



# Cash Flow Projection Report 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.



accounting**seed**

## What is the feature?

The Cash Flow Projection Report displays projected money flowing into and out of your business for the upcoming 4 Accounting Periods. Anticipated 'Cash In' and 'Cash Out' is calculated on expected receipt of outstanding balances owed from customers, expected payment amounts due to vendors, and recurring transactions such as recurring billings, recurring payables, and recurring journal entries.

## When is this feature set used?

The Cash Flow Projection Report is run after the Cash Flow process has completed to review if the business is able to meet its financial obligations. The Cash Flow process can be executed at any time to estimate cash shortages and surpluses.

## What terms or definitions do I need to understand?

Cash Flow	The amount of money coming into or going out of a business.
Cash In	Money coming into the business, such as Cash Receipts from customers, cash injection from venture capital and loans from the bank.
Cash Out	Money going out of the business, such as Vendor Payments and loan repayments.
Shortage	When money going out of the business is greater than the amount of money coming into the business.
Surplus	When the amount of money coming into the business is greater than the amount of money going out of the business.
Accounts Receivable	The amount the company is owed by its customers for the sale of goods or services on credit.
Accounts Payable	The amount the company owes its vendors for the purchase of goods or services on credit.
Recurring Billings	Customer Billings template allowing for the automatic creation of Billings that recur at regular intervals for the sale of goods or services on a contract.
Recurring Payables	Vendor Payables template allowing for the automatic creation of Payables that recur at regular intervals for the purchase of goods or services on a contract.
Recurring Journal Entries	Journal Entry template allowing for the automatic creation of a Journal Entry at regular intervals.
Projection Period	The 4 consecutive Accounting Periods, beginning with the Accounting Period from which the Cash Flow Projection was run.
Base Period	The first period of the Cash Flow Projection.

## Can you give me an overview of how this works?

Before the Cash Flow Projection is run, the user reviews the Expected Receipt/Payment Dates on Billings and Payables and adjusts where needed. If the user does not want specific Billings, Payables, Recurring Billings, Recurring Payables, and Recurring Journal Entries included in the Cash Flow Projection they navigate to those records and check the box “Exclude from Cash Projection”. The user then navigates to the period prior to the first period of the Cash Flow Projection and closes this Accounting Period.

To run the Cash Flow Projection, the user navigates to the first Accounting Period of the projection and selects the “Cash Flow Projection” button. An asynchronous process is executed that will run through the Cash Flow Projection logic and calculate cash coming into and out of the business for 4 Accounting Periods beginning with the Accounting Period selected.

**The Cash Flow Projection logic creates a Cash Flow record for each of these types of source transactions:**

Source Transaction	Cash Flow Projection Logic
Accounts Receivable	Billings where a Billing Aging History record exists in the Cash Flow Projection period and the Amount is > 0
Accounts Payable	Payables where an AP Aging History record exists in the Cash Flow Projection period and the Amount is > 0
Recurring Billings	Billings that are scheduled to be created within the Cash Flow Projection period
Recurring Payables	Payables that are scheduled to be created within the Cash Flow Projection period
Recurring Journal Entries	Journal Entries that are scheduled to be created within the Cash Flow Projection period where the GL Account for at least one of the journal entry line items is a Bank GL Account
Bank Account Opening Balance	Calculated Opening Balance Amount for each period within the Cash Flow Projection period

For other expected receipts/payments in the Cash Flow Projection period such as cash injection from venture capital or fixed asset purchase, the user manually creates a Cash Flow Projection record for that Accounting Period and enters the expected amount of the receipt or payment.

Once the process has completed the user views the Cash Flow Projection records in a list view and creates new Cash Flow Projection records and/or adjusts existing Cash Flow Projection records where needed. Once all adjustments have been made the user runs the Cash Flow Projection Report to view the Cash Flow Projection for the 4-month period.

## What object model changes are required?


Object model changes are additional data objects or fields that you would add to Accounting Seed to achieve the customization. We suggest the following changes:

### Custom Metadata Type

Custom Metadata Types are used to set Cash Flow Projection assumptions. Create a custom metadata type called “Cash Flow Projection” and add the following custom fields:

Field Label	Data Type
Average Collection Time in Days	Number (3,0)
Days Due for Overdue Transactions	Number (3,0)

Here’s a snippet of how this should look after configuration:


SETUP

### Custom Metadata Types

**Custom Metadata Type Detail**
[Edit](#)
[Delete](#)
[Manage Cash Flow Projection](#)

Singular Label	Cash Flow Projection	Description	
Plural Label	Cash Flow Projection	Visibility	Public
Object Name	Cash_Flow_Projection	Protection Level	
API Name	Cash_Flow_Projection__mdt	Record Size	147
Created By	Mary Balmer, 2/9/2020, 1:57 PM	Modified By	Mary Balmer, 2/16/2020, 3:23 AM

**Standard Fields**

Action	Field Label	Field Name	Data Type	Indexed
	Created By	CreatedBy	Lookup(User)	
<a href="#">Edit</a>	Custom Metadata Record Name	DeveloperName	Text(40)	
<a href="#">Edit</a>	Label	MasterLabel	Text(40)	
	Last Modified By	LastModifiedBy	Lookup(User)	
<a href="#">Edit</a>	Namespace Prefix	NamespacePrefix	Text	
<a href="#">Edit</a>	Protected Component	IsProtected	Checkbox	

**Custom Fields**
[New](#)

Action	Field Label	API Name	Data Type	Field Manageability	Indexed	Controlling Field	Modified By
<a href="#">Edit</a>   <a href="#">Del</a>	Average Collection Time in Days	Average_Collection_Time_in_Days__c	Number(3, 0)	Upgradable			Mary Balmer, 2/9/2020, 2:00 PM
<a href="#">Edit</a>   <a href="#">Del</a>	Days Due for Overdue Transactions	Days_Due_for_Overdue_Transactions__c	Number(3, 0)	Upgradable			Mary Balmer, 2/18/2020, 6:34 AM

### Custom Object

Create a Custom object called “Cash Flow Projection” to capture Bank Balances, Cash In and Cash Out, with the following fields:

Field Label	Data Type
Name	Autonumber
Date	Date
Accounting Period	Lookup (Accounting Period)

(Custom Object Continued on next page)

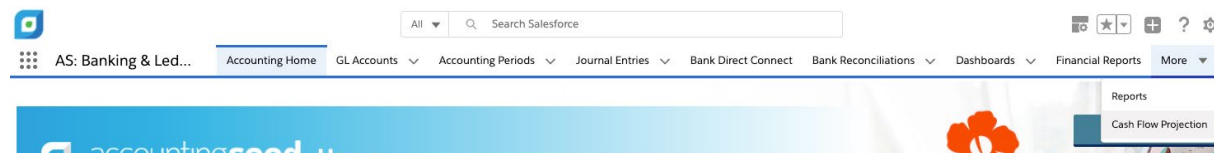
## Custom Object (Continued)

Create a Custom object called “Cash Flow Projection” to capture Bank Balances, Cash In and Cash Out, with the following fields:

Field Label	Data Type
Type	Picklist (Cash In, Cash Out, Bank Balance)
Description	Text (80)
Category	Picklist (Accounts Receivable, Accounts Payable, Recurring Billings, Recurring Payables, Recurring Journal Entries, Bank Account, Other)
Amount	Currency (16,2)
Bank Account	Lookup (GL Account)
Billing	Lookup (Billing)
Recurring Billing	Lookup (Recurring Billing)
Payable	Lookup (Payable)
Recurring Payable	Lookup (Recurring Payable)
Recurring Journal Entry	Lookup (Recurring Journal Entry)

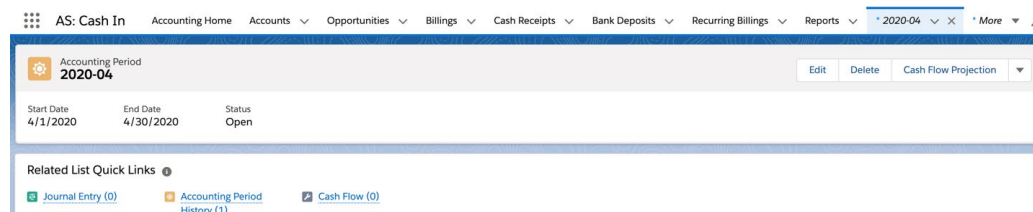
## Custom Tab

Create a custom Tab for the Cash Flow Projection object:



## Custom Button

On the accounting period object create a custom button called “Cash Flow Projection”.



## Custom Fields

Create the following custom fields on standard Accounting Seed Objects:

Object	Field Label	Data Type
Billing	Expected Receipt Date	Date
Billing	Exclude from Cash Flow Projection	Checkbox
Payable	Expected Payment Date	Date
Payable	Exclude from Cash Flow Projection	Checkbox
Recurring Billing	Exclude from Cash Flow Projection	Checkbox
Recurring Payable	Exclude from Cash Flow Projection	Checkbox
Recurring Journal Entry	Exclude from Cash Flow Projection	Checkbox

## Custom Report

Create a custom report selecting the report type called “Cash Flow Projection” and configure as follows:


Fields to include on report:

- Type
- Accounting Period
- Date
- Name
- Category
- Amount

Groupings:

- Group columns by Accounting Period
- Group rows by Type

Below is a snippet of how this report will be displayed:


**Report: Cash Flow Projection**  
**Cash Flow Projection**

Total Amount  
**341,525.02**

Type ↓	Accounting Period →	2020-03	2020-04	2020-05	2020-06	Total
<input type="checkbox"/> Bank Balance	Sum of Amount	60,000.00	65,000.00	76,508.34	80,008.34	281,516.68
<input type="checkbox"/> Cash Out	Sum of Amount	0.00	11,508.34	1,500.00	0.00	13,008.34
<input type="checkbox"/> Cash In	Sum of Amount	5,000.00	0.00	2,000.00	40,000.00	47,000.00
<b>Total</b>	<b>Sum of Amount</b>	<b>65,000.00</b>	<b>76,508.34</b>	<b>80,008.34</b>	<b>120,008.34</b>	<b>341,525.02</b>

**Details (11 Rows)** Click an intersection in the table above to filter details.

	Date	Category	Cash Flow Projection: Cash Flow Name	Amount
3	5/1/2020	Bank Account	CF-0003	76,508.34
4	6/1/2020	Bank Account	CF-0004	80,008.34
5	4/15/2020	Recurring Journal Entries	CF-0005	6,333.34
6	4/20/2020	Other	CF-0006	5,000.00

## What code is needed for this process?

Accounting Seed recommends an asynchronous script is launched when the user clicks the Cash Flow Projection button.

If any Cash Flow Projection records exist the script will delete all records where the Category is not equal to "Other". This will allow a very easy re-running of this process and will avoid duplicate records. For records where the Category = "Other", these records were created manually, and the user can either choose to keep these records if they are still applicable or delete them manually if they are no longer applicable.

If the period prior to the first period is not closed, the user will receive a validation error message indicating the period prior to the first period must be closed before this process can be executed.

### Step 1 - Set the Expected Receipt/Payment Dates:

**Billings** - When a Billing is created and saved, the Expected Receipt Date defaults from the Due Date of the Billing.

**Payables** - When a Payable is created and saved, the Expected Payment Date on each Payable defaults from the Due Date of the Payable.

### Overdue Billings and Payables

#### **Explanation:**

If the Expected Receipt/Payment Date of a Billing/Payable is less than or equal to the day the Cash Flow Projection is executed (i.e. TODAY), then it is considered an overdue Billing/Payable and consideration should be given to reasonably estimate when payment will be made on these overdue transactions. To accommodate this, there is a custom metadata type for Cash Flow Projection, with a field called "Days Due for Overdue Transactions". This field will be set to the number of days to add to the date the Cash Flow is run to determine when payment is expected on these overdue transactions.

#### **Billings Overdue Logic:**

For Billings WHERE the Expected Receipt Date is  $\leq$  the day the Cash Flow Projection is executed (i.e., TODAY), add the value in "Days Due for Overdue Transactions" to the date the Cash Flow Projection is executed (i.e., TODAY) and update the Expected Receipt Date on all overdue Billings to this new calculated date.

#### **Payables Overdue Logic:**

For Payables WHERE the Expected Payment Date is  $\leq$  the day the Cash Flow Projection is executed (i.e., TODAY), add the value in "Days Due for Overdue Transactions" to the date the Cash Flow Projection is executed (i.e., TODAY) and update the Expected Payment Date on all overdue Payables to this new calculated date.

### Step 2 - Create Records for Billings and Payables:

The Cash Flow Projection script creates a Cash Flow Projection record for each outstanding Billing and Payable where the "Expected Receipt Date" or the "Expected Payment Date" falls within one of the Cash Flow Projection periods.

Cash Flow Projection records for Billings are created as follows:

- **Name:** autonumber
- **Type:** Cash In
- **Category:** Accounts Receivable
- **Lookup Field:** Billing
- **Accounting Period:** Name of Accounting Period where Expected Receipt Date  $\geq$  Start Date AND  $\leq$  End Date
- **Date:** Expected Receipt Date
- **Amount:** "Amount" from the Billing Aging History record for the Accounting Period
- **Bank Account:** Default Bank Account from Accounting Settings

Cash Flow Projection records for Payables are created as follows:

- **Name:** autonumber
- **Type:** Cash Out
- **Category:** Accounts Payable
- **Lookup Field:** Payable
- **Accounting Period:** Name of Accounting Period where Expected Payment Date  $\geq$  Start Date AND  $\leq$  End Date
- **Date:** Expected Payment Date
- **Amount:** "Amount" from the AP Aging History record for the Accounting Period
- **Bank Account:** Default Bank Account from Accounting Settings

## Can you show me an example of how to create Bank Balance records?

Let's say you have one Bank GL Account called "1000-Cash". You run a Cash Flow Projection in 2020-04. The Cash Flow Projection process will retrieve the GL Account balance for 1000-Cash, in 2020-03, in the amount of \$40,000. This will be considered the Opening Bank Balance used in the Cash Flow Projection. The opening bank balances for the remaining periods, 2020-05, 2020-06 and 2020-07 are calculated as follows:

	2020-04	2020-05	2020-06	2020-07
Opening Bank Balance for 1000-Cash	40,000	55,000	50,000	55,000
Total Cash In	25,000	35,000	20,000	50,000
Total Cash Out	10,000	40,000	15,000	20,000
Ending Bank Balance for 1000-Cash	55,000	50,000	55,000	85,000

The Opening Bank Balance for the first period of the Cash Flow Projection is equal to the balance in the Bank GL Account from the prior period. The Opening Bank Balance for the remaining periods is equal to the previous period's calculated ending bank balance which is the sum of the Opening Bank Balance for that period plus the sum of all Cash In records minus the sum of all Cash Out records in that period.

In the above example, the Cash Flow Projection script creates Cash Flow Projection records for the opening bank balances as follows:

Cash Flow Name	Type	Category	Description	Accounting Period	Date	Amount
CF-00001	Bank Balance	Bank Account	Opening Balance	2020-04	4/1/2020	40,000
CF-00002	Bank Balance	Bank Account	Opening Balance	2020-05	5/1/2020	55,000
CF-00003	Bank Balance	Bank Account	Opening Balance	2020-06	6/1/2020	50,000
CF-00004	Bank Balance	Bank Account	Opening Balance	2020-07	7/1/2020	55,000

### Step 3 - Create Records for Recurring Billings, Recurring Payables, and Recurring Journal Entries:

The Cash Flow Projection script creates one or more Cash Flow Projection records for each Recurring Billing, Recurring Payable and Recurring Journal Entry where each scheduled date falls within one of the Cash Flow Projection periods. For Recurring Journal Entries, the Cash Flow Projection script includes only those Recurring Journal Entries where at least one of the line items on the Journal Entry is posted to a Bank GL Account.

#### Frequency

Each of these recurring source transactions include a 'Frequency' field (Billing Frequency, Payable Frequency, Journal Entry Frequency) along with a 'Next' and 'Last' date for the recurring items (Next/Last Billing Date, Next/Last Payable Date, Next/Last Journal Entry Date).

If the 'Next' date falls within the Cash Flow Projection period, create a Cash Flow record for each scheduled recurrence up to the last period of the Cash Flow Projection period or the 'Last' date, whichever is earlier.



If the 'Frequency' is Quarterly, Semi-Annual, Annual, or Bi-weekly, calculate when and how many records to create as follows:

- If Quarterly, and the 'Next' date falls within the Cash Flow Projection period, create a Cash Flow Projection record. Add 3 periods to the 'Next' date and if this calculated date falls within the Cash Flow Projection period create another Cash Flow Projection record for that period.
- If Semi-Annual, and the 'Next' date falls within the Cash Flow Projection period, create a Cash Flow Projection record.
- If Annual, and the 'Next' date falls within the Cash Flow Projection period, create a Cash Flow Projection record.
- If Bi-Weekly, and the 'Next' date falls within the Cash Flow Projection period, create a Cash Flow Projection record. Add 2 weeks to the 'Next' date and if this calculated date falls within the Cash Flow Projection period create another Cash Flow Projection record for that period. Continue adding 2 weeks to the calculated date and continue to create Cash Flow Projection records where the calculated dates fall within the Cash Flow Projection period.

## Accounting Period

For Cash Flow Projection records created from Recurring Billings and Recurring Payables, the Accounting Period on each Cash Flow Projection record is calculated based on the "Average Collection Time in Days" setting in the Custom Metadata Type called "Cash Flow Projection". The number of days in this setting is added to the date the Recurring Billing/Payable is scheduled to be created to arrive at the Accounting Period. The Accounting Period on the Cash Flow Projection record is set to the Accounting Period where this calculated date is  $\geq$  to the Accounting Period Start Date and  $\leq$  to the Accounting Period End Date.

For Recurring Journal Entries, the Accounting Period is set to the period where the scheduled Journal Entry Date is  $\geq$  to the Accounting Period Start date and  $\leq$  to the Accounting Period End Date.

## Date

For Recurring Billings, Payables and Journal Entries, the Date field on the Cash Flow Projection records will be set to the date the Recurring Billing, Payable or Journal Entry is scheduled to be created.

## Create Cash Flow Projection Records

Cash Flow Projection records for Recurring Billings are created as follows:

- **Name:** autonumber
- **Type:** Cash In
- **Category:** Recurring Billings
- **Lookup Field:** Recurring Billing
- **Accounting Period:** Name of Accounting Period where (Scheduled Date + Average Collection Time in Days)  $\geq$  Start Date AND  $\leq$  End Date

- **Date:** Scheduled Date
- **Amount:** Total from Scheduled Billing to be created from Recurring Billing
- **Bank Account:** Default Bank Account from Accounting Settings

Cash Flow Projection records for Recurring Payables are created as follows:

- **Name:** autonumber
- **Type:** Cash Out
- **Category:** Recurring Payables
- **Lookup Field:** Recurring Payable
- **Accounting Period:** Name of Accounting Period where (Scheduled Date + Average Collection Time in Days)  $\geq$  Start Date AND  $\leq$  End Date
- **Date:** Scheduled Date
- **Amount:** Total from Scheduled Payable to be created from Recurring Payable
- **Bank Account:** Default Bank Account from Accounting Settings

Cash Flow Projection records for Recurring Journal Entries are created as follows:

- **Name:** autonumber
- **Type:** If JE line is debit, Cash In, else Cash Out
- **Category:** Recurring Journal Entries
- **Lookup Field:** Recurring Journal Entry
- **Accounting Period:** Name of Accounting Period where Scheduled Journal Entry Date  $\geq$  Start Date AND  $\leq$  End Date
- **Date:** Scheduled Date
- **Amount:** Debit or Credit from Scheduled Journal Entry line where a 'Bank' GL Account is selected
- **Bank Account:** Selected Bank GL Account

## Step 4 - Create Bank Balance Records:

The Cash Flow Projection script creates a Cash Flow record for each Bank GL Account, representing the beginning bank balance for that Bank GL Account, for each period in the Cash Flow Projection.

If the checkbox called "Bank" on a GL Account is checked, create a Cash Flow Projection record representing the opening bank account balance for that GL Account for each period of the Cash Flow Projection. The date on each of these records is set to the first day of the Accounting Period.

For the first Cash Flow Projection period, the "Amount" field on the Cash Flow Projection record will equal the Bank GL Account Balance from the previous period.

For each subsequent Cash Flow Projection period, the "Amount" field will equal the prior period's Amount field plus the sum of all 'Cash In' records minus the sum of all 'Cash Out' records for that period.

## What does a successful outcome look like?

With the successful run of the script, Cash Flow Projection records are created for all outstanding Billings and Payables, and for scheduled Recurring Billings, Payables, and Journal Entries within the Cash Flow Projection period, and the user is able to run a Cash Flow Projection Report to view Opening Cash Balances, sum of Cash In and Cash Out, and Ending Cash Balances for each period within the Cash Flow Projection period.

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

1. Create a tab for Cash Flow Projection records and add it to applicable Accounting Seed apps for easy access to the Cash Flow Projection records generated from each run of the script.
2. Create a list view to manage these Cash Flow Projection records.
3. Make a list of any expected Cash Inflows or Outflows not included in the outstanding Billings, Payables or Recurring transactions, expected to be received or paid within the Cash Flow Projection period, and create Cash Flow Projection records for these items after the Cash Flow Projection is executed.
4. For any overdue Billings or Payables, consider if it's reasonable to expect payment to be made on these items and if appropriate, exclude them from the Cash Flow Projection process.
5. Run the script at regular intervals to review your Cash Flow to determine if you expect to have a surplus or shortage at the end of each period in the Cash Flow Projection.

### 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.





---

410.995.8406  
accountingseed.com