bill Segments created for the Service Agreement.
Automated Process-This is a component of batch billing process and gets executed as a part of scheduled batch billing process that runs periodically. Functionality is the same as described in Manual process.

Process Plug-in enabled Y	**Available Algorithm(s):**	BSFZ-Empty - Bill Segment freeze/cancel sample algorithm.
Customizable process N	**Process Name:**	BILLING
Configuration required Y	**Entities to Configure:**	Installation Options – Bill Freeze Options
		Customer Class
		SA Type

3.1 Request Re-Bill Bill Segment(s)
Actor/Role: CSR
Description:
If the problem identified in the frozen Bill Segment has been resolved, the CSR or Authorized User requests to Cancel and Rebill the Bill Segment.

Configuration required Y	**Entities to Configure:**	Bill Cancel Reasons
Business Object Y	**Business Object:**	C1-BillCancelReasonPhysicalBO

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

Actor/Role: C2M(CCB)
Description:
The original Bill Segment(s) is updated to Pending Cancel, and new Bill Segment(s) created. A new Financial Transaction is associated with the new Bill Segment and the original Financial Transaction is in the pending Cancel state.

Configuration required Y	**Entities to Configure:**	Bill Cancel Reasons

3.3 Request Undo ReBill Bill Segment(s)
Actor/Role: CSR
Description:
The CSR or Authorized User determines not to freeze the new Bill Segment(s). If the undo function is used, the newly generated segment is deleted.

3.4 Delete New Segment(s) and Return Original Bill Segment(s) to Frozen
Actor/Role: C2M(CCB)
Description:
C2M(CCB) deletes the newly generated segment and returns the original Bill Segment to frozen. There is no impact to Financial Transactions.

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

Configuration required Y	**Entities to Configure:**	Bill Cancel Reasons
Business Object Y	**Business Object:**	C1-BillCancelReasonPhysicalBO

3.6 Update Bill Segment(s) to Pending Cancel
Actor/Role: C2M(CCB)
Description:
When the CSR or Authorized User requests Initiate Cancel, the system updates the Bill Segment(s) to Pending Cancel.

Configuration required Y	**Entities to Configure:**	Bill Cancel Reasons

3.7 Request Undo Cancel Bill Segment(s)
Actor/Role: CSR

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

3.8 Return Original Bill Segment(s) to Frozen
Actor/Role: C2M(CCB)
Description:
The original Bill Segment(s) is returned to Frozen in C2M(CCB). There is no impact to financial transactions.

3.9 Request Finalize Cancel Bill Segment(s)
Actor/Role: CSR
Description:
The CSR or Authorized User confirms the cancellation of Bill Segment(s).

Configuration required Y	**Entities to Configure:**	Cancel Reasons

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

Process Plug-in enabled Y	**Available Algorithm(s):**	BSFZ-Empty - This is a Customer Class Bill Segment freeze/cancel algorithm

Configuration required Y	**Entities to Configure:**	Installation Options – Bill Freeze Options
		Customer Class

4.1 Request Add Bill Message(s)
Actor/Role: CSR
Description:
The CSR or Authorized User may add Loan Service Agreement related Bill Messages for a given Bill Segment(s). The CSR or Authorized User may also add Bill Messages at the Account Level. The CSR or Authorized User adds these Bill Messages for an online Bill.

Configuration required Y	**Entities to Configure:**	Bill Messages

Business Object Y	**Business Object:**	C1-BillMessagePhysicalBO

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4.2 Add Bill Message(s)

Actor/Role: C2M(CCB)
Description:
The Bill Message is added to the bill in C2M(CCB).

4.3 Request Complete Bill

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

4.4 Create Bill Message Group: Pre-Bill Completion
Group: Bill Completion
Group: Batch Billing

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

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

Automated Process: (Batch billing) If required, such algorithms can:
- Delete Bill Segments in error, create Bill messages for the deleted segments, and create a To Do entry
- Delete bill certain type of financial transactions linked to the bill, for example, if only payments exist for newly created Bill
- Evaluate LPC eligibility
- Evaluate option to post frequent flier miles

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
C1-DELBILPY - C2M-DELBILPS - This customer class pre bill completion algorithm type determines to delete a bill if it only contains frozen financial transactions of given types
C1-CPBC-TAXT – This customer class pre-bill completion algorithm checks if taxes should be

| **Process Plug-in enabled Y** | **Available Algorithm(s):** | charged by comparing the bill's accumulated tax amount with the tax threshold amount.

For v2.3.1, this algorithm was enhanced to accumulate not only bill segment calc amounts, but also the adjustment calc amounts prior to comparing the total to the threshold amount; and if required, both bill segments and adjustments are re-generated. |
| | | C1-SUP-PR-BL - Suppress Printing Bills After Final Bill |

| **Customizable process N** | **Process Name:** | BILLING |

Configuration required Y	**Entities to Configure:**	To Do Type
		To Do Role
		Bill Message
		SA Type
		Customer Class

| **Business Object Y** | **Business Object:** | C1-AccountBillMessage - Account Bill Message |
| | | C1-BillMessagePhysicalBO |

4.5 Create Bill Messages Based on Configuration Group: Bill Completion

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

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

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

This step could be initiated from online or billing batch process

Customizable process N	**Process Name:**	BILLING

Configuration required Y	**Entities to Configure:**	Customer Class Bill Messages
		Rate Schedule Bill Messages
		Meter Reader Remark Bill Messages
		Account and Service Agreement Bill Messages

Business Object Y	**Business Object:**	C1-AccountBillMessage - Account Bill Message
		C1-BillMessagePhysicalBO

4.6 Add Adjustments, Payments, and Bill Corrections to Affect Bill Amount Group: Bill Completion

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

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

This step could be executed from online and batch processing

Customizable process N	**Process Name:**	BILLING.

4.7 Determine Due Date, Late Payment Charge Date, and Credit Review Date Group: Bill Completion

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

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

Process Plug-in enabled Y	**Available Algorithm(s):**	BILPC-TOTAL – This Algorithm Type 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. C2M-LPC-EL5 – This algorithm determines if an account is eligible for late payment charge assessment by comparing the account's current amount against a Threshold Amount. If the current amount is greater than the threshold amount, the account's service agreements will be levied a late payment charge using the respective late payment charge algorithm defined on each SA's SA type. Determine if the amount is sufficient to levy LPCs.

Customizable process N	**Process Name:**	BILLING.

Configuration required Y	**Entities to Configure:**	SA Type
		Customer Class
		Adjustment Types

4.8 4.3.2.5a C2M.CCB.Manage Late Payment Charge Group: Bill Completion

Group: Batch Billing

Actor/Role: C2M(CCB)

Description:

Late Payment Charges may be calculated during Bill Completion. Refer to 4.3.2.5a C2M(CCB) Manage Late Payment Charge.

Customizable process N	Process Name	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

4.9 4.3.1.1d C2M.CCB.Manage Autopay Group: Bill Completion
<div align="center">Group: Batch Billing</div>

Actor/Role: C2M(CCB)
Description:
An Autopay payment may be created during Bill Completion. Refer to 4.3.1.1d **C2M.CCB.**Manage Autopay.

Customizable process N	Process Name	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

5.0 4.3.2.2 C2M.CCB.Manage Severance Process Group: Bill Completion
<div align="center">Group: Batch Billing</div>

Actor/Role: C2M(CCB)
Description:
The status of a Severance Process can change due to Bill Completion. Refer to 4.3.2.2 **C2M.CCB.**Manage Severance Process.

Customizable process N	Process Name	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

5.1 4.3.2.5 C2M.CCB.Write Off Uncollectible Receivables Group: Bill Completion
<div align="center">Group: Batch Billing</div>

Actor/Role: C2M(CCB)
Description:
The status of a Write Off Process or Write Off SA can change due to Bill Completion. Refer to 4.3.2.5 **C2M.CCB.**Write Off Uncollectible Receivables.

Customizable process N	Process Name	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

5.2 Add Additional Required Bill Message(s) Group: Post Bill Completion Activity
<div align="center">Group: Bill Completion</div>
<div align="center">Group: Batch Billing</div>

Actor/Role: C2M(CCB)
Description:
C2M(CCB) can perform various post Bill completion activities. One example is to recreate Adjustments after a Credit Note is completed. This step could be executed from online and batch processing

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

WX-SSBNOTIFY -   This customer class post Bill completion algorithm set Bill Notifications for Self-Service
C1-CR-BLRVWS - This customer class post Bill completion algorithm create Bill Review Schedule
C1-MULT-DUDT - This customer class post Bill completion algorithm Additional Bill Due Dates

Customizable process N   **Process Name:**

BILLING.

Configuration required Y   **Entities to Configure:**

SA Type
Customer Class
Adjustment Types

5.3 Update Bill with Completion Details Group: Bill Completion
                                Group: Batch Billing
Actor/Role: C2M(CCB)
Description:
All Bill completion details are now updated in C2M(CCB).

Customizable process N   **Process Name:**

BILLING

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

WX-Bill - Bill business object (simple bill elements only) This business object is used for simple access to bill information

Business Object Y	Business Object:	WX-BillSegment - This business object is used to read the details related to a bill segment.
		CI_BillSegmentRead - Details related to Bill Segment Reads
		CI_BillSegmentStatus - Bill Segment Status This business object is used to retrieve the status of a bill segment

5.5 Make Necessary Changes for Bill
Actor/Role: CSR
Description:
During Bill Completion information may be missing or incomplete. One example is the mailing address may be missing. The CSR or Authorized User reviews and resolves the error, enters correct data, and completes the Bill as needed.

5.6 Request Reopen Bill
Actor/Role: CSR
Description:
The CSR or Authorized User determines to reopen a Bill for the Customer's account.

5.7 Update Current Bill to Reopen
Actor/Role: C2M(CCB)
Description:
The current Bill is reopened in C2M(CCB) and available for applicable changes.

5.8 Request Changes to Impact Balance
Actor/Role: CSR
Description:
Based on investigation and established business rules, the CSR or Authorized User requests various changes that impact the balance. Typically these changes can be: creation of a new Bill Segment, Rebill of a Bill Segment, Cancellation of a Bill Segment, Creation of a Payment, Adjustment, Cancellation of a Payment, or Adjustment.

5.9 Update Balance
Actor/Role: C2M(CCB)
Description:
The financial balance is updated in C2M(CCB).

6.0 Extract Bill for Delivery
Actor/Role: C2M(CCB)
Description:
Typically C2M(CCB) prepares required billing data and makes data available for the Document Management application.
Note: An additional custom process may be created to interface with the Document Management Software as needed.

Process Plug-in enabled Y	**Available Algorithm(s):**	Bill Route Type - BLEX-EX – This algorithm constructs the records that contain the information that appears on a printed Bill.
		C1-BLEX-CR - This Bill Route Type extract algorithm prepares the report information needed to create a Bill using a Reporting Engine.
		C1-BLEX-XML, C2M-BLEX-XML – The Bill Route Type extract algorithm creates billing information in an XML format as an alternative to a fixed flat file format.

Customizable process N	**Process Name**	POSTROUT – CIPBXBLB - The bill print process creates the flat file that is interfaced to your bill print software

Customizable process Y	**Process Name**	Custom Extract Process

Business Object Y	**Business Object**	WX-BillRouteType - Bill business object to read bill routing details. Note: This BO is currently used for reprint Bills
		C2M-BillRoutingR- This business object is used on the billing history zone displayed on control central - account information. Note: This BO is currently used for reprint Bills
		C1-BillRouteTypePhysicalBO - Physical BO for Bill Route Type

6.1 Produce Bill
Actor/Role: Document Management Software
Description:
Document Management Software reads and process bill information produced by C2M(CCB). It prints actual bills or prepare bills in another format (e-mail, PDF online format, short message service (SMS)).

6.2 Send Bill to Customer
Actor/Role: Document Management Software
Description:
The printed Bill is sent or made available for the Customer.

6.3 Receives Bill
Actor/Role: Customer
Description:
The Customer receives the Bill.

Configuration required Y	Entities to Configure:	Bill Route Type

6.4 Select Accounts for Open Bill Cycle Group: Bill Completion
                                      Group: Batch Billing
Actor/Role: C2M(CCB)
Description:
This step is the first step of batch billing process**.** Using the established Bill Cycle Schedule, C2M(CCB) selects Accounts defined within a specific Open Bill Cycle. The Bill Cycle's schedule controls when the system attempts to create Bills for the account. It's recommended to configure one day Window Billing if Loan should be billed.

Customizable process N	Process Name:	BILLING

Configuration required Y	Entities to Configure:	Bill Cycle
		Account

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

6.5 Check Eligibility for Batch Billing Group: Bill Completion
                                      Group: Batch Billing
Actor/Role: C2M(CCB)
Description:
Normally, most Bills are created and completed automatically. At Billing time, C2M(CCB) attempts to produce a Bill for an account and create one or more Bill Segments for every non-cancelled / non-closed service agreement linked to the account. C2M(CCB) evaluates Account, Loan Service Agreement and eligibility for billing. This step is executed form the batch process only.

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 Plug-in enabled Y	**Available Algorithm(s):**	C1-SKIPACCCB - This Customer Class Bill eligibility algorithm stops processing an account if completed bill exists.

Customizable process N	**Process Name:**	BILLING - The Bill cycle Batch processing creates Bills for accounts with an "open" Bill cycle.

Configuration required Y	**Entities to Configure:**	SA Type
		Customer Class

6.6 Highlight Bill Segment Exceptions Group: Create Bill Segment
Group: Freeze Bill Segment
Group: Batch Billing

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

Customizable process N	**Process Name:**	BILLING

6.7 Highlight Bill Exceptions Group: Bill Completion
Group: Batch Billing

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

Customizable process N	**Process Name:**	BILLING

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

Actor/Role: C2M(CCB)
Description:
C2M(CCB) identifies Bill Segments in error status. C2M(CCB) can create a To Do Entry for every Bill Segment in error status.

Customizable process N	**Process Name:**	TD-BSERR- This background process creates a To Do entry for every Bill Segment that's in error.

Configuration required Y	**Entities to Configure:**	To Do Role
		To Do Type

6.9 Create Bill Segment Exceptions To Do Group: TO DO Bill Segment Error Process
Actor/Role: C2M(CCB)
Description:
C2M(CCB) can create a To Do Entry for every Bill Segment in error status. The To Do functionality allows for online review by a user or group of users. The associated Algorithms listed here provide additional options for To Do Types. To Do Lists summarize and total entries for different To Do Types. Status of To Do Entries is available for evaluation.

Process Plug-in enabled Y	**Available Algorithm(s):**	To Do Type – Calculate Priority
		To Do Type – External Routing
		To Do Type – To Do Information
		To Do Type – To Do Post Processing

Customizable process N	**Process Name:**	TD-BSERR- This background process creates a To Do entry for every Bill Segment that's in error.

Configuration required Y	**Entities to Configure:**	To Do Role
		To Do Type

7.0 Evaluate and Perform Analysis
Actor/Role: CSR
Description:
The CSR or Authorized User will review the Bill Segment error and supporting information in C2M(CCB). Account, Service Agreement, and Billing History are some of the areas reviewed. Typically errors are caused by missing or incomplete information. Based on established business rules, the CSR or Authorized User investigates possible solutions or workarounds for the missing or incomplete information.

7.1 Resolve Issue

Actor/Role: CSR
Description:
The CSR or Authorized User resolves the error and enters information in C2M(CCB).

7.2 Update Data
Actor/Role: C2M(CCB)
Description:
Information required for resolution is updated in C2M(CCB).

7.3 Request Complete To Do
Actor/Role: CSR
Description:
The CSR or Authorized User marks the To Do Entry as complete and requests completion of the To Do Entry. The CSR or Authorized User may add comments or a log entry for future reference.

7.4 Complete To Do Entry
Actor/Role: C2M(CCB)
Description:
The To Do Entry is updated to Complete Status in C2M(CCB).

7.5 Identify Bills in Error Status Group: TO DO Bill Error Process
Actor/Role: C2M(CCB)
Description:
C2M(CCB) identifies Bills in error status. C2M(CCB) can create a To Do Entry for every Bill in error status.

Customizable process N	**Process Name:**	TD-BIERR - This background process creates a To Do entry for every Bill that's in error.

Configuration required Y	**Entities to Configure:**	To Do Role
		To Do Type

7.6 Create Bill Exceptions To Do Group: TO DO Bill Error Process
Actor/Role: C2M(CCB)
Description:
C2M(CCB) can create a To Do Entry for every Bill in error status. The To Do functionality allows for online review by a user or group of users. The associated Algorithms listed here provide additional options for To Do Types.   To Do Lists summarize and total entries for different To Do Types. Status of To Do Entries is available for evaluation.

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

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

Customizable process N   **Process Name:**

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

Configuration required Y   **Entities to Configure:**

To Do Role
To Do Type

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

Test Documentation related to the Current Process

ID	Document Name	Test Type

Document Control

Change Record

Date	Author	Version	Change Reference
6/15/09	Galina Polonsky	Draft	No Previous Document
9/1/09	Colleen King		Updates from Reviews
9/3/09	Colleen King		Updates from Reviews
10/21/10	Geir Hedman		Update Title and Content page
12/13/10	Sarit Cohen		Update display bill functionality and tech update
2/9/11	Geir Hedman		Updated Document and Visio
3/28/2011	Conrad Pinili		Updated Document – Process Plug-Ins
12/10/2013	Muhssin Suliman		CC&B v2.4 Changes
12/18/2013	Galina Polonsky		Reviewed, Approved
08/29/2017	Joshua Piccott		Updated document for v2.6
9/21/2017	Colleen King		Updated Visio and Documents for C2M
9/26/2017	Colleen King		Updated Visio and Documents for C2M
10/6/2017	Colleen King		Updated Visio and Documents for C2M
10/12/2017	Galina Polonsky		Reviewed, Approved
6/3/2019	Satya Kalavala		Updated format for v2.7

Attachments:

Bill Notebook

Bill-Loan.doc

Bill Segment Notebook

Bill Segment
Loan.doc

Admin Menu/Installation Options/Control Central Alerts

Installation Options
Framework Control C

Control Central Search

Control Central
Search.doc

Dashboard

Dashboard.doc