**US\_294145\_Cognizant: Establish Plaid connection with the Build Credit Module**

**Understanding of the requirement**

Create a plaid connection between Build Credit Module with Plaid

**Assumptions**:

* Sandbox account and credentials for plaid connection are provided and we are able to access
* Any changes made in Plaid connection API call, will be notified
* GitLab Apiary access will be provided

**High level Technical design and solution**

* 1. Impacted Modules

BCM Modules

* 1. Impacted Workflows
     1. Overview:

BCM will create a Plaid Link connection by invoking below API with valid credentials.

**Plaid sandbox : POST /item/public\_token/create**

Once BCM established plaid link connection, BCM will receive a public token which is valid for 30 minutes duration. Using this public token, BCM will invoke below RentTrack API to create a new payment account

**RentTrack sandbox : POST /api/tenant/plaid/payment\_accounts**

Also using the public token BCM will able to get the list of partnership banks and Customers will be able to select their bank from the list.

Also BCM can authenticate Plaid to search their transaction history for a payment that relates in date and amount to their lease details.

If a customers couldnt find their bank, BCM will notify RentTrack with the bank information so that Plaid can get a partnership with them. (Which RentTrack API is used by BCM to notify RentTrack? )

Once the partnership is established with the users bank in the future, BCM will notify the user so they can come back in and establish their transaction to be reported to the bureaus. (How BCM will get notified whether the partnership is established for the particular customer bank?, How BCM will notify the customer that the bank is available? )

* + 1. API Involved:

POST /api/tenant/plaid/payment\_accounts

* + - * + BCM is the consumer
        + Payload : public\_token, plaid\_account\_id, pay\_type
        + Error Codes:

201 - Returned when successful

400 - Error validating data. Please check parameters and retry.

409 - User exists.

500 - Internal Server Error

* + 1. Messaging Infrastructure: Please give input
    2. UI Screens: N/A
  1. DB Changes:

Customer Data and Auditing Table

Rent Track access token will be fetched from customer data based on ucid.

* 1. Dependencies

RentTrack API and Plaid connection

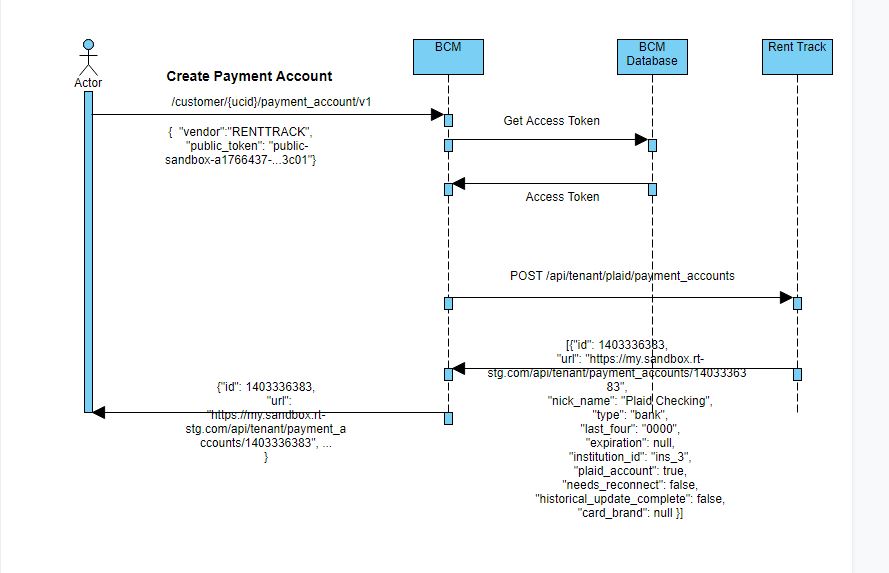
* 1. Blocker Inputs needed

The sandbox access need to be provided for both

* 1. Design Patterns considered and the chosen one

SOA

* 1. Sequence diagram



**Business** :

**Step 1:**

BCM will receive the public token and plaid account id from the RSP(UI).

Request Payload:

{

"public\_token":

"public-sandbox-b0e2c4ee-a763-4df5-bfe9-46a46bce993d",

“pay\_type”:”no\_pay”,

“plaid\_account\_id”:”i544dsd561g13”

}

**Step 2:**

Using the public token and plaid account id, BCM will invoke below RentTrack API to create a new payment account

**RentTrack sandbox : POST /api/tenant/plaid/payment\_accounts**

**Input** :

| Parameter | Type | Required? | Format | Description |
| --- | --- | --- | --- | --- |
| public\_token | string | true | {not blank} | Plaid public token |
| plaid\_account\_id | string | false |  | Selected Id of Plaid Payment Account (optional) |
| pay\_type | string | false | [general|subscription|billpay|nopay] |  |

**Output** :

| Parameter | Type | Versions | Description |
| --- | --- | --- | --- |
| 201 - Returned when successful |  | | |
| [] | array of objects (PaymentAccount) | \* |  |
| [][id] | integer | \* |  |
| [][url] | string | \* |  |
| [][nickname] | string | \* |  |
| [][type] | string | \* |  |
| [][last\_four] | string | \* |  |
| [][expiration] | string | \* | Format: "YYYY-mm" |
| [][institution\_id] | string | \* |  |
| [][plaid\_account] | boolean | \* |  |
| [][needs\_reconnect] | boolean | \* |  |
| [][card\_brand] | string | \* |  |

**Clarifications**:

1. Do we need to create public token for plaid connection or will it be shared to BCM to invoke RentTrack API call ?

- It will be provided by the invoker(RSP) to BCM

2. Which RentTrack API need to invoke to get the list of plaid partnership bank to show to the user ?

- N/A

3. Once the user selects the bank, do we need to capture the user selected bank in the BCM database ?

- N/A

4. Which RentTrack API is used by BCM to notify RentTrack?

- N/A

5.How BCM will get notified whether the partnership is established for the particular customer bank?

- Never get notified

6. How BCM will notify the customer that the bank is available?

- TBD

**Code / Framework References**

**Misc:**