Automated Cash Matching Blueprint

What is this document | Accounting Seed is a flexible accounting platform where you can add, build and layer your own customizations on top of the platform. Accounting Seed Blueprints provide an example of a specific use case that can serve as a template to implement a feature for your organization, but also can be tweaked or modified in any way you need to achieve your exact requirements. Blueprints serve as a design template or starting spot for your own feature.
What is the feature?

Automated cash matching is a process for automatically matching Cash Receipts to Billings (Sales Invoices). The process will automatically match existing data records for Cash Receipts to existing Billing records in Accounting Seed. The tool is used to automate the cash matching process creating efficiency in the processing of data records in the revenue lifecycle.

When is this feature set used?

This feature set is used when customers have a large number of cash receipts and want a more efficient process for automatically matching their Cash Receipts to Billings. An example of this would be a SaaS business that has a large number of customers paying monthly subscription fees. However this is a general tool to be used with any business with a large volume of cash receipts that need to be matched to billing records.

What terms or definitions do I need to understand?

<table>
<thead>
<tr>
<th>Billing</th>
<th>A Billing is a customer invoice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Receipt</td>
<td>A cash receipt is used to record cash received from a customer.</td>
</tr>
<tr>
<td>Billing Cash Receipt</td>
<td>A Billing Cash Receipt is the junction object between the Cash Receipt and the Billing, allowing customers to match one Cash Receipt to multiple Billings or to match Multiple Cash Receipts to one Billing. When processing Cash Receipts and a match is found to a Billing, a Billing Cash Receipt record is created to match the Cash Receipt to the Billing.</td>
</tr>
</tbody>
</table>

Can you give me an overview of how this works?

Customers will upload Cash Receipts in any of the following ways:

- Via Bank Direct Connect
- Data Import Wizard
- API record insertion
- Create manually

A job will be run at a specified interval which will auto-match Cash Receipts to Billings. Alternatively, the user may select to run it on demand. After the process has completed, an email will be sent with the job results to the running user with the following information:

- Number of Cash Receipts matched
- Number of Cash receipts that could not be matched

What object model changes are required?

We suggest adding a new button called “Match Receipts” to the Cash Receipts list view as shown below. This will allow the user to run the Cash Receipt Auto-Match process on demand. However this routine could also be setup as a scheduled job to run daily or weekly for all cash receipts with a balance greater than zero.
A new Custom Setting called “Cash Receipt Auto-Match” will be created to allow the user to configure a background job to run the Cash Receipt Auto-Match process. This setting will include the following custom fields:

*Checkbox to allow the Customer to turn Cash Receipt Auto-Match On/Off:*
- **Field Label:** Enable Auto-Match Job
- **Field Type:** Checkbox
- **Default Value:** Unchecked

*Background Job Configuration to indicate how often, in hours, the job should be run:*
- **Field Label:** Auto-Match Interval in Hours
- **Field Type:** Number
- **Length:** 3
- **Decimal Places:** 0

### What code is needed for this process?

Accounting Seed recommends an asynchronous script is launched when the Cash Receipt Auto-Match job is run to do the following:

- Apply the matching logic (refer to “Matching Logic” below)
- Create Billing Cash Receipts when matches are found
- Email showing job results

### Matching Logic:

There are 3 use cases for the matching logic:
1. The Cash Receipt Amount matches exactly to the Balance of one Billing and there are no other Billings that match this amount.
2. The Cash Receipt Amount matches exactly to the Balance of two or more Billings.
3. The Cash Receipt Amount does not match any Billing Balances.

Below are the steps to follow to find and match each Cash Receipt to Billing records for all 3 of these use cases.

#### Step 1 - Query the records to find the match

* Query Billing records
* Where Posting Status = Posted
  * AND Customer on the Billing is equal to the Customer on the Cash Receipt
  * (Note—scope of matching could be expanded to cover parent accounts)

#### Step 2 - Match the Cash Receipt to the Billing

* If the Cash Receipt Amount is equal to the Billing Balance AND there is only one Billing where the Balance is equal to the Cash Receipt Amount
  * THEN proceed to Step 3 to create a Billing Cash Receipt

Else if the Cash Receipt Amount is equal to the Billing Balance AND there is more than one Billing where the Balance is equal to the Cash Receipt Amount

Then find the oldest Billing and proceed to Step 3 to create a Billing Cash Receipt

Else if the Cash Receipt Amount does not equal the Balance of any Billings found in Step 1

Then find the oldest Billing and proceed to Step 3 to create a Billing Cash Receipt

If the Cash Receipt remaining balance is greater than zero

Then continue to match the Cash Receipt remaining balance to Billings found in Step 1 by finding the oldest Billing and proceeding to Step 3 to create a Billing Cash Receipt until the Cash Receipt remaining balance is zero

#### Step 3 - Create a Billing Cash Receipt record

When creating Billing Cash Receipt records, assign these values to fields on the Billing Cash Receipt:
- Billing = name of Billing record found in Step 2
- Cash Receipt = name of Cash Receipt record
- Applied Accounting Period = later of the Cash Receipt or Billing Accounting Period
- Applied Amount = amount of Cash Receipt

#### Step 4 - Email job results

The results email will include the following information:
- Job ID
- Submitted by
- Start Time
- End Time
- # Cash Receipts Processed
- # Cash Receipts Matched
- # Cash Receipts Not Matched

### Can you show me some specific examples?

Let’s say this Cash Receipt record was entered and posted:

**CR-4075**

Date: 4/20/2020

Accounting Period: 2020-04

Amount: 3,000

Customer: Bluegroove

Let’s assume there are only three Billings with a Balance greater than zero for Bluegroove:

- Billing Number 1000: Date: 2/15/2020: Balance: 1,000
- Billing Number 1050: Date: 3/30/2020: Balance: 1,500
- Billing Number 1080: Date: 4/15/2020: Balance: 2,000
When the auto-matching process attempts to match it to these Billings it will match as follows:
Billing Number 1000: Create Billing Cash Receipt with an Applied Amount of 1,000
Billing Number 1050: Create Billing Cash Receipt with an Applied Amount of 1,500
Billing Number 1080: Create Billing Cash Receipt with an Applied Amount 500

Billing Cash Receipts will be created as follows:

<table>
<thead>
<tr>
<th>Billing</th>
<th>Cash Receipt</th>
<th>Applied Accounting Period</th>
<th>Applied Account</th>
<th>Billing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>CR-4075</td>
<td>2020-04</td>
<td>1,000</td>
<td>0</td>
</tr>
<tr>
<td>1050</td>
<td>CR-4075</td>
<td>2020-04</td>
<td>1,500</td>
<td>0</td>
</tr>
<tr>
<td>1080</td>
<td>CR-4075</td>
<td>2020-04</td>
<td>500</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

What does a successful outcome look like?

With the successful run of the script, Cash Receipts will be auto-matched to Billings and Billing Cash Receipts records will be created for each match, and an email will be sent to indicate how many Cash Receipts were matched in the job and how many were unable to be matched.

What process or policy changes should I consider with implementing this solution?

1. Determine how often the auto-match process should run and set the interval in the custom setting accordingly.
2. Assign appropriate permissions to the “Cash Receipt Auto-Match” custom setting.
3. Adjust page layouts for profiles where the “Match Receipts” button should not be made available.

About Accounting Seed

Accounting Seed is a modern, robust accounting platform powered by the Salesforce platform. We’re committed to breaking down silos and building connections in order to take your business to the next level. Schedule a free demo here or contact us today to begin our conversation.