

temenos

Springboard

J O U R N E Y M A N A G E R

VERSION 22.04

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Retail DAO Overview

Springboard | Form Builder | Retail DAO 3.0

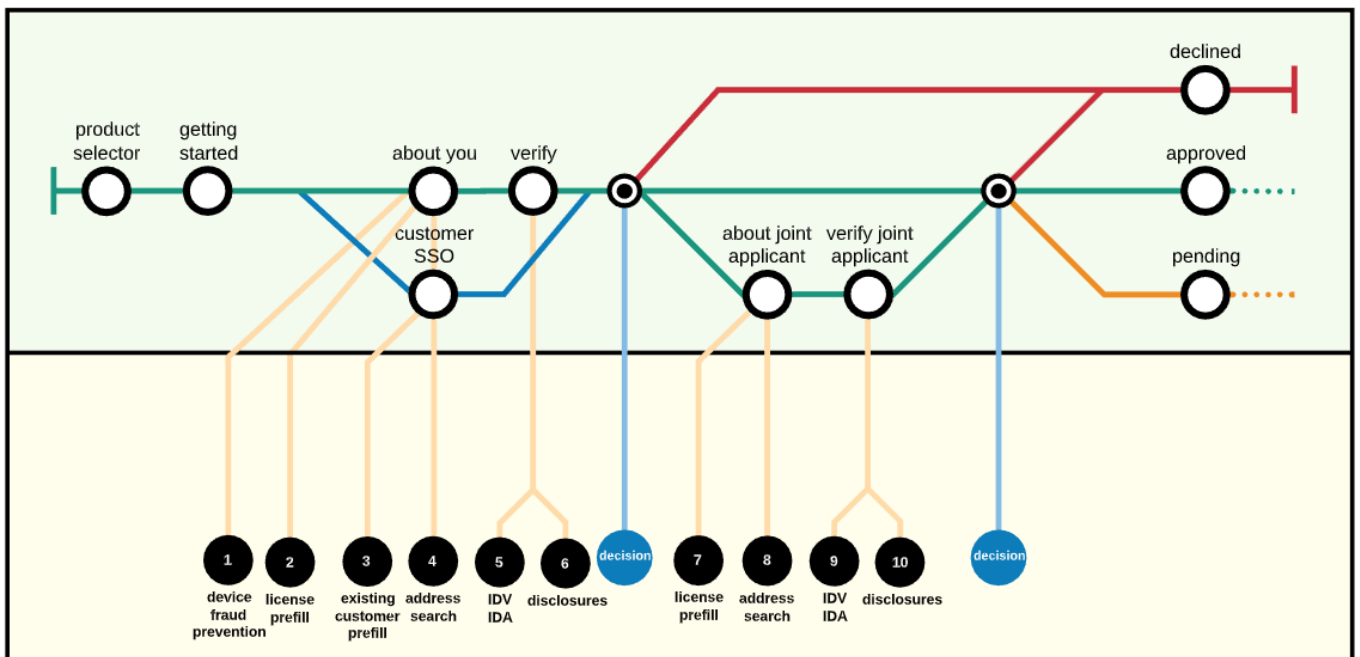
The Retail Springboard Solution for US Deposit Account Opening, Springboard **DAO**¹ for short, is a ready-to-use solution to enable **onboarding**² of new and existing customers for US Direct Deposit Accounts (**DDAs**³). Springboard is a starting point for customer specific DAO projects, which requires significantly less development than a typical Journey project.

This is achieved by pre-building most of the typical components, required to support USDAO solutions on Journey Manager, such as:

- Maestro template and [forms](#)
- [Transact Functions](#) including third-party [integration](#)
- Standard workflows and [collaboration jobs](#) to support manual review and approval activities

For more information on each of the components supplied with the solution, see [components](#).

A typical Springboard application flow is shown below.



¹Deposit Account Opening (DAO). DAO bank forms allow users to open Checking, Savings and Money Market Accounts.

²The steps required to get a new customer integrated into a new program. These steps may vary business to business.

³Direct Deposit Account (DDA) is simply a checking or savings account which offers the ability to send and receive funds electronically.

Audience

This documentation is designed to assist your implementation team members with the initial setup of their local development environment, deployment of solution artifacts and configuration of standard solution components.

This document is also intended for all project team members:

- Project Manager
- Business Analyst
- Solution Architect
- Technical Lead
- Developers
- Quality Assurance Team

Areas of Value

Springboard provides value to Client Services teams and our clients in several ways:

- Offers our clients a vision of what a good **DAO**¹ solution should look like.
- Offers our clients a head start on developing a custom DAO solution by leveraging our base Springboard solution.
- Serves as Temenos' current reference architecture for a Journey Manager / Journey Maestro DAO solution.
- Offers Client Services teams a framework for implementing a custom DAO solution.

Prerequisites

To start using Springboard and get the most out of it, you need to be familiar with:

- [The Temenos Journey platform](#)
- Journey Manager's [services](#)
- [Maestro](#)
- Narratives
- [SCM](#)
- Git

More information is available in our [online documentation](#) and on our [resources website](#). We also offer instructor-led and [online training](#) (authentication required) on developing Journey platform solutions.

¹Deposit Account Opening (DAO). DAO bank forms allow users to open Checking, Savings and Money Market Accounts.

What Remains to Be Done

While large portions of the solution are pre-built there is still work required for every customer specific implementation. Typically, the bulk of the work for a client should be focused into three main areas:

- Configuration/Setup - such as style/brand, labels, configurable options, deploying and testing components, testing integrations, etc.
- Core Banking Integration - to support account and customer creation, as well as other critical onboarding activities
- Customization - which includes specific modifications to the project scope, which have been added to the project SOW or via CRs

Next, learn about [Springboard architecture](#).

Retail DOA Architecture

Springboard | Form Builder | Retail DAO 3.0

All Springboard solutions are based on a standard solution architecture.

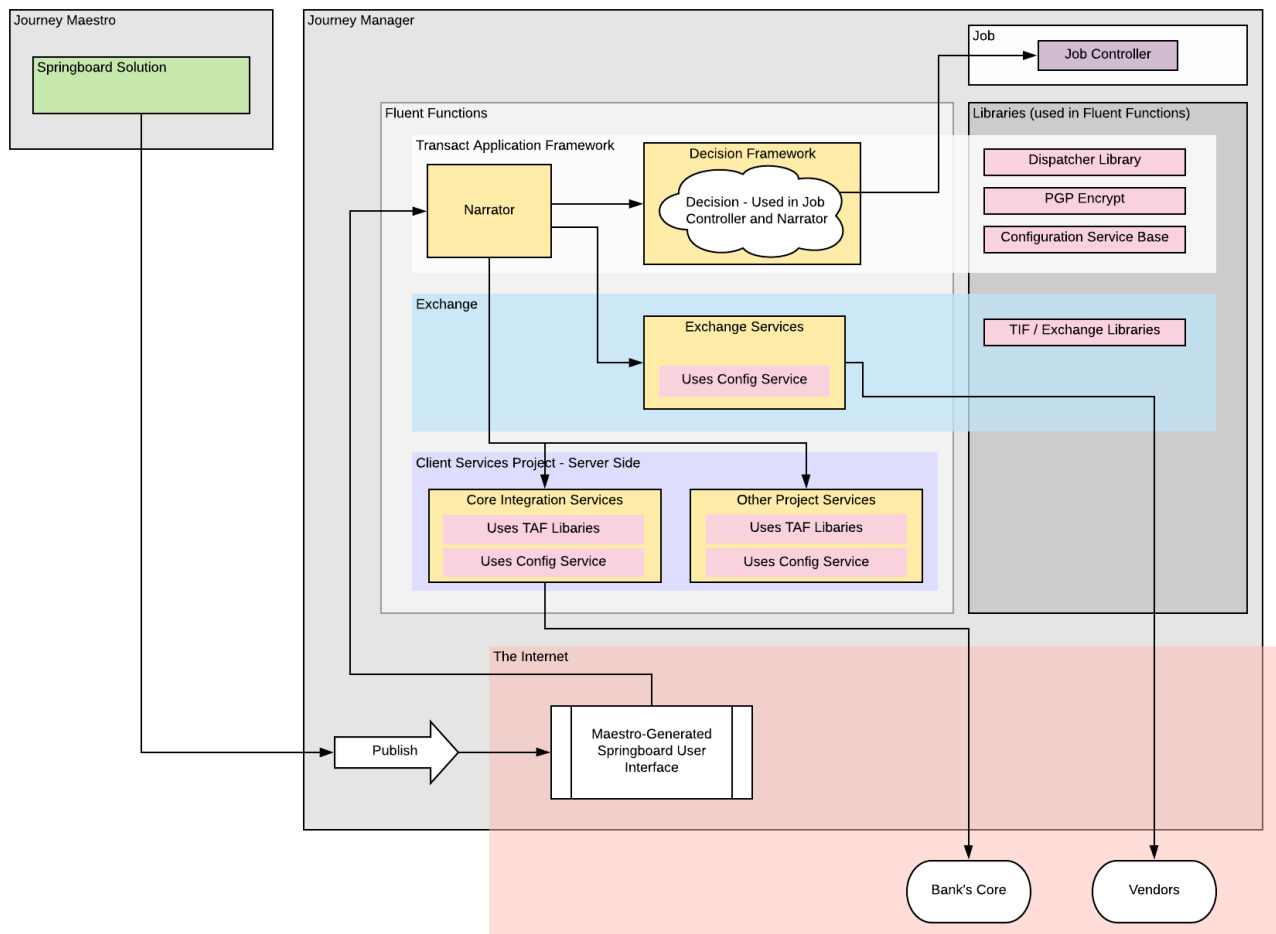
Integrated Development Environment

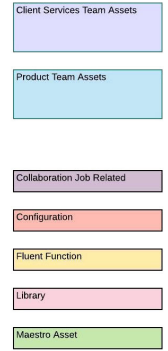
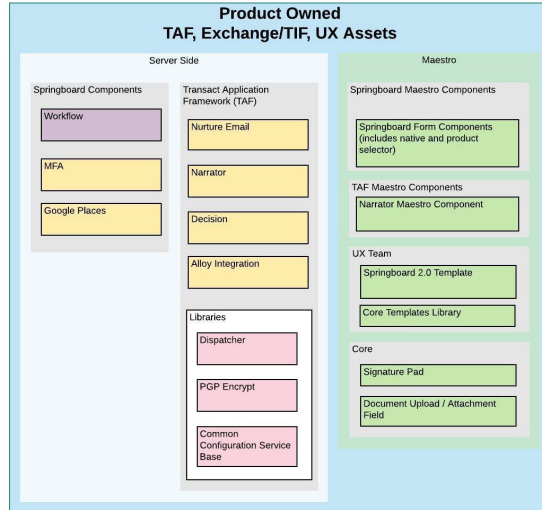
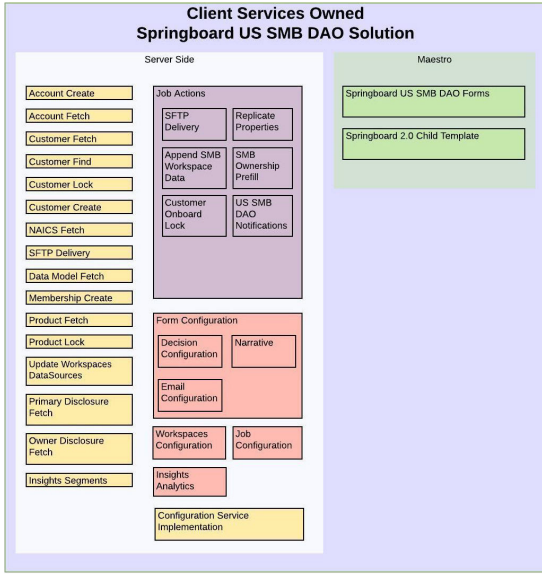
You will need an IDE that supports Maven, Ant scripts, and writing services in Groovy. Eclipse and IntelliJ are two IDEs commonly used when building a Springboard project. Please note that Groovy is natively supported with IntelliJ while Eclipse requires a plugin.

You will also need to install Maven and a JDK. The JDK version must match the version installed on Journey Manager.

Use the diagram below to understand the Springboard Solution Architecture.

Springboard Solution Architecture





Next, learn about [Springboard configuration](#).

| Retail DAO Configuration

Springboard | Form Builder | Retail DAO 3.0

Springboard is a highly configurable product. You can further customize it as per your requirement.

Configuration vs Customization

It's important to carefully review the details in the Springboard USDAO SOW Template and supporting product documentation. Unlike other Client Services engagements, which are entirely composed of custom development, Springboard projects are extremely prescriptive. Certain changes are permitted and others are not.

These constraints ensure solutions are implemented in a repeatable and cost-effective manner, as well as ensuring ease of support for future updates and maintenance.

We refer to permitted changes, which are included by default in all Springboard Statements of Work (SOW), as **configuration**. Certain other changes are still permitted, however, they require additional funding and must be explicitly added to the project scope via additions to the SOW or Change Requests (CR).

Any other changes, whether added to scope via a SOW change, CR or any other means are unsupported. If any of these unsupported changes are made, the solution will no longer be eligible for upgrades and may not be supported by the Springboard Engineering team.

For these reasons, it is obviously important to carefully consider any changes to the application, whether they're in scope and what impact they might have on support or future maintenance. When in doubt you should assume a change is unsupported until you receive confirmation from the Springboard Engineering team or find an appropriate reference to the change in the product documentation.

Springboard Product Number Limit

You can add a number of products to your Springboard solution. Products are added to a JSON file, so there is no hard limit, but we recommend not to exceed 10 products. 3 to 5 products are ideal as it's been thoroughly tested. This is also related to the number of product selectors you can have, which has no hard limit as well, but we recommend not going over 25.

For more information, check the specific project documentation for each of the components, such as the Narrator, USDAO Project and Exchange Components.

You must be familiar with [Journey Manager](#) and its framework creating services, [Maestro](#), Narratives, [SCM](#) and [Git](#)¹. For more information on our products, visit our [community](#) and [documentation](#) websites. Training on developing solutions on the [Temenos Journey Platform](#) is also available.

¹Git is a version control system for tracking changes in computer files and coordinating work on those files among multiple people. It is primarily used for source code management in software development,[8] but it can be used to keep track of changes in any set of files.

Retail DAO Default Configuration of the Job Controller

This describes the default configuration of the Job Controller, associated components, and the workflow that connects them.

Job Controller Workflow

This describes the default configuration of the Job Controller, associated components, and the workflow that connects them.

1. The Springboard DAO form is submitted
2. Job Controller is invoked
3. Job Controller invokes the Determine Initial Route Job Action. This Job Action assumes that the Decide (Decision Framework) service has been run, and that the decision configuration for the DAO form includes the following destinations:

- approved,
- manualReview,
- declined,
- declinedFCRA.

The Job Action inspects the results of the Decide service, and returns the result, which is then used to route the Job Controller to the next step.

4. The Job Controller proceeds to the next step, there are several possibilities depending on the result of the previous step:
 - a. If the result is “approved”, the Job Controller triggers the approved email job action and sends the user to the USDAO Deposits form (whose form code is configured in the Job Controller),
 - b. If the result is “manualReview”, the Job Controller triggers the review email, and the user enters the Workspaces workflow and the user will see the review modal,
 - c. If the result is “declined” or “declinedFCRA”, the Job Controller triggers the declined email and the user will see the declined modal.

Next, learn about [Springboard components](#).

| Retail DOA Components

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution consists of multiple components, all of which work together to provide the required functionality. The common components are listed below.

Forms

There are several forms which comprise the Springboard DAO Solution. Each form represents a different chunk of functionality.

Product Selector Form (optional) | v3.0

The Product Selector Form allows bank Applicants to view product details and select one (or many) products that they would like to apply for. The shopping cart functionality makes it clear what the Applicant has selected and then (unknowingly) transitions them to the DAO Form to complete their application. Banks have the ability to enforce mandatory or optional bundles, configure the 'Learn More' hyperlinks and restrict the number of products, if required.

DAO Form

This is the Deposit Account Opening form which collects personal and financial details of the applicant. At various points in the form, the application is run through the Decision Engine and may be approved, denied, or placed in a review queue. This form is the primary entry point into the application and is accessed by bank Applicants.

Deposits Form

When an Applicant has been approved for a new account, they're typically expected to deposit some initial funds into the account. This form allows the user to fund the new account using Credit, Debit, ACH, Internal Transfer (from an account at the same bank), or a Check by Mail.

In the standard USDAO solution Credit, Debit and ACH funds transfers are all processed using the Vantiv Express payment processing platform. In addition to Vantiv, an integration with Plaid Auth allows applicant's using ACH to retrieve and verify their account details by logging into online banking, rather than typing them manually.

Internal Transfers are performed by the Core Banking API.

Review Form

When Applications are sent to the Manual or Fraud Review queues they need to be manually assessed and a decision is made by a staff member of the bank.

The Review Form is used by bank staff to perform these review operations and make a final Approved/Declined decision for the Application.

Email Unsubscribe Form

This form allows the user to unsubscribe from nurture email notifications, such as application reminder emails. It will not unsubscribe them from transactional emails required to provide details about their application or account (s), such as an Approved Confirmation or Declination email.

Narrative

The USDAO Solution is based on the Application Framework and relies on Narratives to control the flow and actions of each of the forms. As a result, the Narration Controller (Narrator) must be installed and active on the Manager servers hosting the solution.

The solution is preconfigured to include Narratives services in your deployment, and comes with a predefined Narrative which includes all of the standard pages and actions required for DAO.

Developer Documentation: <https://cs-gitlab.avoka.com/springboard/narrator>

Decision Engine

When a user is applying for a Deposit Account, Decision Engine can be used to calculate the eligibility of the applicant. Decision Engine can access the Transaction and Form Data of the application and can use this data to determine whether an application should be accepted, rejected, or placed in a review queue. For example, the application can be rejected if the user's credit score is too low.

For more information, see developer's documentation in [Gitlab](#).

USDAO Project

This project provides the services required for the Springboard DAO form, as well as the Core Banking API. The Narrative provided is designed to call each of these services as required to support the application.

The Fluent Functions in the USDAO project can do things such as:

- Product data pre-fill
- Customer and Account creation
- Validating the product's minimum and maximum funding configuration
- Fetching customer data to be prefilled
- SFTP delivery of complete applications
- ACH Account verification via Plaid and Vantiv Express
- Money movement via Vantiv Express

Workflow (Collaboration Jobs) + Testing Form

The USDAO solution comes with a predefined Collaboration Job Definition (Workflow). This Workflow controls what happens to the application once it is submitted, such as forwarding the application to one of the workspace queues or sending it on for delivery.

This workflow should not be modified for standard implementations.

Maestro Template

The Springboard Maestro Template serves as a starting point for configurations and customizations. The Template implements our current UX best practices and provides client-side support for the Narrator.

The template can be configured in some ways. Colors, backgrounds, and some other items can be easily configured without major modifications. The template can also be customized more deeply depending on a customer's specific needs, but these deeper customizations are distinctly custom development and may result in the customer's implementation forking from the base, making it no longer eligible for upgrades.

Exchange Services

There are a number of exchange services used by the Springboard DAO Project:

- IOvation – Provides fraud detection using device signatures and metadata
- Google Address Search - Provides address autocomplete suggestions as a user types their address
- FISIDV, IDA, Qualifile - Provides fraud risk scores and challenge questions
- AWS SNS - Performs multi-factor authentication using SMS when resuming applications
- Mitek License Pre-fill - Pre-fills applicant data using driver's license
- Vantiv Cards, ACH - Funds new account using Credit Card, Debit or ACH transfer
- Plaid Auth - Verifies the applicant's bank account prior to funds transfer
- Yodlee Auth - Verifies the applicant's bank account prior to funds transfer

Next, learn about [Springboard workflows](#).

| Retail DAO User Interface

Springboard | Form Builder | Retail DAO 3.0

Below are some sample screenshots of the Retail DAO Springboard Solution.






Your product bundle includes





Temenos premier savings - Get a head start on your future by starting to save today.

Advantage plus banking - A good choice if you use direct deposit and want a straightforward banking account.

Account Benefits

-  FDIC insured up to \$250,000.00
-  Earn a competitive interest rate
-  Quick and easy online & mobile access

What's Next



-  Tell us about yourself
-  Accept the Terms and Conditions
-  Fund your account
-  Enroll in Online Banking

[Get Started](#)

[Already have Online Banking? Log In](#)

Personal Details

Please provide your personal information.

<input type="text"/>	
First Name	Last Name
<input type="text"/>	<input type="text"/>
Email 	Date Of Birth
<input type="text"/>	MM/DD/YYYY 

Enter your mobile number to retrieve your saved application later.

Mobile Number 

Do you want to add a co-applicant?

[← Back](#)

Address Details

Where do you live?

Street

Unit

Start typing full address here..

City

State

Zip



I have lived at this address for less than 12 months

I want to provide a different mailing address

 [Back](#)

Continue

Additional Details

We need some additional information from you.

Are you a citizen and resident of the United States?

Social Security Number 

 [Back](#)

[Continue](#)

KYC Details



We need to ask a couple of questions

All banks in the United States are required to ask some variation of the following questions. Bear with us - they should only take a moment.

Have you, a member of your family or a close associate served in or currently occupy a high position in the US, state, local or foreign government?

Do you expect to conduct any of the following on this account?

- Domestic Wires, Direct Deposit, or ACH deposits or withdrawals of greater than \$15,000 per month
- International Wires, or IAT transaction deposits or withdrawal of greater than \$15,000 per month
- Physical Currency withdrawals or deposits in excess of \$10,000 per month

DEMO CONTENT

[Back](#)

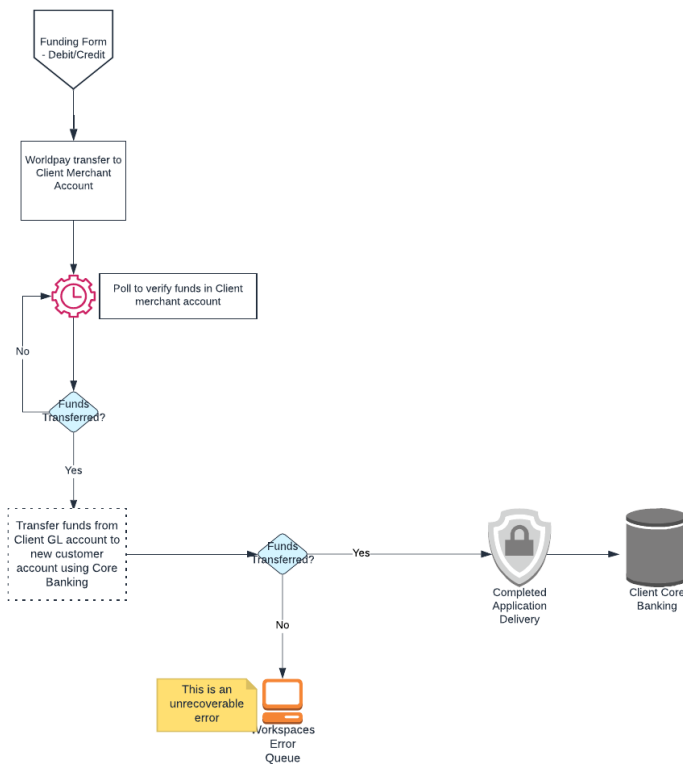
[Continue](#)

Retail DAO Debit Credit Transfer Sub-process

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution comes with multiple workflows and processes. One of them is the Debit Credit Transfer sub-process shown below.

Funding Form - Debit/Credit Funding Sub-process



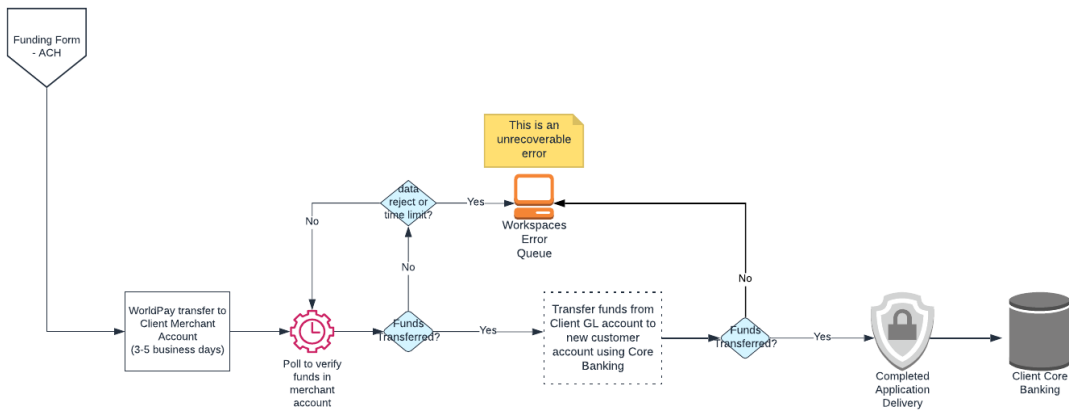
Next, learn about [Funding Form workflow](#).

Retail DOA Funding Form Workflow

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution comes with multiple workflows and processes. One of them is the Funding Form workflow shown below.

Funding Form - ACH Transfer Sub-process



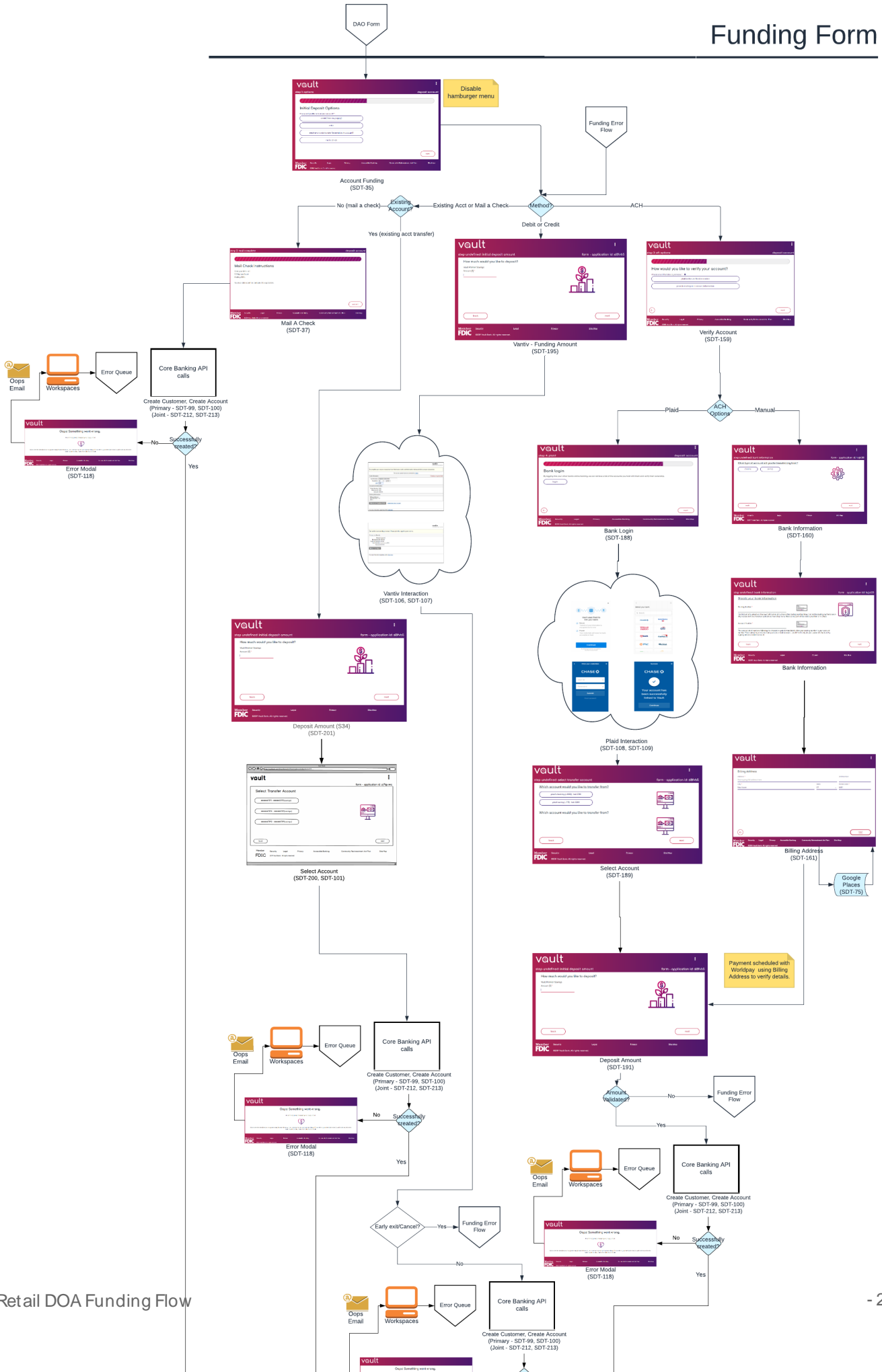
Next, learn about [Funding flow](#).

| Retail DOA Funding Flow

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution comes with multiple workflows and processes. One of them is the Funding flow shown below.

Funding Form



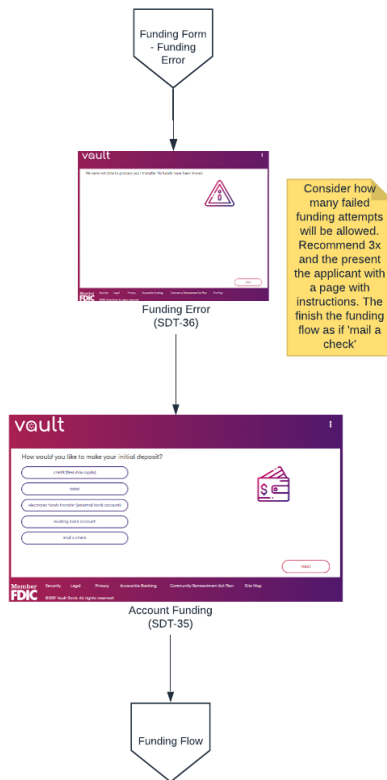
Next, learn about [funding error flow](#).

Retail DOA Funding Error Flow

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution comes with multiple workflows and processes. One of them is the Funding Error flow shown below.

Funding Form - Funding Error Flow



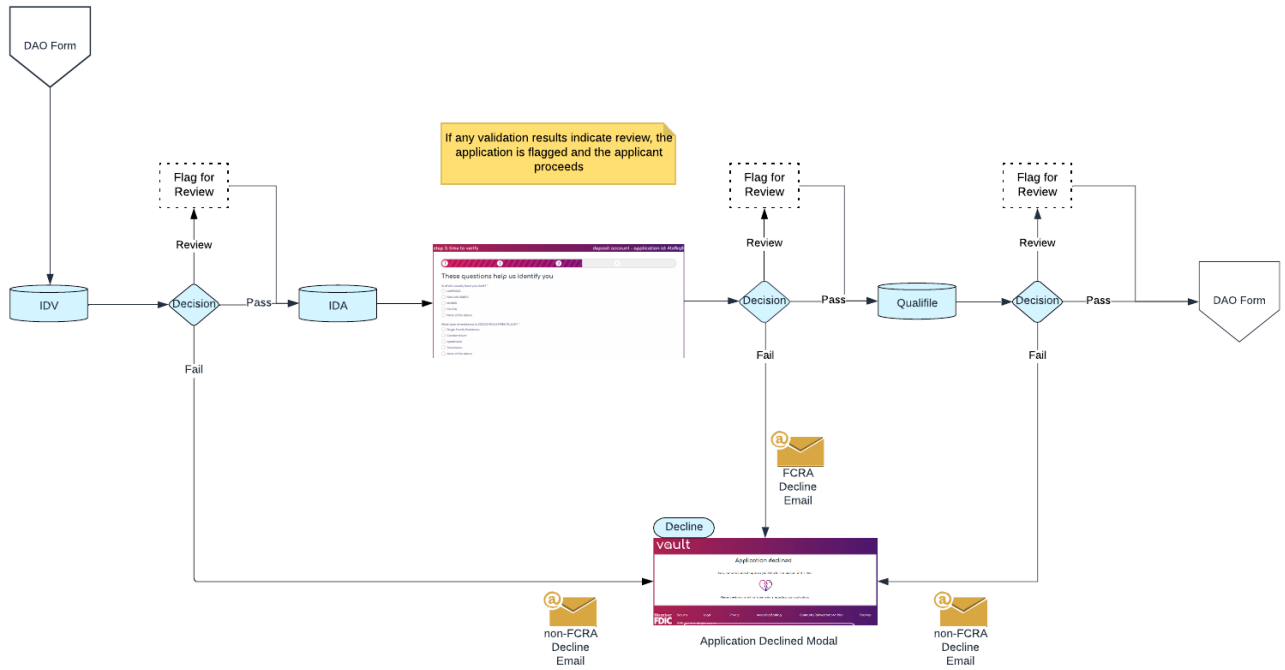
Next, learn about [IDA/ IDV Qualifile](#).

Retail DOA IDA / IDV Qualifile

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution comes with multiple workflows and processes. One of them is the IDA / IDV Qualifile shown below.

IDV / IDA / Qualifile



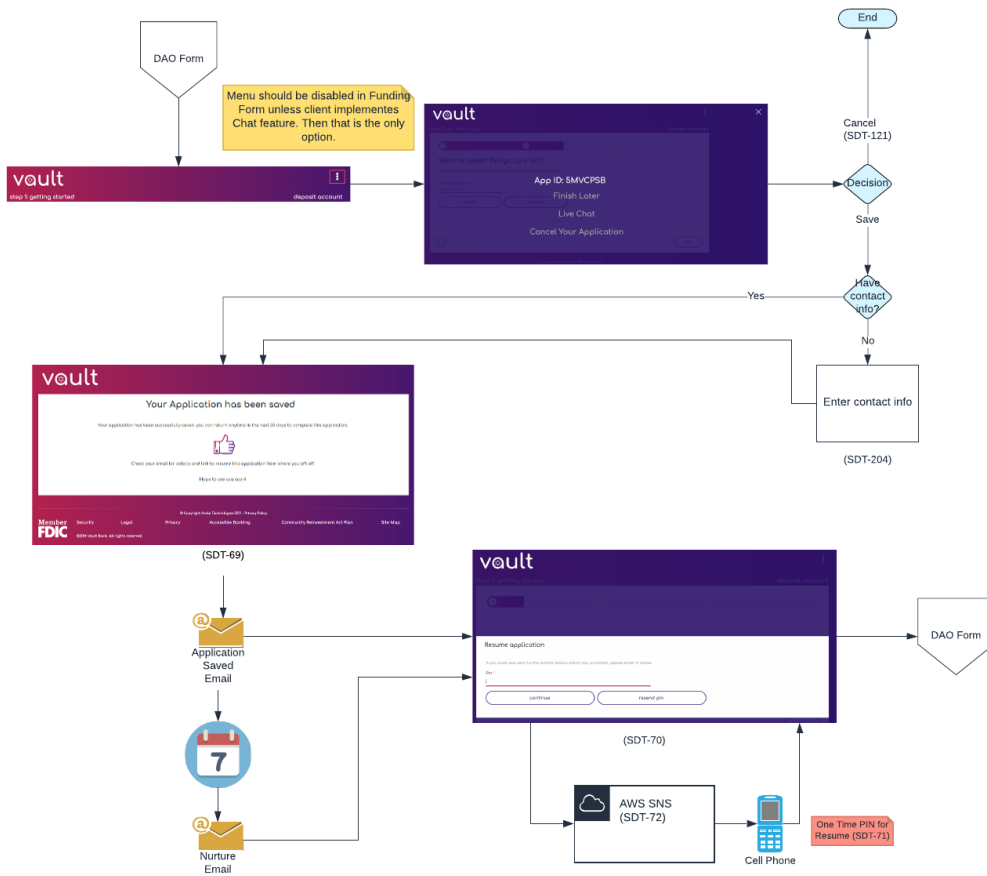
Next, learn about [Save and Resume flow](#).

Retail DOA Save and Resume Flow

Springboard | Form Builder | Retail DAO 3.0

The [Springboard](#) solution comes with multiple workflows and processes. One of them is the Save and Resume shown below.

Save and Resume Flow



Next, learn about [standard Springboard implementation](#).

Standard Springboard Implementation

Springboard | Form Builder | Retail DAO 3.0

Here is a high level overview of the steps required for creating a base standard Springboard Implementation.

This topic covers the work required to build a Base Springboard implementation. It outlines the appropriate time to implement significant departures from the Base [Springboard](#) and references other related resources and documents throughout.

This document is intended for all project team members:

- Project Manager
- Business Analyst
- Solution Architect
- Technical Lead
- Developers
- Quality Assurance Team

The following steps are commonly undertaken when creating a new Springboard implementation:

Step 1

Item	Description
Who	All resources.
What	Review Springboard Getting Started Guide.
Why	Everyone resources should start with understanding what the Springboard product is. The Getting Started Guide will give an overview of what Springboard is and the components it consists of.
Where	See Springboard overview .

Step 2

Item	Description
Who	Project Manager, Business Analyst, Solution Architect, Technical Lead, Developers.
What	Review Customization Specification documents.
Why	The Customization Specification documents show what is available for customization in a Base Springboard project.

Where

- Client Task List
- Customization Specification
- URL Specification
- Product Specification
- Visual Specification

Step 3

Item	Description
Who	Solution Architect, Technical Lead, Developers.
What	Review Developer Setup Guide.
Why	The Customization Specification documents show what is available for customization in a Base Springboard project.
Where	See link for Developer Setup Guide.

Step 4

Item	Description
Who	Project Manager, Business Analyst.
What	Provide clients with a copy of Customization Specification documents to be filled by client.
Why	These documents must be filled to complete a Base Springboard implementation, the filled documents must be attached to certain stories in a later step in this guide.
Where	See link for Client Task List.

Step 5

Item	Description
Who	All Resources.
What	Review Base Springboard Sprints.
Why	The work that must be done to complete a Base Springboard implementation is covered in a pre-defined backlog.

Where See backlog below.

Step 6

Item	Description
Who	Project Manager , Business Analyst.
What	Gather and review Client's reporting requirements.
Why	Set expectations and begin understanding the client's reporting needs.

Step 7

Item	Description
Who	Project Manager , Business Analyst, Solution Architect , Springboard Team (if necessary).
What	Review Client's use case for gaps.
Why	Review the client's complete use case with a focus on finding any missed functionality or gaps, include Springboard team if necessary.

Step 8

Item	Description
Who	Solution Architect, Technical Lead, Developers, QA Team.
What	Agree on development process.
Why	Prior to starting development, the team should agree on the process and workflow for making changes to the Maestro and Journey Manager projects.

Step 9

Item	Description
Who	All Resources.

What Review Customization Specification Docs from Client.

Why Prior to starting development, review the Customization Specification documents provided by the client and add the appropriate documents to their associated tasks see Sprint 1 below).

Step 10

Item	Description
------	-------------

Who All Resources.

What Kickoff Sprint.

Why Start the project!

Client Services are provided with a standard Jira [sprint backlog](#) to follow for each Springboard implementation.

Next, learn about [standard Springboard sprint backlog](#).

| Standard Springboard Sprint Backlog

Springboard | Form Builder | Retail DAO 3.0

Sprint Backlog

Sprint 0 – Setup default Springboard

Item	Description
Spike	Review requirements received from client so far - agree that client has provided sufficient requirements in Customization Specification, Visual Specification, Product Specification, URL Specification documents.
Task	Total number of transactions that match the metric selected, such as Abandoned. This number is also expressed as a percentage for abandonments, field error rates and completion rate.
Task	Completion rate. This is expressed as a percentage of the total number of field commencements. Field commencements are recorded only if the field is touched by a user.
Task	Average number of times a field error occurred, and includes validation and mandatory errors. This is expressed as a percentage of the total number of field commencements. Field commencements are recorded only if the field is touched by a user.
Task	Whitelist Integrations
Task	Test automation project working and all tests pass
Task	Team reviews project and agrees that solution is a “clone” of default Springboard (Should be able to follow “How to fill the form” document)

Sprint 1 – Begin customizing to Base Springboard implementation

Item	Description
Task	Update project to follow Customization Specification
Task	Update project to follow Visual Specification
Task	Update project to follow Product Specification
Task	Update project configuration to follow URL Specification
Task	Team reviews project progress
Task	Test automation project working and all tests pass

Task Bank Core Integration

Sprint 2 – Continue customizing to Base Springboard implementation (if necessary)

Item	Description
Task	Continued work to follow Customization Specification
Task	Continued work to follow Visual Specification
Task	Continued work on Bank Core Integration
Task	Test automation project working and all tests pass

Sprint 3 – Begin Custom Work.

Next, learn about [Springboard client task list](#).

| Springboard Client Task List

Springboard | Form Builder | Retail DAO 3.0

Overview

This topic provides guidance to clients implementing an Temenos Springboard Solution for US Deposit Account Opening. It details a comprehensive check-list of items and tasks, along with when each of them is required. It is particularly relevant for Project Managers and Technical Architects.

Each task and item is documented in detail to provide context, descriptions, help and acceptance criteria. If you have any questions or need any assistance, please reach out to your Implementation Manager.

Recommended reading

We recommend reviewing the documents in the priority order specified below. You will need permissions to access these documents.

- [Project Roles and Working Agreements](#) This document assists in determining the best contact for specific topics and issues when/if they arise throughout the project. It also provides a set of mutually accepted working agreements, which help set expectations with respect to project activities and establish a productive working arrangement.
- [Products Specification](#) The specification documents, such as the Visual, URL, Email Notification USDAO Customization documents provide details about which visual elements, content and application options can be configured or customized. Additionally, they're used to capture your specific requirements for each of these elements and ensure clarity before implementation.
- [Application Data Definition](#)
- [Customization Specification](#)
- [Visual Specification](#)
- [URL Specification](#)
 1. We will provision the environment using a standard convention (e.g. <https://yourbank.avoka-transact.com/>), you may optionally host a reverse proxy to redirect to this URL. When choosing option one, your organization would be fully responsible for the reverse proxy hosting and configuration.
 2. Provide certificates for a custom domain. In this case, we configure the certificates on the hosted AWS instance. Your organization would be responsible for configuring appropriate DNS to support traffic direction to AWS hosted servers.
- Typical URLs look like the following example: [Workspaces_URL_example](#)
- [SFTP Delivery Specification](#) Temenos will deliver a zip package to an SFTP server as defined by the customer, this endpoint must be accessible from the Springboard production and staging environments.

The Springboard solution will allow your solution to configure the path in which the Zip file will reside. The zip package itself, is pre-defined and will include the following artefacts:

- PDF Receipt for the main application form.
- All attachments which are added to the application process.
- All Emails which were communicated to the customer will be provided as HTML files.
- The XML representation of the data entered by the user or used by the application form and persisted.

Next, learn about [Springboard Default Configuration of the Job Controller](#).

| Springboard Use Cases

Springboard | Form Builder | Retail DAO 3.0

Supported Use Case

The Springboard Solution for US Deposit Account Opening (Springboard DAO) is intended to be a ready-made solution to enable onboarding of new and existing customers for US Direct Deposit Accounts (DDAs). Springboard DAO is not intended to be used without a basic level of customization. The basic customization that is part of a Base Springboard DAO implementation (Base Springboard) is documented in a series of Client Specification Documents listed below. The use case covered in this document is the use case supported by Base Springboard.

Base Springboard Workflow

Workflow

Use Case – Select Product(s)

Allow a user to select one (or many) products they wish to apply for, before continuing to the Deposit Account Opening application.

Actor: New-to-FI or existing applicant

Preconditions: If the applicant pre-selects a product from the client's website, this can be automatically added to their shopping cart.

Use Case – Apply for new account(s)

Allow a customer, using their personal device on a mobile or desktop web browser wishes to apply for a new Direct Deposit Account offered by a Financial Institution (FI)

Actor: New-to-FI or existing applicant(s)

Preconditions: Existing marketing resources (web pages or other) exist which list detailed information about products or product bundles available in Base Springboard. Base Springboard does not have any "shopping cart" functionality, so the selection of a product (or products) must be done externally.

Use Case – Fund new account(s)

Allow applicant to add funds to their new account(s) using their personal device on a mobile or desktop web browser. The applicant may add funds using a verified existing bank account, or by mailing a check.

Actor: New-to-FI or existing applicant

Preconditions: Applicant must first complete the first section of the Base Springboard workflow and be approved for the account(s) they applied for. If funding using an existing bank account, applicant must verify their existing bank account by using a vendor to log in to their existing online bank account, or by using a micro-deposits workflow.

Use Case – Approve, Deny or send to Manual Review (automated)

Approve, deny or send application to manual review workflow based on information gathered in the application and based on information from third party vendors. Customized Decision Rules are part of the customization available in a Base Springboard implementation and are defined in the Customization Specification document.

Actor: Financial Institution

Use Case – Manual Review

Applications which receive a Manual Review decision from the automated Decision Rules are sent to a manual review workflow. This workflow uses the Workspaces product, the details of which are not covered by this document. After manual review, an application may be approved or denied. When approved, the applicant workflow moves forward to the Fund New Account(s) use case and workflow.

Actor: Financial Institution Employees

Preconditions: An application receives an automated decision of Manual Review.

SMB DAO Overview

Springboard | Form Builder | SMB DAO 1.0

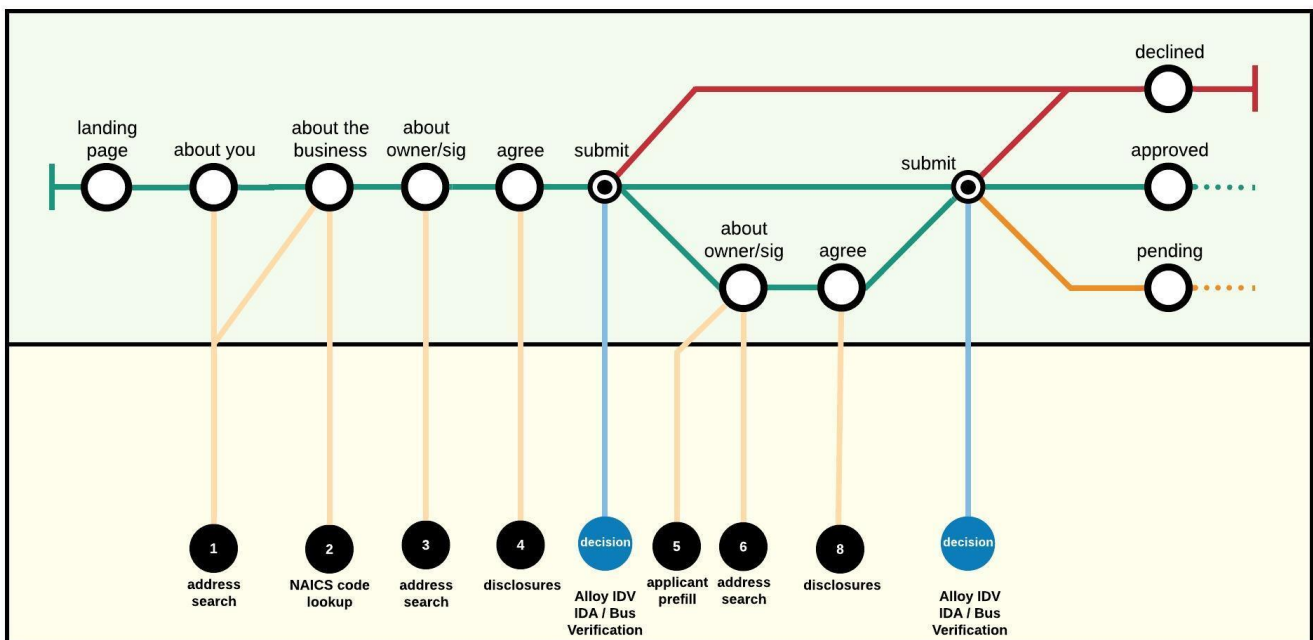
The Small Business Springboard solution for US Deposit Account Opening, Springboard SMB **DAO**¹ for short, allows users to open Checking and/or Savings Business Accounts. In short, it is a ready-to-use solution to enable **onboarding**² of new and existing customers for US Direct Deposit Accounts (**DDAs**³). Springboard is a starting point for customer specific DAO projects, which requires significantly less development than a typical Journey project.

This is achieved by pre-building most of the typical components, required to support USDAO solutions on Journey Manager, such as:

- Maestro template and [forms](#).
- [Transact Functions](#) including third-party [integration](#).
- Standard workflows and [collaboration jobs](#) to support manual review and approval activities.

For more information on each of the components supplied with the solution, see [components](#).

A typical Springboard application flow is shown below.



¹Deposit Account Opening (DAO). DAO bank forms allow users to open Checking, Savings and Money Market Accounts.

²The steps required to get a new customer integrated into a new program. These steps may vary business to business.

³Direct Deposit Account (DDA) is simply a checking or savings account which offers the ability to send and receive funds electronically.

Areas of Value

Springboard provides value to Client Services teams and our clients in several ways:

- Offers our clients a vision of what a good **DAO**¹ solution should look like.
- Offers our clients a head start on developing a custom DAO solution by leveraging our base Springboard solution.
- Serves as Temenos' current reference architecture for a Journey Manager / Journey Maestro DAO solution.
- Offers Client Services teams a framework for implementing a custom DAO solution.

SMB DAO User Interface

For more information, see [SMB DAO user interface](#).

Prerequisites

To start using Springboard and get the most out of it, you need to be familiar with:

- [The Temenos Journey platform](#)
- Journey Manager's [services](#)
- [Maestro](#)
- Narratives
- [SCM](#)
- Git
- Workspaces
- Analytics

More information is available in our [online documentation](#) and on our [resources website](#). We also offer instructor-led and [online training](#) (authentication required) on developing Journey platform solutions.

What Remains to Be Done

While large portions of the solution are pre-built there is still work required for every customer specific implementation. Typically, the bulk of the work for a client should be focused into three main areas:

¹Deposit Account Opening (DAO). DAO bank forms allow users to open Checking, Savings and Money Market Accounts.

- Configurations and Setup - such as style and brand, labels, configurable options, deploying and testing components, testing integrations, etc.
- Core Banking Integration - to support account and customer creation, as well as other critical onboarding activities
- Customization - which includes specific modifications to the project scope, which have been added to the project SOW or via CRs

Next, learn about [SMB DAO architecture](#).

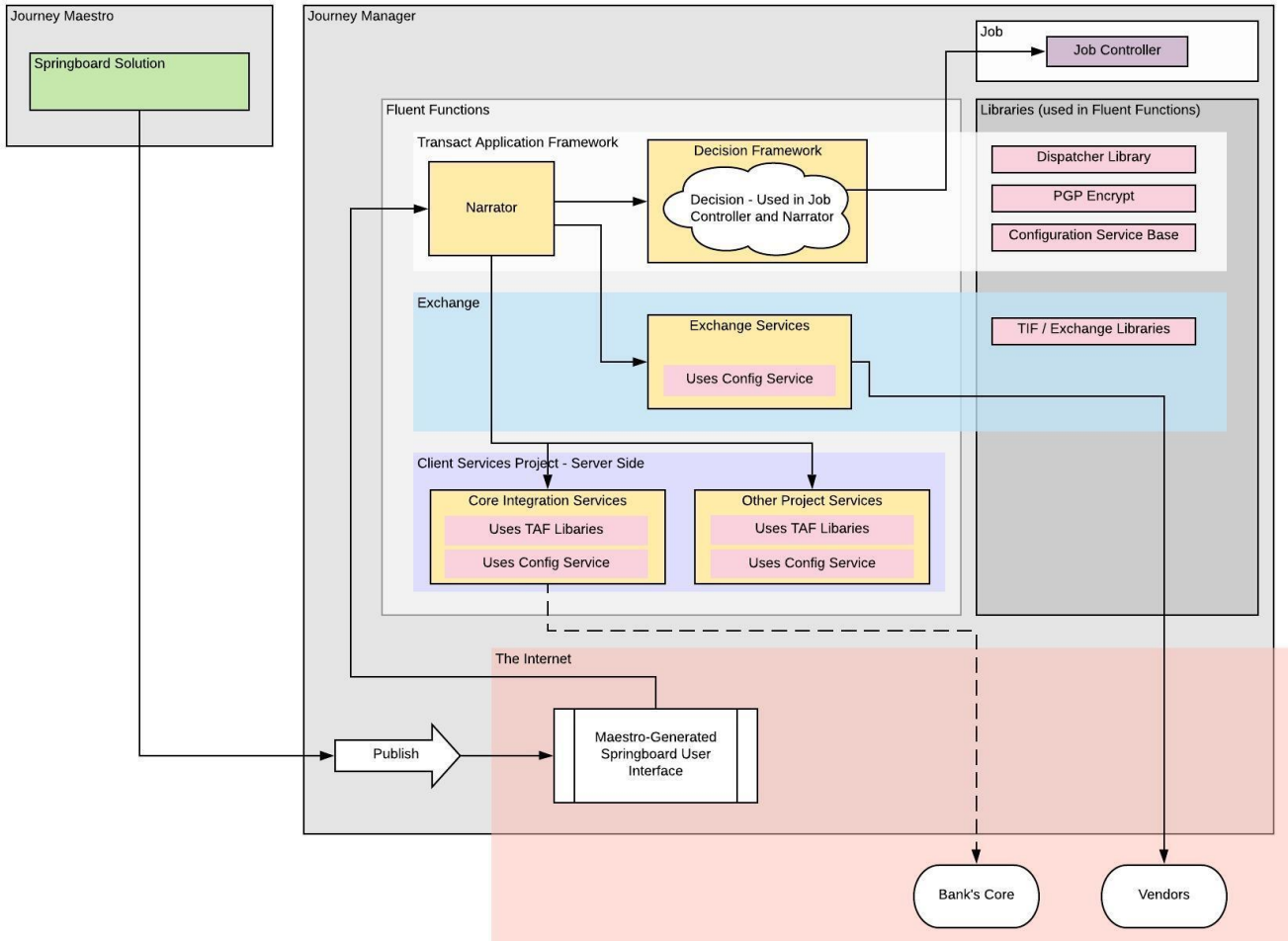
SMB DAO Architecture

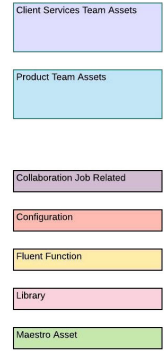
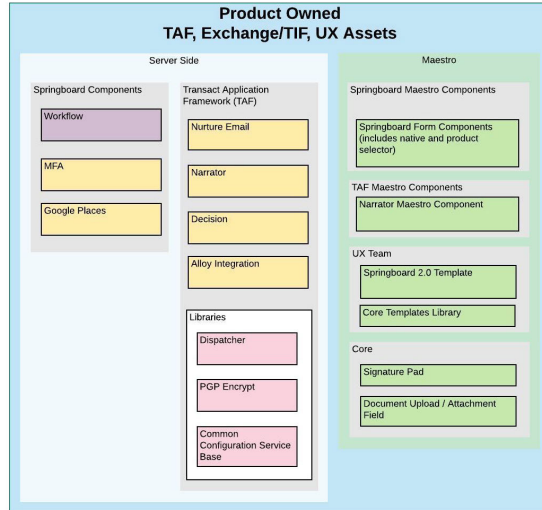
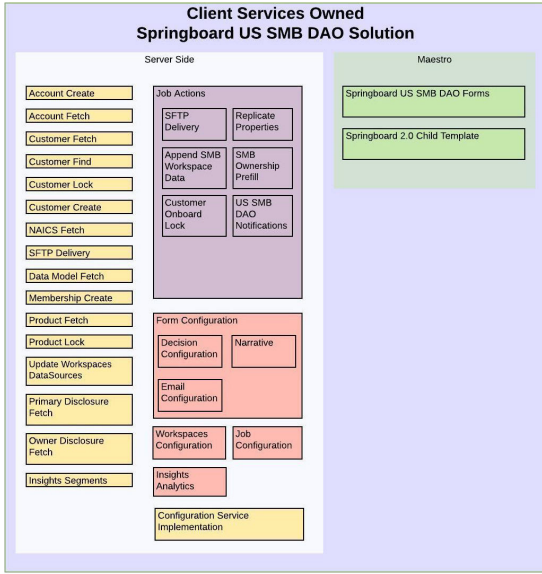
Springboard | Form Builder | SMB DAO 1.0

All SMB DAO solutions are based on a standard solution architecture.

Use the diagram below to understand the SMB DAO Springboard Solution Architecture.

Springboard Solution Architecture





Next, learn about [SMB DAO configuration](#).

| SMB DAO Configuration

Springboard | Form Builder | SMB DAO 1.0

Springboard is a highly configurable product. You can further customize it as per your requirement.

Configuration vs Customization

It's important to carefully review the details in this document, the Springboard US SMB DAO SOW Template and supporting product documentation. Unlike other Client Services engagements, which are entirely composed of custom development, Springboard projects are extremely prescriptive. Certain changes are permitted, and others are not. These constraints ensure solutions are implemented in a repeatable and cost-effective manner, as well as ensuring ease of support for future updates and maintenance.

Permitted changes which are included by default in all Springboard SOWs are typically referred to as "Configuration". Certain other changes are still permitted, however, they require additional funding and must be explicitly added to the project scope via additions to the SOW or Change Requests.

Any other changes, whether added to scope via a SOW change, CR or any other means are unsupported. If any of these unsupported changes are made, the customer's solution will no longer be eligible for upgrades and may not be supported by the Springboard Engineering team.

For these reasons, it's obviously important to carefully consider any changes to the application, whether they're in scope and what impact they might have on support or future maintenance.

When in doubt, you should assume a change is unsupported until you receive confirmation from the Springboard Engineering team or find an appropriate reference to the change in the product documentation.

Springboard Product Number Limit

You can add a number of products to your Springboard solution. Products are added to a JSON file, so there is no hard limit, but we recommend not to exceed 10 products. 3 to 5 products are ideal as it's been thoroughly tested. This is also related to the number of product selectors you can have, which has no hard limit as well, but we recommend not going over 25.

For more information, check the specific project documentation for each of the components, such as the Narrator, USDAO Project and Exchange Components.

You must be familiar with [Journey Manager](#) and its framework creating services, [Maestro](#), Narratives, [SCM](#) and [Git](#)¹. For more information on our products, visit our [community](#) and [documentation](#) websites. Training on developing solutions on the [Temenos Journey Platform](#) is also available.

SMB DAO Default Configuration of the Jb Controller

This describes the default configuration of the Jb Controller, associated components, and the workflow that connects them.

Next, learn about [SMB DAO components](#).

¹Git is a version control system for tracking changes in computer files and coordinating work on those files among multiple people. It is primarily used for source code management in software development,[8] but it can be used to keep track of changes in any set of files.

| SMB DAO Components

Springboard | Form Builder | SMB DAO 1.0

The [SMB DAO](#) solution consists of multiple components, all of which work together to provide the required functionality. The common components are listed below.

Forms

There are several forms which comprise the Springboard DAO Solution. Each form represents a different chunk of functionality.

Product Selector Form (optional) | v3.0

The Product Selector Form allows bank Applicants to view product details and select one (or many) products that they would like to apply for. The shopping cart functionality makes it clear what the Applicant has selected and then (unknowingly) transitions them to the DAO Form to complete their application. Banks have the ability to enforce mandatory or optional bundles, configure the 'Learn More' hyperlinks and restrict the number of products, if required.

SMB DAO Form (Primary Applicant)

This is the Deposit Account Opening form which collects personal and business details of the applicant. The application is run through the Alloy Decision Engine on submission and may be approved, denied, or placed in a review queue. This form is the primary entry point into the application for the Primary Applicant.

SMB Owners DAO Form (Owners/ Signatories)

This is the Deposit Account Opening form which collects personal and business details of any Owners or Signatories that were identified by the Primary Applicant. The application is run through the Alloy Decision Engine on submission and may be approved, denied, or placed in a review queue. This form is the primary entry point into the application for any Owners / Signatories.

Review Form

When Applications are sent to the Manual or Fraud Review queues they need to be manually assessed and a decision is made by a staff member of the bank.

The Review Form is used by bank staff to perform these review operations and make a final Approved/Declined decision for the Application.

Email Unsubscribe Form

This form allows the user to unsubscribe from nurture email notifications, such as application reminder emails. It will not unsubscribe them from transactional emails required to provide details about their application or account (s), such as an Approved Confirmation or Declination email.

SMB Kickoff Form

This is used to speed up the testing and debug process for the US SMB DAO form. It allows testers to bypass the US SMB DAO form to simulate approved, declined or pended applications and kick off the Job Controller.

Narrative

The SMB DAO Solution is based on our Application Framework and relies on Narratives to control the flow and actions of each of the forms. As a result, the Narration Controller (Narrator) must be installed and active on the Transact Manager servers hosting the solution.

The solution is preconfigured to include Narratives services in your deployment, and comes with a predefined Narrative which includes all of the standard pages and actions required for SMB DAO.

For more information, see [developer documentation](#).

SMB DAO Project

This project provides the services required for the Springboard DAO form, as well as the Core Banking API. The Narrative provided is designed to call each of these services as required to support the application.

The Fluent Functions in the SMB DAO project can do things such as:

- Product data pre-fill
- Applicant IDV/IDA through Alloy integration
- Populating application used by Workspaces
- Fetching customer data to be prefilled

Workflow / Collaboration Jobs and Testing Form

The SMB DAO solution comes with a predefined Collaboration Job Definition (Workflow). This Workflow controls what happens to the application once it is submitted, such as forwarding the application to one of the workspace queues or sending it on for delivery.

This workflow should not be modified for standard implementations.

Maestro Template

The Springboard Maestro Template serves as a starting point for configurations and customizations. The Template implements our current UX best practices and provides client-side support for the Narrator.

The template can be configured in some ways. Colors, backgrounds, and some other items can be easily configured without major modifications. The template can also be customized more deeply depending on a customer's specific needs, but these deeper customizations are distinctly custom development and may result in the customer's implementation forking from the base, making it no longer eligible for upgrades.

Exchange Services

There are a number of exchange services used by the Springboard DAO Project:

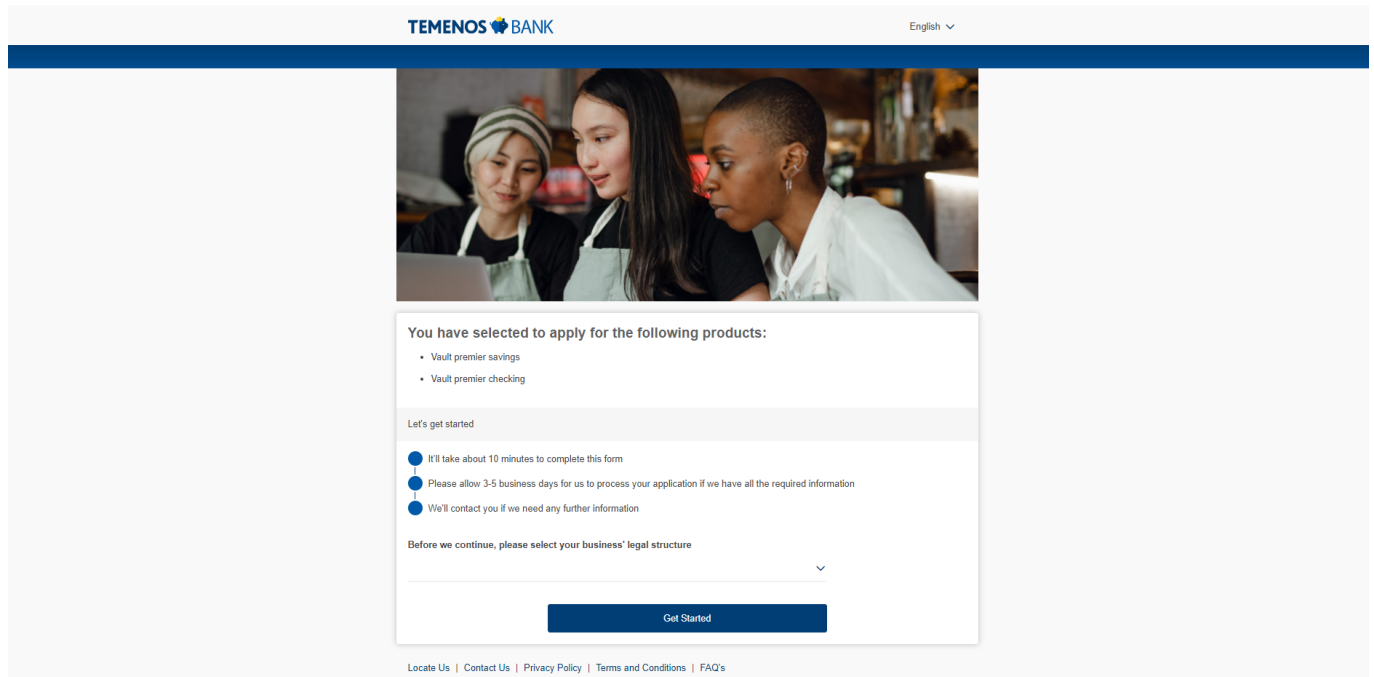
- Google Places API - Address Details - v1.1.2 - Fluent Function that gets additional information for the address select from the list of addresses provided by Google Places API
- Google Places API - Address Search - v1.1.2 - Fluent Function which calls Google Places API to get list of possible address for the user to select from.

Next, learn about [SMB DAO workflows](#).

SMB DAO User Interface

Springboard | Form Builder | SMB DAO 1.0

Below are some sample screenshots of the SMB DAO Solution.



The screenshot shows the top of the application interface. At the top left is the TEMENOS BANK logo, and at the top right is a language dropdown menu set to "English". Below the header is a large image of three diverse people looking at a laptop. Underneath the image is a white box with a blue border containing the following text:

You have selected to apply for the following products:

- Vault premier savings
- Vault premier checking

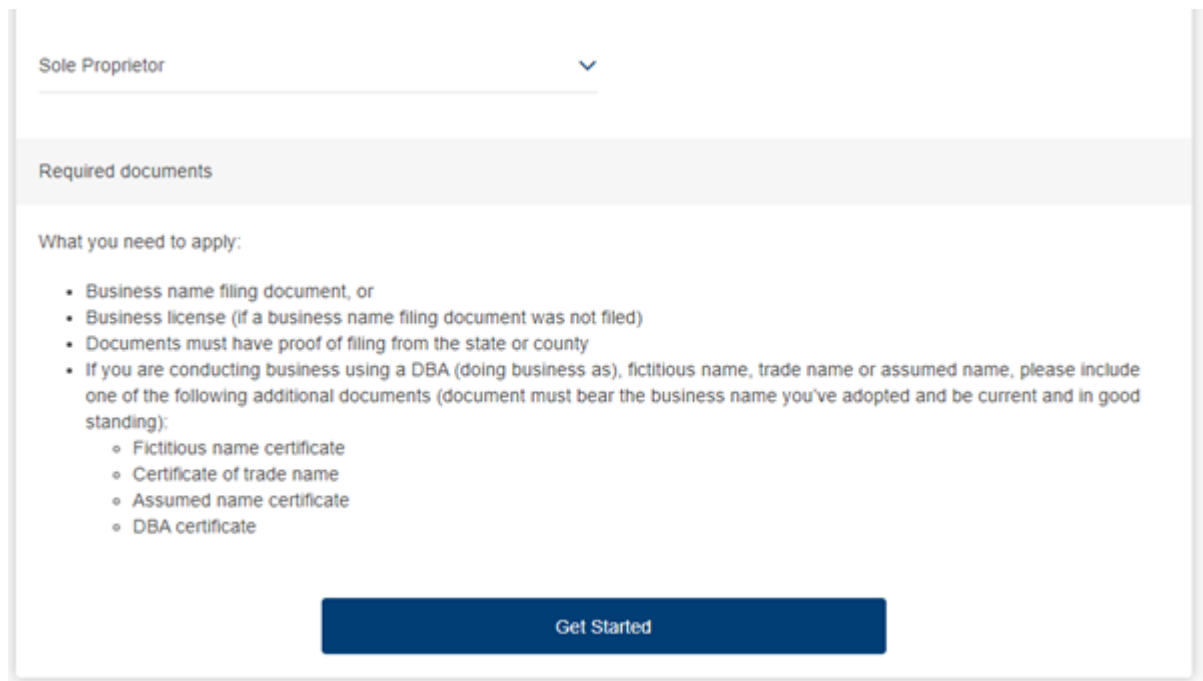
Let's get started

- It'll take about 10 minutes to complete this form
- Please allow 3-5 business days for us to process your application if we have all the required information
- We'll contact you if we need any further information

Before we continue, please select your business' legal structure

Get Started

At the bottom of the page, there are links: [Locate Us](#) | [Contact Us](#) | [Privacy Policy](#) | [Terms and Conditions](#) | [FAQ's](#)



The screenshot shows a dropdown menu with "Sole Proprietor" selected. Below the dropdown is a section titled "Required documents" with the following text:

What you need to apply:

- Business name filing document, or
- Business license (if a business name filing document was not filed)
- Documents must have proof of filing from the state or county
- If you are conducting business using a DBA (doing business as), fictitious name, trade name or assumed name, please include one of the following additional documents (document must bear the business name you've adopted and be current and in good standing):
 - Fictitious name certificate
 - Certificate of trade name
 - Assumed name certificate
 - DBA certificate

Get Started

Contact details

Let's grab some contact information so we can follow up with you quickly.

First name


Serg

Last name

Thaddeus Crane Pennyworth

Email 

seremenko@temenos.com

Mobile number 

(043) 397-7874

Debugging Assistance

Job Controller Approval Route

Approved



Continue

Personal details

Date of birth

02/07/1981



Are you a citizen and resident of the United States?

Yes

No

What is your Country of Residence?

AUSTRALIA

What is your Country of Citizenship?

▼ AUSTRALIA



SSN 

123-45-6789

Back

Continue

ID details

We'll use these details to confirm your identity

Type of Identification



US Driver's License



Passport

ID number

1234567

Country of Issue

AUSTRALIA



Issued date

01/02/2020

Expiry date



01/02/2030



Back

Continue

Where do you live?

Street

1 Long Street

Unit

City

Atlanta

State

GA

Zip

30344



I have lived at this address for less than 12 months

Previous address

5 Longfellow Place

Unit

City

Boston

State

MA

Zip

02114



I want to provide a different mailing address

Back

Continue

Before we continue

All banks in the United States are required to ask some variation of the following questions.

Bear with us - they should only take a moment.

Have you, a member of your family or a close associate served in or currently occupy a high position in the US, state, local or foreign government?

Yes

No

Do you expect to conduct any of the following on this account? Domestic Wires, Direct Deposit, or ACH deposits or withdrawals of greater than \$15,000 per month International Wires, or IAT transaction deposits or withdrawal of greater than \$15,000 per month Physical Currency withdrawals or deposits in excess of \$10,000 per month

Yes

No

Were not able to service some types of businesses including: Money or financial services - Illegal products/services Internet prescription drugs Get rich quick schemes Marijuana or hemp-related business Crowdfunding/sourcing Unlawful online gambling/sweepstakes OFAC/specially designed nationals and blocked person (SDN) list Embassy or consulate offices Adult entertainment Criminal offenders Does your business fall into one of the above categories?

Yes

No

Back

Continue

Tell us about the business

Legal business name

DBA (if applicable) 

My best company ever

Date established

01/01/2010



Business Tax ID (EIN/SSN)

••••••••

Business address

Unit

7 Longs Peak Drive

City

State

Zip

Broomfield

CO

▼ 80021

My best company ever has a different mailing address

Business phone number

Number of employees

1-10



NAICS Code

Sector



Back

Continue

Account options

Select the options listed below that you would like to apply to your new account(s).

Enroll in online banking

Vault premier savings

Enroll in paperless statements

Order overdraft protection

Vault premier checking

Enroll in paperless statements

Order overdraft protection

Back

Continue

Document upload

What you need to apply

Business name filing document



If you are conducting business using a DBA (doing business as), please include one of the following additional documents (document must bear the business name you've adopted and be current and in good standing)



Any other supporting documentation

Select File

Back

Continue

Electronic disclosure

Before opening your account, you must open and review the E-Disclosure below. Be sure to take a snapshot/print a copy for your records.

If you consent to this agreement and meet the system requirements, provide your electronic signature to this agreement by checking the box below.

I, Serg Thaddeus Crane Pennyworth, have reviewed and consent to the [E-Disclosure](#).

DEMO CONTENT

Back

Continue

What would you like to do?



Save Application



Resume Application



Cancel Application

Back

Continue

[Locate Us](#) | [Contact Us](#) | [Privacy Policy](#) | [Terms and Conditions](#) | [FAQ's](#)

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Equal Housing Lender - Member FDIC



Close

Resume Application

To resume your application, you will need access to your mobile device.

Click 'Send PIN' to receive an SMS and enter it below to resume your application.

Reference Code ⓘ

| _____

PIN _____

Next, learn about [SMB DAO implementation](#)

| SMB DAO Implementation

Springboard | Form Builder | SMB DAO 1.0

Here is a high level overview of the steps required for creating a base standard Springboard Implementation.

This topic covers the work required to build a Base Springboard implementation. It outlines the appropriate time to implement significant departures from the Base [Springboard](#) and references other related resources and documents throughout.

This page is intended for all project team members:

- Project Manager
- Business Analyst
- Solution Architect
- Technical Lead
- Developers
- Quality Assurance Team

The following steps are commonly undertaken when creating a new Springboard implementation:

Step 1

Team reviews project progress – goal of agreeing that Base Springboard implementation is complete

Item	Description
Who	All resources.
What	Review Springboard Getting Started Guide.
Why	Everyone resources should start with understanding what the Springboard product is. The Getting Started Guide will give an overview of what Springboard is and the components it consists of.
Where	See Springboard overview .

Step 2

Team reviews project progress – goal of agreeing that Base Springboard implementation is complete

Item	Description
Who	Project Manager, Business Analyst, Solution Architect, Technical Lead, Developers.

What	Review Customization Specification documents.
Why	The Customization Specification documents show what is available for customization in a Base Springboard project.
Where	<ul style="list-style-type: none"> • Customization Specification • URL Specification • Product Specification • Visual Specification

Step 3

Item	Description
Who	Solution Architect, Technical Lead, Developers.
What	Review Developer Setup Guide.
Why	The Customization Specification documents show what is available for customization in a Base Springboard project.
Where	See link for Developer Setup Guide.

Step 4

Item	Description
Who	Project Manager, Business Analyst.
What	Provide clients with a copy of Customization Specification documents to be filled by client.
Why	These documents must be filled to complete a Base Springboard implementation, the filled documents must be attached to certain stories in a later step in this guide.

Step 5

Item	Description
Who	All Resources.
What	Review Base Springboard Sprints.

Why The work that must be done to complete a Base Springboard implementation is covered in a pre-defined backlog.

Where See backlog below.

Step 6

Item	Description
------	-------------

Who Project Manager, Business Analyst.

What Gather and review Client's reporting requirements.

Why Set expectations and begin understanding the client's reporting needs.

Step 7

Item	Description
------	-------------

Who Project Manager, Business Analyst, Solution Architect, Springboard Team (if necessary).

What Review Client's use case for gaps.

Why Review the client's complete use case with a focus on finding any missed functionality or gaps, include Springboard team if necessary.

Step 8

Item	Description
------	-------------

Who Solution Architect, Technical Lead, Developers, QA Team.

What Agree on development process.

Why Prior to starting development, the team should agree on the process and workflow for making changes to the Maestro and Journey Manager projects.

Step 9

Item	Description
------	-------------

Who All Resources.

What Review Customization Specification Docs from Client.

Why Prior to starting development, review the Customization Specification documents provided by the client and add the appropriate documents to their associated tasks see Sprint 1 below).

Step 10

Item	Description
Who	All Resources.
What	Kickoff Sprint.
Why	Start the project!

Client Services are provided with a standard Jira [sprint backlog](#) to follow for each Springboard implementation.

Next, learn about [SMB DAO sprint backlog](#).

| SMB DAO Sprint Backlog

Springboard | Form Builder | SMB DAO 1.0

Sprint Backlog

Sprint 0 – Setup default Springboard

Item	Description
Spike	Review requirements received from client so far - agree that client has provided sufficient requirements in Customization Specification, Visual Specification, Product Specification, URL Specification documents.
Task	Total number of transactions that match the metric selected, such as Abandoned. This number is also expressed as a percentage for abandonments, field error rates and completion rate.
Task	Completion rate. This is expressed as a percentage of the total number of field commencements. Field commencements are recorded only if the field is touched by a user.
Task	Average number of times a field error occurred, and includes validation and mandatory errors. This is expressed as a percentage of the total number of field commencements. Field commencements are recorded only if the field is touched by a user.
Spike	Team agrees on development/QA process and workflow
Task	Whitelist Integrations
Task	Test automation project working and all tests pass
Task	Team reviews project and agrees that solution is a “clone” of default Springboard (Should be able to follow “How to fill the form” document)

Sprint 1 – Begin customizing to Base Springboard implementation

Item	Description
Task	Update project to follow Customization Specification
Task	Update project to follow Visual Specification
Task	Update project to follow Product Specification
Task	Update project configuration to follow URL Specification
Task	Configure Integrations/Vendor Credentials in Alloy

- Task Team reviews project progress
- Task Test automation project working and all tests pass
- Task Bank Core Integration

Sprint 2 – Continue customizing to Base Springboard implementation (if necessary)

Item	Description
Task	Continued work to follow Customization Specification
Task	Continued work to follow Visual Specification
Task	Continued work on Bank Core Integration
Task	Test automation project working and all tests pass
Task	Team reviews project progress – goal of agreeing that Base Springboard implementation is complete

Sprint 3 – Begin Custom Work.

Item	Description
N/A	N/A

| SMB DAO Use Cases

Springboard | Form Builder | SMB DAO 1.0

Supported Use Case

The Springboard solution for US Small Business (SMB) Deposit Account Opening (Springboard DAO) allows users to open Checking and/or Savings Business Accounts. In short, it is a ready-to-use solution to enable the onboarding of new and existing customers for US Direct Deposit Accounts (DDAs). Springboard DAO is not intended to be used without a basic level of customization. The basic customization that is part of a Base Springboard DAO implementation (Base Springboard) is documented in a series of Client Specification Documents listed below. The use case covered in this document is the use case supported by Base Springboard.

Base Springboard Workflow

[Workflow](#)

Use Case – Select Product(s) - optional

Allow a user to select one (or many) products they wish to apply for, before continuing to the Deposit Account Opening application.

Actor: New-to-FI or existing applicant

Preconditions: If the applicant pre-selects a product from the client's website, this can be automatically added to their shopping cart.

Use Case – Apply for new account(s)

Allow a customer, using their personal device on a mobile or desktop web browser wishes to apply for a new Direct Deposit Account offered by a Financial Institution (FI)

Actor: New-to-FI or existing applicant(s) (user journey is currently the same for both)

Preconditions: Existing marketing resources (web pages or other) exist which list detailed information about products or product bundles available in Base Springboard. Base Springboard does not have any "shopping cart" functionality, so the selection of a product (or products) must be done externally or using the product selector form.

Use Case – Approve, Deny or send to Manual Review (automated)

Approve, deny or send application to manual review workflow based on information gathered in the application and based on information from third party vendors. Customized Decision Rules are part of the customization available in a Base Springboard implementation and are defined in the Customization Specification document.

Actor: Financial Institution

Use Case – Manual Review

Applications which receive a Manual Review decision from the automated Decision Rules are sent to a manual review workflow. This workflow uses the Workspaces product, the details of which are not covered by this document. After manual review, an application may be approved or denied. When approved, the applicant workflow moves forward to the Fund New Account(s) use case and workflow.

Actor: Financial Institution Employees

Preconditions: An application receives an automated decision of Manual Review.