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Preface

About This Document

This document provides detail information about various batches in Oracle Revenue Management and Billing.

Intended Audience

This document is intended for the following audience:

- End-users
- Implementation Team
- Consulting Team
- Development Team

Organization of the Document

The information in this document is organized into the following sections:

Section No.	Section Name	Description
Section 1	Billing	Lists and describes various billing related batches.
Section 2	Payment	Lists and describes various payment related batches.
Section 3	Adjustment	Lists and describes various adjustment related batches.
Section 4	Financial Transaction	Lists and describes various financial transaction related batches.
Section 5	Pricing Management	Lists and describes various pricing related batches.

Related Documents

You can refer to the following documents for more information:

Document	Description
<i>Oracle Revenue Management and Billing Banking User Guide</i>	Lists and describes various banking features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.

Change Log

Revision	Last Update	Updated Section	Comments
6.1	22-Mar-2018	Section 1.1: Billing (BILLING)	Updated Information
		Section 1.2: Pending Bill Generation (C1-PNDBL)	Updated Information
		Section 1.3: Bill Segment Generation (C1-BLGEN)	Updated Information
		Section 1.4: Bill Completion (C1-BLPPR)	Updated Information
		Section 1.5 Construct Based - Pending Bill Generation (BILLOPEN)	Updated Information
		Section 1.6 Construct Based - Bill Segment Generation (BSGENREG)	Updated Information
		Section 1.7 Construct Based - Bill Completion (POSTPROC)	Updated Information
		Section 1.9 Upload and Validate Usage Data File (C1-ODFU)	Updated Information
		Section 1.11 Adhoc Billing (C1-FABL)	Updated Information
		Section 1.12 Freeze and Complete Adhoc Bills (C1-FCADH)	Updated Information
		Section 1.13 Pending Bill Segments Deletion (C1-BSEGD)	Updated Information
		Section 1.14 Pending Bill Deletion (C1-PNBD)	Updated Information
		Section 2.5 Freeze or Cancel Automatic Payments (APAYRA)	Updated Information
		Section 2.8 Payment Request Periodic Monitor (C1-PAYRQ)	Updated Information
		Section 3.1 Upload Request Periodic Monitor (C1-UPLRQ)	Updated Information

Contents

1.	Billing	1
1.1	Billing (BILLING)	2
1.2	Pending Bill Generation (C1-PNDBL)	4
1.3	Bill Segment Generation (C1-BLGEN)	7
1.4	Bill Completion (C1-BLPPR).....	10
1.5	Construct Based - Pending Bill Generation (BILLOPEN).....	14
1.6	Construct Based - Bill Segment Generation (BSGENREG)	16
1.7	Construct Based - Bill Completion (POSTPROC)	19
1.8	Refresh Pricing (C1-TXNRP)	21
1.9	Upload and Validate Usage Data File (C1-ODFU)	23
1.10	Billable Charge Creation (C1-ODBCH).....	25
1.11	Adhoc Billing (C1-FABL)	26
1.12	Freeze and Complete Adhoc Bills (C1-FCADH)	29
1.13	Pending Bill Segments Deletion (C1-BSEGD)	30
1.14	Pending Bill Deletion (C1-PNBD).....	31
2.	Payment.....	33
2.1	Payment Upload (PUPL).....	33
2.2	Automatic Payment Creation (APAYCRET)	35
2.3	Activate Automatic Payments (ACTVTAPY)	36
2.4	Extract Automatic Payments (APAYACH)	37
2.5	Freeze or Cancel Automatic Payments (APAYRA)	38
2.6	To Do Creation for Automatic Payment Exception Records (APAYUPTD).....	40
2.7	Create Tender Controls for Automatic Payments (BALAPY).....	40
2.8	Payment Request Periodic Monitor (C1-PAYRQ).....	41
3.	Adjustment	43
3.1	Upload Request Periodic Monitor (C1-UPLRQ)	43
4.	Financial Transaction	45
4.1	Foreign Exchange Loss Gain (C1-FXLG).....	45
4.2	Assign GL Account to Financial Transaction (C1-GLASN).....	46
4.3	Insert Records in CI_FTTEMP (GLASSGN1)	48
4.4	Assign GL Account to Financial Transaction (GLASSGN2).....	49
4.5	GL Download Staging (GLS)	51
4.6	GL Download Extract (GLDL).....	52
5.	Pricing Management.....	54
5.1	Identify Accounts for Repricing (C1-REPC1)	54

5.2 Process Repricing Request and Persist Pricing for an Account (C1-REPC2)	55
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1. Billing

Oracle Revenue Management and Billing enables you to carry out billing based on the bill cycle (defined for the account). In other words, you are able to generate a bill for a bill cycle using the billable charges whose start or end date is earlier than or equal to the cut-off date. You can generate bills online or through a batch process. If you generate bills through a batch process, the batch business date is treated as the cut-off date.

Oracle Revenue Management and Billing provides you with a batch named **BILLING**, which generates the bills based on the bill cycle defined for the account. In the **BILLING** batch, multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. This chunking logic might not be efficient while handling voluminous data. To handle high volume with better performance, you must generate bills by executing the following three batches in the specified order:

1. Pending Bill Generation (C1-PNDBL)
2. Bill Segment Generation (C1-BLGEN)
3. Bill Completion (C1-BLPPR)

Note: These three batches are primarily designed and developed for the Banking and Payments industries.

Before you execute these billing batches (i.e. **BILLING**, **C1-PNDBL**, **C1-BLGEN**, and **C1-BLPPR**), you must do the following:

- Set the **Bill Segment Freeze Option** field in the **Billing** tab of the **Installation Options** screen to either **Freeze At Will** or **Freeze At Bill Completion**.
- Set the **Billable Charges Date** option type in the **C1_FINTRANOP** feature configuration to either **S** or **E** depending on whether you want to consider the billable charges whose start or end date is earlier than or equal to the cut-off date.

Note:

If the **Billable Charges Date** option type of the **C1_FINTRANOP** feature configuration is set to **E**, the system considers the following:

>> Recurring billable charges whose start date is earlier than the cut-off date and end date is later than the cut-off date

>> Non-recurring billable charges whose end date is earlier than or equal to the cut-off date

This section provides detail information about the following batches:

- Billing (BILLING)
- Pending Bill Generation (C1-PNDBL)
- Bill Segment Generation (C1-BLGEN)
- Bill Completion (C1-BLPPR)
- Construct Based - Pending Bill Generation (BILLOPEN)

- Construct Based - Bill Segment Generation (BSGENREG)
- Construct Based - Bill Completion (POSTPROC)
- Refresh Pricing (C1-TXNRP)
- Upload and Validate Usage Data File (C1-ODFU)
- Billable Charge Creation (C1-ODBCH)
- Adhoc Billing (C1-FABL)
- Freeze and Complete Adhoc Bills (C1-FCADH)
- Pending Bill Segments Deletion (C1-BSEGD)
- Pending Bill Deletion (C1-PNBD)

1.1 Billing (BILLING)

The **Billing (BILLING)** batch is used to generate bills based on the bill cycle defined for the account. Based on the batch business date, the system identifies the bill cycles for which the bills must be generated. Once the bill cycles are identified, the system identifies a set of accounts on which these bill cycles are defined. Then, based on a set of parameters specified while executing this batch, the bills are generated for accounts that meet the criteria and the status of the bills is set to **Pending**.

Then, based on the batch business date, the system identifies the recurring and non-recurring billable charges for which bill segments must be generated. Once the billable charges are identified, the bill segments are generated in the pending bills. In addition, the post-processing bill segments, if any, are generated in the pending bills.

Note:

If the **Billable Charges Date** option type of the **C1_FINTRANOP** feature configuration is set to **E**, the system considers the following:

>> Recurring billable charges whose start date is earlier than the cut-off date and end date is later than the cut-off date

>> Non-recurring billable charges whose end date is earlier than or equal to the cut-off date

If the **Freeze and Complete** check box is selected for the bill cycle for which the bill is generated, the status of the bill segments is set to **Frozen** and the status of the bill is set to **Complete**. But, if the **Freeze and Complete** check box is not selected for the bill cycle for which the bill is generated, the status of the bill segments is set to **Freezable** and the status of the bill remains as **Pending**.

This batch is a multi-threaded batch. The multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the following:</p> <ul style="list-style-type: none"> Bill cycles within which the specified date falls Billable charges for which bill segments must be generated <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Note: All billable charges whose start or end date is earlier than or equal to the specified date are considered during bill segment generation. If you do not specify any date, the batch business date is set to the current date. </div>
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Note: By default, the thread count is set to 0. </div>
Division	No	Used when you want to generate bills for accounts belonging to a particular division.
Bill Cycle	No	Used when you want to generate bills for accounts having a particular bill cycle.
Account ID	No	Used when you want to generate bills for a particular account.
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Billing (BILLING)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the bills are generated for accounts that meet the criteria.

1.2 Pending Bill Generation (C1-PNDBL)

The **Pending Bill Generation (C1-PNDBL)** batch is used to generate pending trial or actual bills for accounts that meet the criteria.

Based on the batch business date, the system identifies the bill cycles for which the pending trial or actual bills must be generated. Once the bill cycles are identified, the system identifies a set of accounts on which these bill cycles are defined. Then, based on a set of parameters specified while executing this batch, the pending trial or actual bills are generated for accounts that meet the criteria.

This batch is a multi-threaded batch. The multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the bill cycles within which the specified date falls.</p> <p>Note: If you do not specify any date, the batch business date is set to the current date.</p>
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Division	Yes	<p>Used when you want to generate pending trial or actual bills for accounts belonging to a particular division.</p>
Bill Cycle	No	<p>Used when you want to generate pending trial or actual bills for accounts having a particular bill cycle.</p> <p>Note: You can specify maximum twenty comma separated values for this parameter.</p>

Parameter Name	Mandatory (Yes or No)	Description
Delete Existing Bill	No	<p>Used to indicate whether you want to delete existing trial or actual bills which are in the Pending status. The valid value is:</p> <ul style="list-style-type: none"> • Y <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note:</p> <p>If you do not want to delete the existing pending bill, you must leave this parameter blank. In such case, new pending bill is not generated, and the existing pending bill (available for the account and bill cycle combination) is used for further processing.</p> <p>The system does not delete the existing bills which are in the Complete status.</p> <p>If the existing pending bills have any bill segments in the Freezable or Error status, the bills are deleted. But, if the existing pending bills have any bill segments in the Frozen or Cancelled status, the bills are not deleted.</p> <p>This parameter is not supported when you are generating trial bills.</p> </div>
Bill Generation Type	No	<p>Used to indicate whether you want to generate pending trial or actual bills. If you want to generate pending trial bills, the valid value is Trial. And, if you want to generate pending actual bills, you must leave this parameter blank.</p>
Description for Trial Billing Batch Run	No	<p>Used to specify the description for the batch run. This description is stamped on each trial bill which is generated in the batch run. This helps to identify the trial bills which are generated in a particular batch run.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note:</p> <p>This parameter is used only when you are generating pending trial bills.</p> <p>If you do not specify the description, by default, the description is set to "Trial Invoicing Run On YYYY-MM-DD-HH.MM.SS".</p> </div>

Parameter Name	Mandatory (Yes or No)	Description
Process All or Selected Accounts	No	<p>Used to indicate whether you want to generate pending trial bills for all accounts (that meet the criteria) or only for those accounts (that meet the criteria and) where the Trial Bill check box is selected. If you want to generate pending trial bills for only those accounts where the Trial Bill check box is selected, set the value of this parameter to Y. If you want to generate pending trial bills for all accounts irrespective of whether the Trial Bill check box is selected or not, you must leave this parameter blank.</p> <p>Note: This parameter is used either when you are creating trial bills or when you are creating actual bills using trial bills.</p>
Account ID	No	Used when you want to generate pending trial or actual bills for a particular account.
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Pending Bill Generation (C1-PNDBL)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the pending trial or actual bills are generated for the accounts that meet the criteria.

1.3 Bill Segment Generation (C1-BLGEN)

The **Bill Segment Generation (C1-BLGEN)** batch is used to generate bill segments in the pending trial or actual bills. It is also used to copy trial bills' bill segments to the actual bills while creating actual bills using trial bills.

Based on the batch business date, the system identifies the recurring and non-recurring billable charges for which bill segments must be generated. Once the billable charges are identified, the bill segments are generated in the pending trial or actual bills.

Note:

If the **Billable Charges Date** option type of the **C1_FINTRANOP** feature configuration is set to **E**, the system considers the following:

>> Recurring billable charges whose start date is earlier than the cut-off date and end date is later than the cut-off date

>> Non-recurring billable charges whose end date is earlier than or equal to the cut-off date

If the **Freeze and Complete** check box is selected for the bill cycle for which the pending actual bill is generated, the status of the bill segments is set to **Frozen**. But, if the **Freeze and Complete** check box is not selected for the bill cycle for which the pending actual bill is generated, the status of the bill segments is set to **Freezable**. However, in case of pending trial bills, irrespective of whether the **Freeze and Complete** check box is selected or not for the bill cycle, the status of the bill segments is set to **Freezable**.

While creating actual bills using trial bills, the system copies trial bills' bill segments which are in the **Freezable** status to the actual bills. If you want to freeze the bill segments in such actual bills, you need to execute the **Bill Segment Generation (C1-BLGEN)** batch once again without specifying the trial billing batch run number.

Note:

There might be situations when you have received certain billing information after the bill and bill segments are generated. In such scenarios, you must first execute the **Pending Bill Generation (C1-PNDBL)** batch to fetch the newly created billable charges and then execute the **Bill Segment Generation (C1-BLGEN)** batch. While executing the **Pending Bill Generation (C1-PNDBL)** batch, you must leave the **Delete Existing Bill** parameter blank indicating that you want to use the existing pending bill for further processing.

In addition, there might be situations when you want to regenerate the bill segments before freezing them. In such case, you need to set the **Bill Segment Regeneration on Freeze** option type of the **C1_FINTRANOP** feature configuration to **Y**, and then execute the **Pending Bill Generation (C1-PNDBL)** and **Bill Segment Generation (C1-BLGEN)** batches once again. While executing the **Pending Bill Generation (C1-PNDBL)** batch, you must leave the **Delete Existing Bill** parameter blank indicating that you want to use the existing pending bill for further processing. If the **Freeze and Complete** check box is selected for the bill cycle and the **Bill Segment Regeneration on Freeze** option type is set to **Y**, then the bill segments are regenerated and the status of the bill segments is set to **Frozen**. Note that if the **Freeze and Complete** check box is not selected for the bill cycle, then the bill segments are always regenerated irrespective of whether the **Bill Segment Regeneration on Freeze** option type is set to **Y** or not.

This batch is a multi-threaded batch. The multi-threading is based on billable charge ID and chunks for multi-threading are created based on numerical distribution of billable charge ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the billable charges for which bill segments must be generated.</p> <p>Note: All billable charges whose start or end date is earlier than or equal to the specified date are considered during bill segment generation. If you do not specify any date, the batch business date is set to the current date.</p>
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Division	Yes	Used when you want to generate bill segments for accounts belonging to a particular division.
Bill Cycle	No	<p>Used when you want to generate bill segments for accounts having a particular bill cycle.</p> <p>Note: You can specify maximum twenty comma separated values for this parameter.</p>
Billing Processing Sequence	No	<p>Used to specify the billing processing sequence of the contract's contract type whose bill segments you want to generate. This parameter is useful when you want to generate bill segments in a particular order of importance.</p> <p>Note: You can specify comma separated values for this parameter. For example, 10, 20, 30. In such case, the bill segments of contracts whose contract types' billing processing sequence is 10, 20, or 30 will be generated simultaneously.</p>

Parameter Name	Mandatory (Yes or No)	Description
Bill Generation Type	No	Used to indicate whether you want to generate bill segments for pending trial or actual bills. If you want to generate bill segments for pending trial bills, the valid value is Trial . And, if you want to generate bill segments for pending actual bills or if you want to copy trial bills' bill segments while creating actual bills using trial bills, you must leave this parameter blank.
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' bill segments you want to copy to the actual bills.</p> <p>Note: This parameter is used only when you are creating actual bills using trial bills.</p>
Process All or Selected Accounts	No	<p>Used to indicate whether you want to generate bill segments for all accounts (that meet the criteria) or only for those accounts (that meet the criteria and) where the Trial Bill check box is selected. If you want to generate bill segments for only those accounts where the Trial Bill check box is selected, set the value of this parameter to Y. If you want to generate bill segments for all accounts irrespective of whether the Trial Bill check box is selected or not, you must leave this parameter blank.</p> <p>Note:</p> <p>This parameter is used either when you are creating trial bills or when you are creating actual bills using trial bills.</p> <p>If you set the value of this parameter to Y while creating actual bills using trial bills, the system will copy trial bills' bill segments of only those accounts (that meet the criteria and) where the Trial Bill check box is selected. And, if you leave this parameter blank, the system will copy trial bills' bill segments of all accounts (that meet the criteria) irrespective of whether the Trial Bill check box is selected or not. If the bill segments do not exist for an account while creating actual bills using trial bills, the system generates the bill segments for the account.</p>
Account ID	No	Used when you want to generate bill segments for a particular account.

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

You must specify same parameters in the **C1-PNDBL**, **C1-BLGEN** and **C1-BLPPR** batches. Otherwise, erroneous results will occur.

If the **Bill Segment Generation (C1-BLGEN)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the bill segments are generated in the pending trial or actual bills.

1.4 Bill Completion (C1-BLPPR)

The **Bill Completion (C1-BLPPR)** batch is used to generate post-processing bill segments in the pending trial or actual bills during the bill completion process. The adjustments, if any, created on the accounts are swept onto the pending trial or actual bills. In addition, the bill routing information and bill messages are stamped on the pending trial or actual bills. If the adjustment currency is different from the account's invoice currency, the transfer adjustment is created on the pending actual bill. However, in case of pending trial bill, the currency conversion for adjustments is done, but the transfer adjustments are not created. Finally, the status of the actual bill is set to **Complete**, whereas the status of the trial bill remains as **Pending**.

Based on the batch business date, the system identifies the bill cycles whose pending bills must be completed. Once the bill cycles are identified, the system identifies a set of accounts on which these bill cycles are defined. Then, based on a set of parameters specified while executing this batch, the pending bills are completed for accounts that meet the criteria.

If the **Freeze and Complete** check box is selected for the bill cycle for which the pending actual bill is generated, the status of the post-processing bill segments is set to **Frozen** and the status of the actual bill is changed to **Complete**. But, if the **Freeze and Complete** check box is not selected for the bill cycle for which the pending actual bill is generated, the status of the post-processing bill segments is set to **Freezable** and the status of the actual bill remains as **Pending**. However, in case of pending trial bills, irrespective of whether the **Freeze and Complete** check box is selected or not for the bill cycle, the status of the post-processing bill segments is set to **Freezable** and the status of the trial bill remains as **Pending**.

While creating actual bills using trial bills, the system copies trial bills' post-processing bill segments which are in the **Freezable** status to the actual bills. If you want to freeze the post-processing bill segments and complete such actual bills, you need to execute the **Bill Completion (C1-BLPPR)** batch once again without specifying the trial billing batch run number.

Note:

There might be situations when you have selected the **Freeze and Complete** check box for the bill cycle after all three batches are executed. In such scenarios, the system allows you to re-execute these batches. However, to enhance performance, you must first execute the **Bill Segment Generation (C1-BLGEN)** batch and then execute the **Bill Completion (C1-BLPPR)** batch. The status of the bill segments and bills is changed accordingly.

In addition, there might be situations when you want to regenerate the post-processing bill segments before freezing them. In such case, you need to set the **Bill Segment Regeneration on Freeze** option type of the **C1_FINTRANOP** feature configuration to **Y**, and then execute the **Bill Completion (C1-BLPPR)** batch once again. If the **Freeze and Complete** check box is selected for the bill cycle and the **Bill Segment Regeneration on Freeze** option type is set to **Y**, then the post-processing bill segments are regenerated, and the status of the bill segments is set to **Frozen**. Note that if the **Freeze and Complete** check box is not selected for the bill cycle, then the post-processing bill segments are always regenerated irrespective of whether the **Bill Segment Regeneration on Freeze** option type is set to **Y** or not.

This batch is a multi-threaded batch. The multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the bill cycles within which the specified date falls.</p> <p>Note: If you do not specify any date, the batch business date is set to the current date.</p>
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Division	Yes	Used when you want to initiate the bill completion process for accounts belonging to a particular division.
Bill Cycle	No	<p>Used when you want to initiate the bill completion process for accounts having a particular bill cycle.</p> <p>Note: You can specify maximum twenty comma separated values for this parameter.</p>

Parameter Name	Mandatory (Yes or No)	Description
Bill Generation Type	No	Used to indicate whether you want to initiate the bill completion process for pending trial or actual bills. If you want to initiate the bill completion process for pending trial bills, the valid value is Trial . And, if you want to initiate the bill completion process for pending actual bills or if you want to copy trial bills' post-processing bill segments while creating actual bills using trial bills, you must leave this parameter blank.
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' post-processing bill segments you want to copy to the actual bills.</p> <p>Note: This parameter is used only when you are creating actual bills using trial bills.</p>

Parameter Name	Mandatory (Yes or No)	Description
Process All or Selected Accounts	No	<p>Used to indicate whether you want to initiate the bill completion process for all accounts (that meet the criteria) or only for those accounts (that meet the criteria and) where the Trial Bill check box is selected. If you want to initiate the bill completion process for those accounts where the Trial Bill check box is selected, set the value of this parameter to Y. If you want to initiate the bill completion process for all accounts irrespective of whether the Trial Bill check box is selected or not, you must leave this parameter blank.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note:</p> <p>This parameter is used either when you are creating trial bills or when you are creating actual bills using trial bills.</p> <p>If you set the value of this parameter to Y while creating actual bills using trial bills, the system will copy trial bills' post-processing bill segments of only those accounts (that meet the criteria and) where the Trial Bill check box is selected. And, if you leave this parameter blank, the system will copy trial bills' post-processing bill segments of all accounts (that meet the criteria) irrespective of whether the Trial Bill check box is selected or not. If the post-processing bill segments do not exist for an account while creating actual bills using trial bills, the system generates the post-processing bill segments (if any) for the account.</p> </div>
Account ID	No	Used when you want to initiate the bill completion process for a particular account.
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

You must specify same parameters in the **C1-PNDBL**, **C1-BLGEN** and **C1-BLPPR** batches. Otherwise, erroneous results will occur.

If the **Bill Completion (C1-BLPPR)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

To improve the performance of the **Bill Completion (C1-BLPPR)** batch, you can store the post-processing price item pricing information. For more information, refer to the [Refresh Pricing \(C1-TXNRP\)](#) section.

Post Execution Check/Clean Up:

On successful completion of this batch, the post-processing bill segments (if any) are generated in the pending trial or actual bills. The status of the actual bill is changed to **Complete** and the status of the trial bill remains as **Pending**.

1.5 Construct Based - Pending Bill Generation (BILLOPEN)

The **Construct Based - Pending Bill Generation (BILLOPEN)** batch is used to generate pending trial or actual bills for accounts that meet the criteria.

Based on the batch business date, the system identifies the bill cycles for which the pending trial or actual bills must be generated. Once the bill cycles are identified, the system identifies a set of accounts on which these bill cycles are defined. These accounts may be usage or invoice accounts. Then, based on a set of parameters specified while executing this batch, the pending trial or actual bills are generated for accounts that meet the criteria.

In addition, this batch fetches all recurring and non-recurring billable charges of the accounts with the **Adhoc** flag set to **No** and whose start or end date is earlier than or equal to the batch business date. If a billable charge satisfies the rule defined on any active construct, the construct and invoice account details are stamped in the temporary area. And, if a billable charge does not satisfy the rule defined on any active construct, the invoice account details are stamped in the temporary area. Note that in such case, the account will be billed individually and not through any invoice account.

Note:

If the **Billable Charges Date** option type of the **C1_FINTRANOP** feature configuration is set to **E**, the system considers the following:

>> Recurring billable charges whose start date is earlier than the cut-off date and end date is later than the cut-off date

>> Non-recurring billable charges whose end date is earlier than or equal to the cut-off date

This batch is a multi-threaded batch. The multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the bill cycles within which the specified date falls.</p> <p>Note: If you do not specify any date, the batch business date is set to the current date.</p>

Parameter Name	Mandatory (Yes or No)	Description
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Division	Yes	<p>Used when you want to generate pending trial or actual bills for accounts belonging to a particular division.</p>
Bill Cycle	No	<p>Used when you want to generate pending trial or actual bills for accounts having a particular bill cycle.</p> <p>Note: You can specify maximum twenty comma separated values for this parameter.</p>
Delete Existing Bill	No	<p>Used to indicate whether you want to delete existing trial or actual bills which are in the Pending status. The valid value is:</p> <ul style="list-style-type: none"> • Y <p>Note:</p> <p>If you do not want to delete the existing pending bill, you must leave this parameter blank. In such case, new pending bill is not generated, and the existing pending bill (available for the account and bill cycle combination) is used for further processing.</p> <p>The system does not delete the existing bills which are in the Complete status.</p> <p>If the existing pending bills have any bill segments in the Freezable or Error status, the bills are deleted. But, if the existing pending bills have any bill segments in the Frozen or Cancelled status, the bills are not deleted.</p> <p>This parameter is not supported when you are generating trial bills.</p>
Bill Generation Type	No	<p>Used to indicate whether you want to generate pending trial or actual bills. If you want to generate pending trial bills, the valid value is Trial. And, if you want to generate pending actual bills, you must leave this parameter blank.</p>

Parameter Name	Mandatory (Yes or No)	Description
Description for Trial Billing Batch Run	No	<p>Used to specify the description for the batch run. This description is stamped on each trial bill which is generated in the batch run. This helps to identify the trial bills which are generated in a particular batch run.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note:</p> <p>This parameter is used only when you are generating pending trial bills.</p> <p>If you do not specify the description, by default, the description is set to "Trial Invoicing Run On YYYY-MM-DD-HH.MM.SS".</p> </div>
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Construct Based - Pending Bill Generation (BILLOPEN)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the pending trial or actual bills are generated for the accounts that meet the criteria.

1.6 Construct Based - Bill Segment Generation (BSGENREG)

The **Construct Based - Bill Segment Generation (BSGENREG)** batch is used to generate bill segments in the pending trial or actual bills. It is also used to copy trial bills' bill segments to the actual bills while creating actual bills using trial bills.

If the construct and invoice account details are stamped corresponding to a billable charge in the temporary area, the bill segment is generated on the pending trial or actual bill of the invoice account. However, if only the invoice account details are stamped corresponding to a billable charge in the temporary area, the bill segment is generated on the pending trial or actual bill of the usage account.

If the **Freeze and Complete** check box is selected for the bill cycle for which the pending actual bill is generated, the status of the bill segments is set to **Frozen**. But, if the **Freeze and Complete** check box is not selected for the bill cycle for which the pending actual bill is generated, the status of the bill segments is set to **Freezable**. However, in case of pending trial bills, irrespective of whether the **Freeze and Complete** check box is selected or not for the bill cycle, the status of the bill segments is set to **Freezable**.

While creating actual bills using trial bills, the system copies trial bills' bill segments which are in the **Freezable** status to the actual bills. If you want to freeze the bill segments in such actual bills, you need to execute the **Construct Based - Bill Segment Generation (BSGENREG)** batch once again without specifying the trial billing batch run number.

Note:

There might be situations when you have received certain billing information after the bill and bill segments are generated. In such scenarios, you must first execute the **Construct Based - Pending Bill Generation (BILLOPEN)** batch to fetch the newly created billable charges and then execute the **Construct Based - Bill Segment Generation (BSGENREG)** batch. While executing the **Construct Based - Pending Bill Generation (BILLOPEN)** batch, you must leave the **Delete Existing Bill** parameter blank indicating that you want to use the existing pending bill for further processing.

In addition, there might be situations when you want to regenerate the bill segments before freezing them. In such case, you need to set the **Bill Segment Regeneration on Freeze** option type of the **C1_FINTRANOP** feature configuration to **Y**, and then execute the **Construct Based - Pending Bill Generation (BILLOPEN)** and **Construct Based - Bill Segment Generation (BSGENREG)** batches once again. While executing the **Construct Based - Pending Bill Generation (BILLOPEN)** batch, you must leave the **Delete Existing Bill** parameter blank indicating that you want to use the existing pending bill for further processing. If the **Freeze and Complete** check box is selected for the bill cycle and the **Bill Segment Regeneration on Freeze** option type is set to **Y**, then the bill segments are regenerated and the status of the bill segments is set to **Frozen**. Note that if the **Freeze and Complete** check box is not selected for the bill cycle, then the bill segments are always regenerated irrespective of whether the **Bill Segment Regeneration on Freeze** option type is set to **Y** or not.

This batch is a multi-threaded batch. The multi-threading is based on billable charge ID and chunks for multi-threading are created based on numerical distribution of billable charge ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the billable charges for which bill segments must be generated.</p> <p>Note:</p> <p>All billable charges whose start or end date is earlier than or equal to the specified date are considered during bill segment generation.</p> <p>If you do not specify any date, the batch business date is set to the current date.</p>
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Division	No	Used when you want to generate bill segments for accounts belonging to a particular division.

Parameter Name	Mandatory (Yes or No)	Description
Bill Cycle	No	<p>Used when you want to generate bill segments for accounts having a particular bill cycle.</p> <p>Note: You can specify maximum twenty comma separated values for this parameter.</p>
Bill Generation Type	No	<p>Used to indicate whether you want to generate bill segments for pending trial or actual bills. If you want to generate bill segments for pending trial bills, the valid value is Trial. And, if you want to generate bill segments for pending actual bills or if you want to copy trial bills' bill segments while creating actual bills using trial bills, you must leave this parameter blank.</p>
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' bill segments you want to copy to the actual bills.</p> <p>Note: This parameter is used only when you are creating actual bills using trial bills.</p>
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

You must specify same parameters in the **BILLOPEN**, **BSGENREG** and **POSTPROC** batches. Otherwise, erroneous results will occur.

If the **Construct Based - Bill Segment Generation (BSGENREG)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the bill segments are generated in the pending trial or actual bills.

1.7 Construct Based - Bill Completion (POSTPROC)

The **Construct Based - Bill Completion (POSTPROC)** batch is used to generate post-processing bill segments in the pending trial or actual bills during the bill completion process. The post-processing bill segments, if any, are generated on the invoice or usage account depending on the type of price assignment. If an adjustment created on the account satisfies the rule defined on any active construct, the adjustment is swept onto the pending trial or actual bill of the invoice account. However, if an adjustment created on the account does not satisfy the rule defined on any active construct, the adjustment is swept onto the pending trial or actual bill of the usage account.

In addition, the bill routing information and bill messages are stamped on the pending trial or actual bills. If the adjustment currency is different from the account's invoice currency, the transfer adjustment is created on the pending actual bill. However, in case of pending trial bill, the currency conversion for adjustments is done, but the transfer adjustments are not created. Finally, the status of the actual bill is set to **Complete**, whereas the status of the trial bill remains as **Pending**.

Based on the batch business date, the system identifies the bill cycles whose pending bills must be completed. Once the bill cycles are identified, the system identifies a set of accounts on which these bill cycles are defined. Then, based on a set of parameters specified while executing this batch, the pending bills are completed for accounts that meet the criteria.

If the **Freeze and Complete** check box is selected for the bill cycle for which the pending actual bill is generated, the status of the post-processing bill segments is set to **Frozen** and the status of the actual bill is changed to **Complete**. But, if the **Freeze and Complete** check box is not selected for the bill cycle for which the pending actual bill is generated, the status of the post-processing bill segments is set to **Freezable** and the status of the actual bill remains as **Pending**. However, in case of pending trial bills, irrespective of whether the **Freeze and Complete** check box is selected or not for the bill cycle, the status of the post-processing bill segments is set to **Freezable** and the status of the trial bill remains as **Pending**.

While creating actual bills using trial bills, the system copies trial bills' post-processing bill segments which are in the **Freezable** status to the actual bills. If you want to freeze the post-processing bill segments and complete such actual bills, you need to execute the **Construct Based - Bill Completion (POSTPROC)** batch once again without specifying the trial billing batch run number.

Note:

There might be situations when you have selected the **Freeze and Complete** check box for the bill cycle after all three batches are executed. In such scenarios, the system allows you to re-execute these batches. However, to enhance performance, you must first execute the **Construct Based - Bill Segment Generation (BSGENREG)** batch and then execute the **Construct Based - Bill Completion (POSTPROC)** batch. The status of the bill segments and bills is changed accordingly.

In addition, there might be situations when you want to regenerate the post-processing bill segments before freezing them. In such case, you need to set the **Bill Segment Regeneration on Freeze** option type of the **C1_FINTRANOP** feature configuration to **Y**, and then execute the **Construct Based - Bill Completion (POSTPROC)** batch once again. If the **Freeze and Complete** check box is selected for the bill cycle and the **Bill Segment Regeneration on Freeze** option type is set to **Y**, then the post-processing bill segments are regenerated, and the status of the bill segments is set to **Frozen**. Note that if the **Freeze and Complete** check box is not selected for the bill cycle, then the post-processing bill segments are always regenerated irrespective of whether the **Bill Segment Regeneration on Freeze** option type is set to **Y** or not.

This batch is a multi-threaded batch. The multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the bill cycles within which the specified date falls.</p> <p>Note: If you do not specify any date, the batch business date is set to the current date.</p>
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Division	Yes	Used when you want to initiate the bill completion process for accounts belonging to a particular division.
Bill Cycle	No	<p>Used when you want to initiate the bill completion process for accounts having a particular bill cycle.</p> <p>Note: You can specify maximum twenty comma separated values for this parameter.</p>

Parameter Name	Mandatory (Yes or No)	Description
Bill Generation Type	No	Used to indicate whether you want to initiate the bill completion process for pending trial or actual bills. If you want to initiate the bill completion process for pending trial bills, the valid value is Trial . And, if you want to initiate the bill completion process for pending actual bills or if you want to copy trial bills' post-processing bill segments while creating actual bills using trial bills, you must leave this parameter blank.
Trial Billing Batch Run Number	No	Used to indicate the trial billing batch run number whose trial bills' post-processing bill segments you want to copy to the actual bills. Note: This parameter is used only when you are creating actual bills using trial bills.
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

You must specify same parameters in the BILLOPEN, BSGENREG and POSTPROC batches. Otherwise, erroneous results will occur.

If the Construct Based - Bill Completion (POSTPROC) batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the post-processing bill segments (if any) are generated in the pending trial or actual bills. The status of the actual bill is changed to **Complete** and the status of the trial bill remains as **Pending**.

1.8 Refresh Pricing (C1-TXNRP)

You can store the regular and post-processing price item pricing information in the following tables and thereby improve the performance of the **Price Item Pricing Verification (C1-TXNVP)** and **Bill Completion (C1-BLPPR)** batches:

- CI_PRC_AGRD
- CI_PRC_PL
- CI_PRC_INH_PL

If you set the **Materialized View Used** option type of the **C1_FM** feature configuration to **true**, the system will store the regular and post-processing price item pricing information in the above mentioned

tables. But, if you set the **Materialized View Used** option type of the **C1_FM** feature configuration to **false**, the system will not store the regular and post-processing price item pricing information in the above mentioned tables.

This mechanism to store pricing information in the above mentioned tables helps to quickly search for regular or post-processing price item pricing information while executing the **Price Item Pricing Verification (C1-TXNVP)** or **Bill Completion (C1-BLPPR)** batch, respectively. The system stores all price items pricing information irrespective of whether it is effective or not. If the price assignment ID is not stamped on any billable charge, the system refers to the price assignment search algorithm which searches for the pricing in the original tables and not in the above mentioned tables.

If there are any pricing changes, you will have to update these tables before you execute the **Price Item Pricing Verification (C1-TXNVP)** or **Bill Completion (C1-BLPPR)** batch. The **Refresh Pricing (C1-TXNRP)** batch is used to update the regular and post-processing price item pricing information in the above mentioned tables.

This batch is a multi-threaded batch. The multi-threading is based on person ID and chunks for multi-threading are created based on numerical distribution of person ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Thread Count	No	Used to specify the number of threads you want to spawn in parallel. Note: By default, the thread count is set to 0.
Chunk Size	Yes	Used to specify the number of persons whose regular and post-processing price item pricing information you want to update in each work unit.
Division	No	Used when you want to update the price item pricing information of accounts belonging to a particular division.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Refresh Pricing (C1-TXNRP)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the regular and post-processing price item pricing information is updated in the **CI_PRC_AGRD**, **CI_PRC_PL**, and **CI_PRC_INH_PL** tables. During this process, the existing data is first removed from these tables, and then the latest information is added into these tables.

1.9 Upload and Validate Usage Data File (C1-ODFU)

The **Upload and Validate Usage Data File (C1-ODFU)** batch is used to upload and validate a usage data file. It is also used for revalidating a usage data file which is already uploaded in the system.

While uploading or revalidating a usage data file, a batch job is created using this batch automatically when the usage data file size exceeds the file size limit defined in the **On Demand Billing (C1-ODBFC)** feature configuration.

This batch is a multi-threaded batch. The multi-threading is based on staging ID and chunks for multi-threading are created based on numerical distribution of staging ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
File Group	Yes	Used to specify the group in which you want to upload the usage data file.
File Name	Yes	Used to specify the name of the usage data file that you want to upload or revalidate.
Thread Pool Name	No	<p>Used to specify the thread pool on which you want to execute the batch.</p> <p>Note: If a batch job is created automatically, the value defined in the Thread Pool Name option type of the On Demand Billing (C1-ODBFC) feature configuration is used.</p>
File Type	Yes	Used to specify the type of usage data file.
Billing Method	Yes	<p>Used to specify the type of billing you want to use for the usage data file. The valid values are:</p> <ul style="list-style-type: none"> ADB RLB <p>Note: ADB stands for adhoc billing and RLB stands for regular billing.</p>
Access Group	No	Used to specify the access group of the user who is uploading or revalidating the usage data file.
Bill After Date	Yes (Conditional)	<p>Used to specify the date after which the bills must be generated for the usage data file.</p> <p>Note: This parameter is required only when the billing method is ADB.</p>

Parameter Name	Mandatory (Yes or No)	Description
Default Usage Start Date	Yes	Used to specify the date from when the price item was used. The default usage start date is used when the start date is not specified for a record in the usage data file.
Default Usage End Date	Yes	Used to specify the date till when the price item was used. The default usage end date is used when the end date is not specified for a record in the usage data file.
File Path	Yes (Conditional)	<p>Used to specify the path of the usage data file that you want to upload.</p> <p>Note: This parameter is not required when you are revalidating a usage data file.</p>
Revalidate	Yes	<p>Used to indicate whether you want to revalidate the usage data file. The valid values are:</p> <ul style="list-style-type: none"> • Y – Used when you want to revalidate a usage data file. • N – Used when you want to upload and validate a usage data file.
Chunk Size	Yes	<p>Used to specify the number of usage records you want to validate or revalidate in each work unit.</p> <p>Note: If a batch job is created automatically, the value defined in the Validation Chunk Size option type of the On Demand Billing (C1-ODBFC) feature configuration is used.</p>

Note:

If a batch job is created automatically, the values for these parameters are automatically specified in the batch job depending on whether you are uploading or revalidating a usage data file.

If the **Upload and Validate Usage Data File (C1-ODFU)** batch fails or aborts due to some reason, you cannot restart the batch. Instead, you need to upload the usage data file once again in the system.

Post Execution Check/Clean Up:

On successful completion of this batch, records are either uploaded and validated or revalidated in the system. If a usage record is successfully validated, the status of the usage record is changed to **Valid**. And, if a usage record could not pass through the validation process, the status of the usage record is changed to **Invalid**.

In addition, a To Do entry is created using the **C1-ODFU** To Do type. You can view this To Do entry only when you are assigned a To Do role which is mapped to the **C1-ODFU** To Do type. This To Do indicates whether the batch was successfully executed or not. If the batch was successfully executed, it indicates the following:

- Number of records that were uploaded in the system (appears only on uploading a usage data file)
- Number of records which were successfully validated
- Number of records which could not pass through the validation process
- Number of records which failed to validate due to some technical reasons

1.10 Billable Charge Creation (C1-ODBCH)

The **Billable Charge Creation (C1-ODBCH)** batch is used to create a billable charge for a valid usage record. While submitting or approving usage records, a batch job is created using this batch automatically when the total number of valid records in a usage data file exceeds the transaction limit defined in the **On Demand Billing (C1-ODBFC)** feature configuration.

This batch is a multi-threaded batch. The multi-threading is based on staging ID and chunks for multi-threading are created based on numerical distribution of staging ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
File Name	Yes	Used to specify the name of the usage data file for which you want to create the billable charges.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch. Note: If a batch job is created automatically, the value defined in the Thread Pool Name option type of the On Demand Billing (C1-ODBFC) feature configuration is used.
Chunk Size	Yes	Used to specify the number of valid records for which you want to create billable charges in each work unit. Note: If a batch job is created automatically, the value defined in the Billable Charge Chunk Size option type of the On Demand Billing (C1-ODBFC) feature configuration is used.
File Group Header ID	No	Used to specify the header ID of the file group for which you want to create the billable charges.

Note:

If a batch job is created automatically, the values for these parameters are automatically specified in the batch job.

If the **Billable Charge Creation (C1-ODBCH)** batch fails or aborts due to some reason, you cannot restart the batch. Instead, you need to submit or approve the usage records once again in the system.

Post Execution Check/Clean Up:

On successful completion of this batch, a billable charge is created for each valid record. The status of the usage record is changed to **Processed**.

In addition, a To Do entry is created using the **C1-ODBCH** To Do type. You can view this To Do entry only when you are assigned a To Do role which is mapped to the **C1-ODBCH** To Do type. This To Do indicates whether the batch was successfully executed or not. If the batch was successfully executed, it indicates the following:

- Number of records for which billable charges were created
- Number of records for which billable charges could not be created successfully

1.11 Adhoc Billing (C1-FABL)

The **Adhoc Billing (C1-FABL)** batch is used to generate an adhoc bill for a file group and account combination or for an account when the bill after date is earlier than or equal to the batch business date. Both, automatically generated and manually created billable charges (with the **Adhoc Bill** flag set to **Y**) are considered during adhoc billing.

While generating adhoc bills through the **On Demand Billing** screen, a batch job is created using this batch automatically when the total number of billable charges for a file group exceeds the online bill creation limit defined in the **On Demand Billing (C1-ODBFC)** feature configuration.

Once the billable charges are identified, bill segments are generated in the adhoc bill. The status of bill segments is set to **Freezable** and the status of adhoc bill is set to **Pending**. In the following scenarios, the system behaves in the following manner:

- If an adhoc bill with the **Pending** status already exists for an account or for a file group and account combination, then the existing bill is deleted and regenerated.
- If an adhoc bill with the **Completed** status already exists for an account or for a file group and account combination, then a new bill is generated (but the existing bill is not deleted).
- If a completed bill of an account or of a file group and account combination is cancelled (in other words, bill segments in an adhoc bill are cancelled), a new bill is generated (but the existing bill is not deleted).

This batch is a multi-threaded batch. The chunks for multi-threading are created randomly and there is no specific logic defined for chunking in the system. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the billable charges for which bill segments must be generated. If the file group is specified, the billable charges that meet the following criteria are considered during adhoc billing:</p> <ul style="list-style-type: none"> Billable charges are created for accounts whose usage data is uploaded in the specified file group. The Adhoc Bill flag of the billable charge is set to Y. Billable charges whose bill after date is earlier than or equal to the specified date. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note:</p> <p>If you do not specify any date, the batch business date is set to the current date.</p> <p>This parameter is used to identify billable charges only when the cut-off date is not specified.</p> </div>
File Group	No	<p>Used to indicate the file group for which you want to generate the adhoc bills.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note: If a batch job is created automatically, the value for this parameter is automatically specified in the batch job.</p> </div>
Thread Pool Name	No	<p>Used to specify the thread pool on which you want to execute the batch.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note: If a batch job is created automatically, the value defined in the Thread Pool Name option type of the On Demand Billing (C1-ODBFC) feature configuration is used.</p> </div>
Division	No	Used when you want to generate adhoc bills for accounts belonging to a particular division.
Account ID	No	Used when you want to generate adhoc bills for a particular account.
Lead Days	No	Used to specify the number of lead days that you want to consider while identifying the billable charges. If you specify the lead days, the system considers all adhoc

Parameter Name	Mandatory (Yes or No)	Description
		billable charges whose bill after date is earlier than or equal to batch business date + lead days.
Cutoff Date	No	<p>Used to identify the billable charges for which bill segments must be generated. If the file group is specified, the billable charges that meet the following criteria are considered during adhoc billing:</p> <ul style="list-style-type: none"> Billable charges are created for accounts whose usage data is uploaded in the specified file group. The Adhoc Bill flag of the billable charge is set to Y. Billable charges whose bill after date is earlier than or equal to the specified date.
Accounting Date	No	<p>Used to specify the accounting date.</p> <p>Note: The accounting date cannot be earlier than the cutoff date.</p>

Note: If the **Adhoc Billing (C1-FABL)** batch fails or aborts due to some reason, you cannot restart the batch. Instead, you need to generate adhoc bills for the closed file group once again in the system.

Post Execution Check/Clean Up:

On successful completion of this batch, an adhoc bill is generated for an account or for a file group and account combination when the bill after date is earlier than or equal to the batch business date or batch business date + lead days.

In addition, a To Do entry is created using the **C1-FABL** To Do type. You can view this To Do entry only when you are assigned a To Do role which is mapped to the **C1-FABL** To Do type. This To Do indicates whether the batch was successfully executed or not. If the batch was successfully executed, it indicates the following:

- Number of billable charges which were processed
- Number of billable charges for which the bill after date is a future date
- Number of adhoc bills generated for the usage data file
- Number of billable charges which could not be processed successfully

1.12 Freeze and Complete Adhoc Bills (C1-FCADH)

The **Freeze and Complete Adhoc Bills (C1-FCADH)** batch is used to freeze and complete all adhoc bills of a file group which are in the **Pending** status. While executing this batch, the system does not freeze and complete pending adhoc bills which have bill segments in the **Error** status.

While freezing and completing adhoc bills through the **On Demand Billing** screen, a batch job is created using this batch automatically.

This batch is a multi-threaded batch. The chunks for multi-threading are created randomly and there is no specific logic defined for chunking in the system. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
File Group	No	<p>Used to indicate the file group whose adhoc bills you want to freeze and complete.</p> <p>Note: If a batch job is created automatically, the value for this parameter is automatically specified in the batch job.</p>
Accounting Date	No	<p>Used to specify the accounting date. This parameter is useful when you want to override the accounting date specified while creating adhoc bills.</p>
Bill Date	No	<p>Used to specify the bill date that you want to display on the adhoc bills.</p> <p>Note: If you do not specify any date, the bill date is set to the current date.</p>
Thread Pool Name	No	<p>Used to specify the thread pool on which you want to execute the batch.</p> <p>Note: If a batch job is created automatically, the value defined in the Thread Pool Name option type of the On Demand Billing (C1-ODBFC) feature configuration is used.</p>

Note: If the **Freeze and Complete Adhoc Bills (C1-FCADH)** batch fails or aborts due to some reason, you cannot restart the batch. Instead, you need to freeze and complete adhoc bills of the closed file group once again in the system.

Post Execution Check/Clean Up:

On successful completion of this batch, adhoc bills of the file group are completed. The status of the adhoc bills is changed to **Complete**.

In addition, a To Do entry is created using the **C1-FCADH** To Do type. You can view this To Do entry only when you are assigned a To Do role which is mapped to the **C1-FCADH** To Do type. This To Do indicates

whether the batch was successfully executed or not. If the batch was successfully executed, it indicates the following:

- Number of bills which were picked up for completion
- Number of bills which were completed
- Number of bills which could not be completed successfully

1.13 Pending Bill Segments Deletion (C1-BSEGD)

The **Pending Bill Segments Deletion (C1-BSEGD)** batch is used to delete bill segments which are in the **Freezable** or **Error** status. It does not delete bill segments which are in the **Pending Cancel**, **Frozen**, or **Cancel** status.

This batch is a multi-threaded batch. The multi-threading is based on bill segment ID and chunks for multi-threading are created based on numerical distribution of bill segment ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Thread Count	No	<p>Used to specify the number of threads you want to spawn in parallel.</p> <p>Note: By default, the thread count is set to 0.</p>
Account ID	No	Used to indicate the account whose bill segments you want to delete.
Division	No	Used when you want to delete bill segments of accounts belonging to a particular division.
Bill Cycle	No	Used when you want to delete bill segments of accounts having a particular bill cycle.
Request Type	No	<p>Used to indicate whether you want to delete bill segments during the disaggregation process. The valid values are:</p> <ul style="list-style-type: none"> • BILLING – When you select this option, the system deletes bill segments of pending bills of accounts that meet the criteria. • DISAGG – When you select this option, the system deletes bill segments of accounts that meet the criteria and for which the disaggregation request is created. <p>Note: If you do not specify any value, by default, the parameter value is set to BILLING.</p>

Parameter Name	Mandatory (Yes or No)	Description
Chunk Size	Yes	Used to specify the number of transactions you want to execute in each work unit.
Maximum Batch Count	Yes	Used to specify the maximum number of transactions after which the data must be committed in the database.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

At present, the batch business date is not used (or considered) while executing the **Pending Bill Segments Deletion (C1-BSEGD)** batch.

If the **Pending Bill Segments Deletion (C1-BSEGD)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the bill segments in the **Freezable** or **Error** status and their corresponding financial transactions are deleted. The corresponding bill ID is added in the **CI_DELETE_BILL_DETAIL** table for further processing.

1.14 Pending Bill Deletion (C1-PNBD)

The **Pending Bill Deletion (C1-PNBD)** batch checks whether the pending bills listed in the **CI_DELETE_BILL_DETAIL** table have any bill segments in the **Pending Cancel**, **Frozen**, or **Cancel** status. If there are bill segments in the **Pending Cancel**, **Frozen**, or **Cancel** status, the pending bill is not deleted. However, if there are no bill segments in the **Pending Cancel**, **Frozen**, or **Cancel** status, the pending bill is deleted. This batch deletes regular pending bills and not adhoc pending bills.

Note: If the pending bills have bill segments, you must first execute the **Pending Bill Segments Deletion (C1-BSEGD)** batch and then execute the **Pending Bill Deletion (C1-PNBD)** batch. While executing these batches in the specified order, ensure that you specify the same parameters in both these batches.

This batch is a multi-threaded batch. The multi-threading is based on bill ID and chunks for multi-threading are created based on numerical distribution of bill ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Thread Count	No	Used to specify the number of threads you want to spawn in parallel. Note: By default, the thread count is set to 0.
Account ID	No	Used to indicate the account whose pending bills you want to delete.

Parameter Name	Mandatory (Yes or No)	Description
Division	No	Used when you want to delete pending bills of accounts belonging to a particular division.
Bill Cycle	No	Used when you want to delete pending bills of accounts having a particular bill cycle.
Request Type	No	<p>Used to indicate whether you want to delete pending bills during the disaggregation process. The valid values are:</p> <ul style="list-style-type: none"> • BILLING – When you select this option, the system deletes pending bills of accounts that meet the criteria. • DISAGG – When you select this option, the system deletes pending bills of accounts that meet the criteria and for which the disaggregation request is created. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Note: If you do not specify any value, by default, the parameter value is set to BILLING. </div>
Chunk Size	Yes	Used to specify the number of transactions you want to execute in each work unit.
Maximum Batch Count	Yes	Used to specify the maximum number of transactions after which the data must be committed in the database.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

At present, the batch business date is not used (or considered) while executing the **Pending Bill Deletion (C1-PNBD)** batch.

If the **Pending Bill Deletion (C1-PNBD)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the BILL_ACT_CD column corresponding to a pending bill in the CI_DELETE_BILL_DETAIL table is set to either 10 or 20. 10 indicate that the pending bill contains no bill segments in the **Pending Cancel, Frozen, or Cancel** status, and therefore can be deleted. However, 20 indicate that the pending bill contains bill segments in the **Pending Cancel, Frozen, or Cancel** status, and therefore cannot be deleted. If the BILL_ACT_CD column corresponding to a pending bill is set to 10, the system deletes the pending bill.

2. Payment

This section provides detail information about the following batches:

- Payment Upload (PUPL)
- Automatic Payment Creation (APAYCRET)
- Activate Automatic Payments (ACTVTAPY)
- Extract Automatic Payments (APAYACH)
- Freeze or Cancel Automatic Payments (APAYRA)
- To Do Creation for Automatic Payment Exception Records (APAYUPTD)
- Create Tender Controls for Automatic Payments (BALAPY)
- Payment Request Periodic Monitor (C1-PAYRQ)

2.1 Payment Upload (PUPL)

The **Payment Upload (PUPL)** batch is used to create the deposit control, tender controls, payment events, tenders, payments, and payment segments using payment records in the staging area. In addition, the financial transactions are created when the payments are frozen. The system creates these objects only when the accounting date (i.e. date received in case of the **Payment Upload** process) of the payment record is earlier than or equal to the batch business date.

For the **Payment Upload** process, you need to configure this batch such that it is executed at regular intervals. It is a multi-threaded batch. The multi-threading is based on account ID and chunks for multi-threading are created based on numerical distribution of account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.
Staging Header ID	No	Used to indicate the payment data file for which you want to create payments.

Note:

When the batch is automatically invoked at predefined intervals, the system does not specify any value in the above mentioned parameters.

If the **Payment Upload (PUPL)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the records are added in the following tables:

- CI_DEP_CTL
- CI_TNDR_CTL
- CI_PAY_EVENT
- CI_PAY_TNDR
- CI_PAY
- CI_PAY_CHAR (if the characteristics exist for the payment)
- CI_FT
- CI_FT_GL

In addition, the status of the corresponding deposit control, tender control, payment tender, and payment staging records is set to **Complete**. If an error occurs while creating a payment event and/or payment, an exception is added in the CI_PAY_EVT_EXCP and CI_PAY_EXCP tables, respectively. If any error occurs while creating payment event for a payment record, the status of the deposit control, tender control, payment tender, and payment staging records is changed to **Error**. In addition, the status of the payment record in the pre-staging area is changed to **Error in Staging**.

Traditionally, the **Payment Upload (PUPL)** batch considered staging records which are in the **Error** or **Pending** status. If a staging record is in the **Error** status, the system used to reset the status to **Pending** and then further processed the staging record. This system behavior still exists for staging records which are not uploaded through the **Payment Upload** process. If the staging records are uploaded through the **Payment Upload** process, you need to manually correct the staging records and change the status of deposit control, tender control, payment tender, and payment staging records to **Pending**. The corrected staging records will then be processed when the **Payment Upload (PUPL)** batch is invoked at subsequent interval.

2.2 Automatic Payment Creation (APAYCRET)

When the automatic payment facility is used for an account, the system calculates the automatic payment amount and extracts date during the bill completion and stamps these details against the bill in the CI_BILL_ACH table. The **Automatic Payment Creation (APAYCRET)** batch is used to create automatic payments and payment events for such bills. It also creates a clearing record for each automatic payment in the CI_APAY_CLR_STG table. The payment freeze date in the clearing record is set to NULL. The extract date is calculated and stamped on the clearing record. This extract date is later on used to activate the clearing record.

This batch is a multi-threaded batch. The multi-threading is based on bill ID and chunks for multi-threading are created based on numerical distribution of bill ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the bills whose extract date is earlier than or equal to the specified date. The batch then creates automatic payments for such bills.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Note: If you do not specify any date, the batch business date is set to the current date. </div>
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.
Division	No	Used when you want to create automatic payments for accounts belonging to a particular division.

Note: If the **Automatic Payment Creation (APAYCRET)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the records are added in the following tables:

- CI_APAY_CLR_STG
- CI_PAY
- CI_PAY_EVENT
- CI_PAY_TNDR

While adding the clearing record in the CI_APAY_CLR_STG table, the APAY_DIST_FRZ_DT column is set to NULL. In addition, the extract date is added in the SCHED_EXTRACT_DT column of the CI_APAY_CLR_STG table.

2.3 Activate Automatic Payments (ACTVTAPY)

Unless you activate a clearing record, you cannot extract the clearing record in a flat file. The **Activate Automatic Payments (ACTVTAPY)** batch is used to activate a clearing record by stamping the APAYACH batch control and incremental batch run number on the clearing record. Only those clearing records whose extract date are earlier than or equal to the batch business date are activated through this batch.

This batch is a multi-threaded batch. The multi-threading is based on clearing staging ID and chunks for multi-threading are created based on numerical distribution of clearing staging ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the clearing records whose extract date is earlier than or equal to the specified date.</p> <p>Note: If you do not specify any date, the batch business date is set to the current date.</p>
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.
Division	No	Used when you want to activate clearing records of accounts belonging to a particular division.

Note: If the **Activate Automatic Payments (ACTVTAPY)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the batch control named APAYACH is added in the BATCH_CD column and the next batch run number is added in the BATCH_NBR column corresponding to the clearing records in the CI_APAY_CLR_STG table.

2.4 Extract Automatic Payments (APAYACH)

The **Extract Automatic Payments (APAYACH)** batch is used to extract the clearing records with the latest batch run number in a flat file. This flat file is then sent to the auto clearing house for review.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Output Directory Path	No	<p>Used to specify the path where you want to save the flat file.</p> <p>Note: If you do not specify the path, the flat file is, by default, saved in the <code>sploutput</code> directory.</p>
Output File Name	No	<p>Used to specify the name which you want to use for the flat file.</p> <p>Note: If you do not specify the name, the file is, by default, named as <code>ACHMMDDYYHHSS</code>. Here, <code>MMDDYY</code> indicates the date and <code>HHSS</code> indicates the time when the file is extracted.</p>
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.
Division	No	Used when you want to extract clearing records of accounts belonging to a particular division.

Note: If the **Extract Automatic Payments (APAYACH)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the flat file is created at the specified location. If you have not specified the path and name of the output file, by default, the file is saved as `ACHMMDDYYHHSS` in the `sploutput` directory.

2.5 Freeze or Cancel Automatic Payments (APAYRA)

The **Freeze or Cancel Automatic Payments (APAYRA)** batch is used to freeze or cancel the automatic payments based on the reason code. It checks whether the reason code (i.e. upload reason) and sub reason code (i.e. payment cancellation reason or NOC reason) specified in the clearing staging record exist in the system. A clearing staging record which is in the **Pending** status and for which payment freeze date is specified in the clearing record is considered during the batch execution.

If the reason code and sub reason code exist in the system, the system executes the algorithms attached to the reason code in the specified sequence. If the type of reason code is **Cancel**, the attached algorithm cancels the automatic payment and payment event. If the type of reason code is **Success**, the attached algorithm freezes the automatic payment on the payment freeze date. However, if the type of reason code is **Success** and the sub reason code is specified along with the reason code, the attached algorithm freezes the automatic payment on the payment freeze date, stores sub reason codes (i.e. NOC reasons) as payment tender characteristics and then creates a To Do entry to notify user about these NOC reasons. In addition, the status of the clearing staging record is changed to **Complete**.

If the reason code and/or sub reason code (i.e. upload reason, payment cancellation reason, or NOC reason) specified in the clearing staging record does not exist in the system, the status of the clearing staging record is changed to **Error**. In addition, an exception is logged in the CI_APAY_STGUP_EXC table.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.
Division	No	Used when you want to freeze or cancel automatic payments of accounts belonging to a particular division.

Parameter Name	Mandatory (Yes or No)	Description
Validate Payment Freeze Date (Y or N)	No	<p>Used to indicate whether you want to validate the payment freeze date before freezing the automatic payments. The valid values are:</p> <ul style="list-style-type: none"> • Y • N <p>If you set this parameter to Y, the system considers only those automatic payment clearing records whose payment freeze date is earlier than or equal to the batch business date. However, if you set this parameter to N, the system considers automatic payment clearing records whose payment freeze date is either earlier than or equal to the batch business date and whose payment freeze date is a future date.</p> <p>Note: If you do not specify any value, by default, the parameter value is set to N.</p>

Note: If the **Freeze or Cancel Automatic Payments (APAYRA)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the status of the clearing staging record is updated in the APAY_UP_STATUS_FLG column of the CI_APAY_STAGE_UP table. The status of automatic payment is updated in the PAY_STATUS_FLG column of the CI_PAY table. The APAY_DIST_FRZ_DT column of the corresponding clearing record in the CI_APAY_CLR_STG table is set to NULL.

If the upload reason, payment cancellation reason, or NOC reason does not exist in the system, an exception is logged in the CI_APAY_STGUP_EXC table.

2.6 To Do Creation for Automatic Payment Exception Records (APAYUPTD)

The **To Do Creation for Automatic Payment Exception Records (APAYUPTD)** batch is used to create a To Do using the APAYUPTD To Do type when an exception is logged for a clearing staging record in the CI_APAY_STGUP_EXC table. The system creates one To Do entry for all exceptions that have occurred for a clearing staging record.

Only those exceptions where review date does not exist in the CI_APAY_STGUP_EXC table are considered during the batch execution. This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **To Do Creation for Automatic Payment Exception Records (APAYUPTD)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the records are added in the CI_TD_ENTRY table. Also, the date when the To Do is generated is added in the REVIEW_DT column of the CI_APAY_STGUP_EXC table.

2.7 Create Tender Controls for Automatic Payments (BALAPY)

The **Create Tender Controls for Automatic Payments (BALAPY)** batch is used to create tender and deposit controls for each automatic payment which is frozen, but not yet linked to any tender control. One tender control is created for the APAYACH batch control and batch run number combination. The payment tenders of these automatic payments are then linked to the tender control. This batch also balances the open tender control records and changes the status of the tender and deposit controls, accordingly.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Parameter Name	Mandatory (Yes or No)	Description
Division	No	Used when you want to create tender controls for automatic payments of accounts belonging to a particular division.

Note: If the **Create Tender Controls for Automatic Payments (BALAPY)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the records are added in the following tables:

- CI_DEP_CTL
- CI_TNDR_CTL

The status is updated in the DEP_CTL_STATUS_FLG and TNDR_CTL_ST_FLG columns of the CI_DEP_CTL and CI_TNDR_CTL tables, respectively. In addition, the tender control ID is stamped in the TNDR_CTL_ID column of the CI_PAY_TNDR table.

2.8 Payment Request Periodic Monitor (C1-PAYRQ)

The **Payment Request Periodic Monitor (C1-PAYRQ)** batch is used to monitor or check whether there are any payment requests in the **Deferred Distribution** status. If there is a payment request in the **Deferred Distribution** status, the batch changes the status of the payment request to **Distributed**. Then, the algorithm attached to the **Distributed** status is triggered which distributes the tender or transfer amount.

Note: On distributing the tender amount, the payment event, payments, payment segments, and payment tender are created. The payments are created in the **Freezable** status. If any error occurs while creating a payment, the payment is created in the **Error** status. If all payments of a payment event are in the **Freezable** status, the status of the payment event is set to **Balanced**. However, if any payment of a payment event is in the **Error** status, the status of the payment event is set to **Unbalanced**. On distributing the payment amount (during transfer), the new payments are created in the **Freezable** status. If any error occurs while creating a new payment, the payment is created in the **Error** status. The status of the payment event is set to **Unbalanced**. The old payments in the payment event that you want to transfer remains in the **Frozen** or **Error** status.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Maintenance Object	Yes	<p>Used to indicate that you want to monitor payment requests created using the business objects of a particular maintenance object.</p> <p>Note: By default, the parameter value is set to C1-PAYREQ.</p>

Parameter Name	Mandatory (Yes or No)	Description
Batch Control	No	Used when you want to monitor the payment requests whose current status is linked to the batch code. The valid value is true .
Payment Request Type	No	Used when you want to monitor the payment requests which are created using a particular payment request type.
Business Object	No	Used when you want to monitor the payment requests which are created using a particular business object.
Status	No	Used when you want to monitor the payment requests which are in a particular status. Note: This parameter is useful when this batch is invoked from more than one status in the lifecycle of the business object.
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Payment Request Periodic Monitor (C1-PAYRQ)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the status of the payment request is changed from **Deferred Distribution** to **Distributed**.

3. Adjustment

This section provides detail information about the following batches:

- Upload Request Periodic Monitor (C1-UPLRQ)

3.1 Upload Request Periodic Monitor (C1-UPLRQ)

The **Upload Request Periodic Monitor (C1-UPLRQ)** batch is used to monitor or check whether there are any upload requests in the **Deferred** status. If there is an upload request in the **Deferred** status, the batch changes the status of the upload request to **Creating Adjustment**. Then, the algorithm attached to the **Creating Adjustment** status is triggered which creates the adjustments.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Maintenance Object	Yes	<p>Used to indicate that you want to monitor upload requests created using the business objects of a particular maintenance object.</p> <p>Note: By default, the parameter value is set to C1-UPLREQ.</p>
Batch Control	No	Used when you want to monitor the payment requests whose current status is linked to the batch code. The valid value is true .
Business Object	No	Used when you want to monitor the upload requests which are created using a particular business object.
Status	No	<p>Used when you want to monitor the upload requests which are in a particular status.</p> <p>Note: This parameter is useful when this batch is invoked from more than one status in the lifecycle of the business object.</p>
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Upload Request Type	No	Used when you want to monitor the upload requests which are created using a particular upload request type.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Upload Request Periodic Monitor (C1-UPLRQ)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the status of the upload request is changed from **Deferred** to **Creating Adjustment**.

4. Financial Transaction

This section provides detail information about the following batches:

- Foreign Exchange Loss Gain (C1-FXLG)
- Assign GL Account to Financial Transaction (C1-GLASN)
- Insert Records in CI_FTTEMP (GLASSGN1)
- Assign GL Account to Financial Transaction (GLASSGN2)
- GL Download Staging (GLS)
- GL Download Extract (GLDL)

4.1 Foreign Exchange Loss Gain (C1-FXLG)

The **Foreign Exchange Loss Gain (C1-FXLG)** batch is used to calculate foreign exchange gain or loss on financial transactions, such as payments and adjustments. This gain or loss occurs due to fluctuations in the exchange rate at different point in time. During the batch execution, the system considers the following types of financial transactions:

- Payments (i.e. Pay Segments)
- Credit adjustments which are created against a bill after the bill completion
- Write-off adjustments which are created against a bill
- Write Up adjustments which are automatically created when you match a payment against a bill using the Bill Weighted match type
- Write Down adjustments which are automatically created when you match a payment against a bill using the Bill Weighted match type

However, the system considers payment and adjustment FTs when:

- Division's Base Currency is different from the Payment or Adjustment Currency
- Payment or Adjustment Freeze Date is different from the Bill Completion Date
- Match Event ID exists in the financial transaction
- FXLG_CALC_STATUS column corresponding to the financial transaction in the CI_FT table is set to **N** or **NULL**

This batch is a multi-threaded batch. The multi-threading is based on financial transaction ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Division	Yes	Used to calculate foreign exchange gain or loss for financial transactions, which are created for accounts, belonging to a particular division.

Parameter Name	Mandatory (Yes or No)	Description
Distribution Code for FXLG	Yes	Used to indicate the distribution code against which you want to book the foreign exchange gain or loss.
Distribution Code for Contract Balancing	No	Used to indicate the distribution code against which you want to balance the foreign exchange gain or loss. Note: If you do not specify any distribution code, by default, the distribution code associated with the FT's contract is used to balance the foreign exchange gain or loss.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note:

You must execute the **Foreign Exchange Loss Gain (C1-FXLG)** batch prior to the **Assign GL Account to Financial Transaction (C1-GLASN)** or **Insert Records in CI_FTTEMP (GLASSGN1)** batch.

If the **Foreign Exchange Loss Gain (C1-FXLG)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, two entries are added corresponding to each financial transaction (for which foreign exchange gain or loss is calculated) in the CI_FT_GL and CI_FT_GL_EXT tables. One entry for foreign exchange gain or loss is booked against the distribution code for FXLG and another entry for foreign exchange gain or loss is booked against the distribution code which is used for contract balancing. The foreign exchange loss is recorded as positive entry and the foreign exchange gain is recorded as negative entry.

In the CI_FT_GL table, the foreign exchange gain or loss is recorded in the financial transaction currency. And, in the CI_FT_GL_EXT table, the foreign exchange gain or loss is recorded in the division's base currency. The FXLG_CALC_STATUS column corresponding to the financial transaction in the CI_FT table is set to I.

4.2 Assign GL Account to Financial Transaction (C1-GLASN)

The **Assign GL Account to Financial Transaction (C1-GLASN)** batch is used to assign GL account to trial and actual financial transactions. It allows you to validate the GL account before it is assigned to financial transactions. If the GL account is valid, the date when the GL account is validated is added in the GLA_VAL_DT column of the CI_TRL_FT_GL or CI_FT_GL table, respectively, depending on whether the GL account is assigned to a trial or actual financial transaction. However, the column is not updated when the GL account is invalid or when the GL account is not validated. This batch also facilitates you to assign GL account only to frozen or to both frozen and freezable financial transactions depending on the requirement.

This batch is a multi-threaded batch. The multi-threading is based on financial transaction ID and chunks for multi-threading are created based on numerical distribution of financial transaction ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Process Only Frozen FTs	No	Used to indicate whether you want to assign GL account only to frozen financial transactions. If you set the value of this parameter to Y , GL account is assigned only to frozen financial transactions. However, if you want to assign GL account to both frozen and freezable financial transactions, you must leave this parameter blank.
Chunk Size	No	Used to specify the number of financial transactions to which you want to assign GL account in each work unit.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.
Division	No	Used when you want to assign GL account to financial transactions, which are created for accounts, belonging to a particular division.
Bill Generation Type	No	<p>Used to indicate whether you want to assign GL account to trial or actual financial transactions. The valid values are:</p> <ul style="list-style-type: none"> • Trial • Regular <p>Note: If you do not specify any value, the bill generation type is set to Regular.</p>
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' financial transactions you want to consider for assigning GL account.</p> <p>Note: This parameter is used only when you are assigning GL account to trial financial transactions.</p>
Validate GL Account	No	Used to indicate whether you want to validate the GL account before it is assigned to the financial transaction. If you set the value of this parameter to Y , the GL account is validated. However, if you do not want to validate the GL account, you must leave this parameter blank.

Note: If the **Assign GL Account to Financial Transaction (C1-GLASN)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the following columns are updated in the CI_TRL_FT_GL or CI_FT_GL table depending on whether the GL account is assigned to a trial or actual financial transaction:

- GL_ACCT
- GLA_VAL_DT
- VALIDATE_SW

The GLA_VAL_DT column is updated when the GL account is valid and not when the GL account is invalid.

4.3 Insert Records in CI_FTTEMP (GLASSGN1)

The **Insert Records in CI_FTTEMP (GLASSGN1)** batch is used to search and add the frozen and/or freezable financial transactions (FTs), where the GL account is not yet assigned, in the CI_FTTEMP table. The data in this table is then used for creating chunks for multi-threading while executing the **Assign GL Account to Financial Transaction (GLASSGN2)** batch.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Process Only Frozen FTs	No	Used to indicate whether you want to add only frozen financial transactions in the CI_FTTEMP table. If you set the value of this parameter to Y, only frozen financial transactions are added in the CI_FTTEMP table. However, if you want to add both frozen and freezable financial transactions, you must leave this parameter blank.
Division	No	Used when you want to add financial transactions, which are created for accounts, belonging to a particular division.

Parameter Name	Mandatory (Yes or No)	Description
Bill Generation Type	No	<p>Used to indicate whether you want to add trial or actual financial transactions in the CI_FTTEMP table. The valid values are:</p> <ul style="list-style-type: none"> • Trial • Regular <p>Note: If you do not specify any value, the bill generation type is set to Regular.</p>
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' financial transactions you want to add in the CI_FTTEMP table.</p> <p>Note: This parameter is used only when you are adding trial financial transactions in the CI_FTTEMP table.</p>

Note:

You must specify same parameters in the GLASSGN1 and GLASSGN2 batches. Otherwise, erroneous results might occur.

If the **Insert Records in CI_FTTEMP (GLASSGN1)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the financial transactions from CI_TRL_FT_GL or CI_FT_GL table are added in the CI_FTTEMP table.

4.4 Assign GL Account to Financial Transaction (GLASSGN2)

The **Assign GL Account to Financial Transaction (GLASSGN2)** batch is used to assign GL account to frozen and/or freezable financial transactions which are stored in the CI_FTTEMP table. It allows you to validate the GL account before it is assigned to financial transactions. If the GL account is valid, the date when the GL account is validated is added in the GLA_VAL_DT column of the CI_TRL_FT_GL or CI_FT_GL table, respectively, depending on whether the GL account is assigned to a trial or actual financial transaction. However, the column is not updated when the GL account is invalid or when the GL account is not validated.

If the GL account is not successfully assigned any financial transaction, an error is logged and To Do is created for the corresponding financial transaction.

This batch is a multi-threaded batch. The multi-threading is based on financial transaction ID and chunks for multi-threading are created based on numerical distribution of financial transaction ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Process Only Frozen FTs	No	Used to indicate whether you want to assign GL account only to frozen financial transactions. If you set the value of this parameter to Y , GL account is assigned only to frozen financial transactions. However, if you want to assign GL account to both frozen and freezable financial transactions, you must leave this parameter blank.
Division	No	Used when you want to assign GL account to financial transactions, which are created for accounts, belonging to a particular division.
Bill Generation Type	No	<p>Used to indicate whether you want to assign GL account to trial or actual financial transactions. The valid values are:</p> <ul style="list-style-type: none"> • Trial • Regular <p>Note: If you do not specify any value, the bill generation type is set to Regular.</p>
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' financial transactions you want to consider for assigning GL account.</p> <p>Note: This parameter is used only when you are assigning GL account to trial financial transactions.</p>
Validate GL Account	No	Used to indicate whether you want to validate the GL account before it is assigned to the financial transaction. If you set the value of this parameter to Y , the GL account is validated. However, if you do not want to validate the GL account, you must leave this parameter blank.

Note:

You must specify same parameters in the GLASSGN1 and GLASSGN2 batches. Otherwise, erroneous results might occur.

If the **Assign GL Account to Financial Transaction (GLASSGN2)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the following columns are updated in the CI_TRL_FT_GL or CI_FT_GL table depending on whether the GL account is assigned to a trial or actual financial transaction:

- GL_ACCT
- GLA_VAL_DT
- VALIDATE_SW

The GLA_VAL_DT column is updated when the GL account is valid and not when the GL account is invalid.

4.5 GL Download Staging (GLS)

Unless you activate a FT GL record, you cannot extract the record in a flat file. The **GL Download Staging (GLS)** batch is used to activate trial or actual financial transaction against which the GL account is assigned. Here, activating means stamping the GLDL batch control and incremental batch run number on the FT GL record.

This batch is a multi-threaded batch. The multi-threading is based on financial transaction ID and chunks for multi-threading are created based on numerical distribution of financial transaction ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Division	No	Used when you want to activate FT GL records of accounts belonging to a particular division.
Bill Generation Type	No	<p>Used to indicate whether you want to activate trial or actual FT GL records. The valid values are:</p> <ul style="list-style-type: none"> • Trial • Regular <p>Note: If you do not specify any value, the bill generation type is set to Regular.</p>

Parameter Name	Mandatory (Yes or No)	Description
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' FT GL records you want to activate.</p> <p>Note: This parameter is used only when you are activating trial FT GL records.</p>
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **GL Download Staging (GLS)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the following columns are updated in the CI_TRL_FT_PROC or CI_FT_PROC table depending on whether trial or actual FT GL record is activated:

- BATCH_CD
- BATCH_NBR

4.6 GL Download Extract (GLDL)

The **GL Download Extract (GLDL)** batch is used to extract trial or actual FT GL records with the latest batch run number in a flat file. This flat file is then used for uploading data in the General Ledger application.

This batch is a single-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Output Directory Path	Yes	Used to specify the path where you want to save the flat file.
Output File Name	Yes	Used to specify the name which you want to use for the flat file.
Override Maximum Number of Errors	No	Used to override the maximum number of errors after which the batch must be terminated.
Division	No	Used when you want to extract FT GL records of accounts belonging to a particular division.

Parameter Name	Mandatory (Yes or No)	Description
Bill Generation Type	No	<p>Used to indicate whether you want to extract trial or actual FT GL records. The valid values are:</p> <ul style="list-style-type: none"> • Trial • Regular <p>Note: If you do not specify any value, the bill generation type is set to Regular.</p>
Trial Billing Batch Run Number	No	<p>Used to indicate the trial billing batch run number whose trial bills' FT GL records you want to extract.</p> <p>Note: This parameter is used only when you are extracting trial FT GL records.</p>
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **GL Download Extract (GLDL)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the flat file is created at the specified location.

5. Pricing Management

This section provides detail information about the following batches:

- Identify Accounts for Repricing (C1-REPC1)
- Process Repricing Request and Persist Pricing for an Account (C1-REPC2)

5.1 Identify Accounts for Repricing (C1-REPC1)

On defining and editing the price item pricing of a price list which is assigned to an account or a person, the system creates an entry for the price item pricing in the CI_REPRC_ENTITY_DTL table. The **Identify Accounts for Repricing (C1-REPC1)** batch is used to identify the following in the specified order:

1. Price list on which the price item pricing (for which an entry is created in the CI_REPRC_ENTITY_DTL table) is assigned
2. Account or Person on which the price list is assigned
3. All accounts which belong to the person and its child persons when the price list is assigned to a person

Once the accounts are identified, the system checks whether the identified accounts are eligible for repricing. If one or more accounts are eligible for repricing, a repricing request is created for the account, price item, and effective date combination in the CI_REPRC_REQ_DTL table. If the price assignment end date is specified, the system creates two repricing requests – one request where the effective date is set to the price assignment start date and another request where the effective date is set to the price assignment end date + 1 Day.

Note: Only accounts where the person and child person are the main customers are considered for repricing.

This batch considers only those entries in the CI_REPRC_ENTITY_DTL table which are in the **Pending (P)** or **Error (E)** status and whose effective date is earlier than or equal to the batch business date. This batch is a multi-threaded batch and the multi-threading is based on the account ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the entries in the CI_REPRC_ENTITY_DTL table which must be considered during the batch execution.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note:</p> <p>All entries whose effective date is earlier than or equal to the batch business date are considered during batch execution.</p> <p>If you do not specify any date, the batch business date is set to the current date.</p> </div>

Parameter Name	Mandatory (Yes or No)	Description
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Identify Accounts for Repricing (C1-REPC1)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, a repricing request is created for the account, price item, and effective date combination in the CI_REPRC_REQ_DTL table. The BO_STATUS_CD column corresponding to the entry in the CI_REPRC_ENTITY_DTL table is set to either **Complete (C)** or **Error (E)** depending on whether the repricing request was created successfully or not. The date and time when the BO_STATUS_CD column is updated is stamped in the UPDT_DTTM column. The information about the batch which is executed is stamped in the BATCH_CD and BATCH_NBR columns.

5.2 Process Repricing Request and Persist Pricing for an Account (C1-REPC2)

The **Process Repricing Request and Persist Pricing for an Account (C1-REPC2)** batch is used to calculate and persist the rate for the account in the CI_PRCE_CALC table. It must be executed when a repricing request is created on:

- Editing the attributes and characteristics of an account
- Adding and deleting the usage amount and counter details of an account
- Editing the attributes and characteristics of a person
- Adding and deleting the usage amount and counter details of a person
- Assigning a price list to an account or editing the price list assignment details of an account
- Assigning a price list to a person or editing the price list assignment details of a person
- Defining or editing the price item pricing of an account
- Defining or editing the price item pricing of a person
- Defining and editing the price item pricing of a price list which is assigned to an account or a person

Note: In the latter case, this batch must be executed after executing the **Identify Accounts for Repricing (C1-REPC1)** batch.

It invokes the C1-PriceAccount business service which determines effective price item pricing for an account and persist calculated rates for price items whose price item type is set to **Rate**.

This batch considers only those repricing requests in the CI_REPRC_REQ_DTL table which are in the **Pending (P)** or **Error (E)** status and whose effective date is earlier than or equal to the batch business date. This batch is a multi-threaded batch and the multi-threading is based on the repricing request ID. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Batch Business Date	No	<p>Used to identify the repricing requests in the CI_REPRC_REQ_DTL table which must be considered during the batch execution.</p> <p>Note:</p> <p>All repricing requests whose effective date is earlier than or equal to the batch business date are considered during batch execution.</p> <p>If you do not specify any date, the batch business date is set to the current date.</p>
Account ID	No	Used when you want to process repricing requests created for a particular account.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

Note: If the **Process Repricing Request and Persist Pricing for an Account (C1-REPC2)** batch fails or aborts due to some reason, you can restart the batch over and over again with the same set of parameters.

Post Execution Check/Clean Up:

On successful completion of this batch, the rate is calculated and persisted for the rate type price items in the CI_PRCE_CALC_K, CI_PRCE_CALC, CI_PRCE_CALC LN, and CI_PRCE_CALC_PARAMS tables..

The BO_STATUS_CD column corresponding to the repricing request in the CI_REPRC_REQ_DTL table is set to either **Complete (C)** or **Error (E)** depending on whether the rate was successfully calculated and persisted for the account, price item, and effective date combination. The date and time when the BO_STATUS_CD column is updated is stamped in the UPDT_DTTM column. The information about the batch which is executed is stamped in the BATCH_CD and BATCH_NBR columns.