Setup Guide - Broker Named Credentials

1. Setup Guide Overview

Up to 10 user limit and support in built salesforce different authorizations types . All users must require “ modify name credential access” PS which gives authorization read/edit permission of all users. We do not recommend this setup until all users are trustable and do not modify/delete each other's name Configuration. We recommend this approach when you have only one user license or all users belong to one Person/trusted household member. Ksema recommended “**Setup Guide -Broker-CustomAuthorize**” if the broker supports Oauth 2.0 which most brokers(Schwab supports) do support and in this option each user can configure and see only their authorization setup.

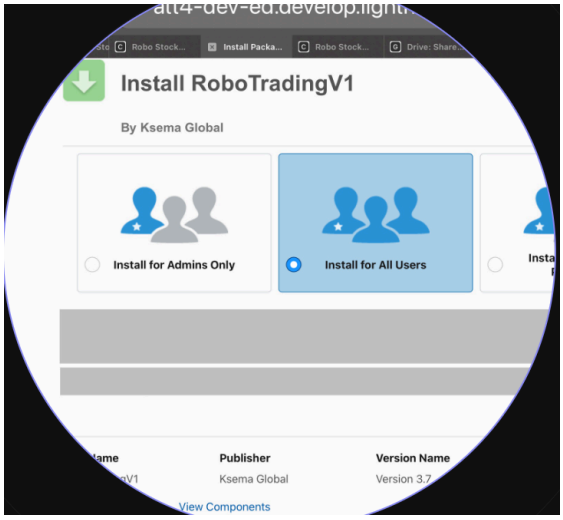
2. Subscription Workflow & App Installation- By system Administrator

- First create a salesforce login(first user is default to System Administrator licence and you can configure an App for the same user) if not already and then Install Robo App in your salesforce instance.

Subscription Workflow Guide

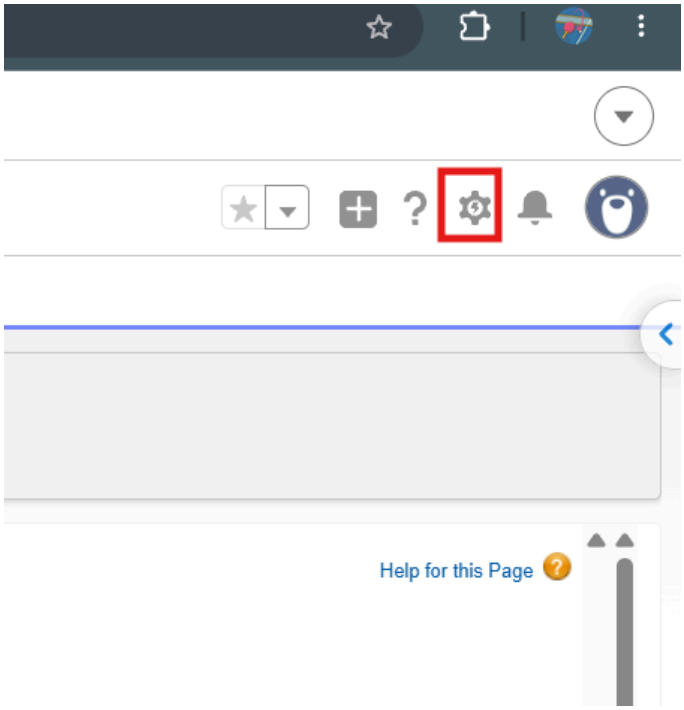
Installed App

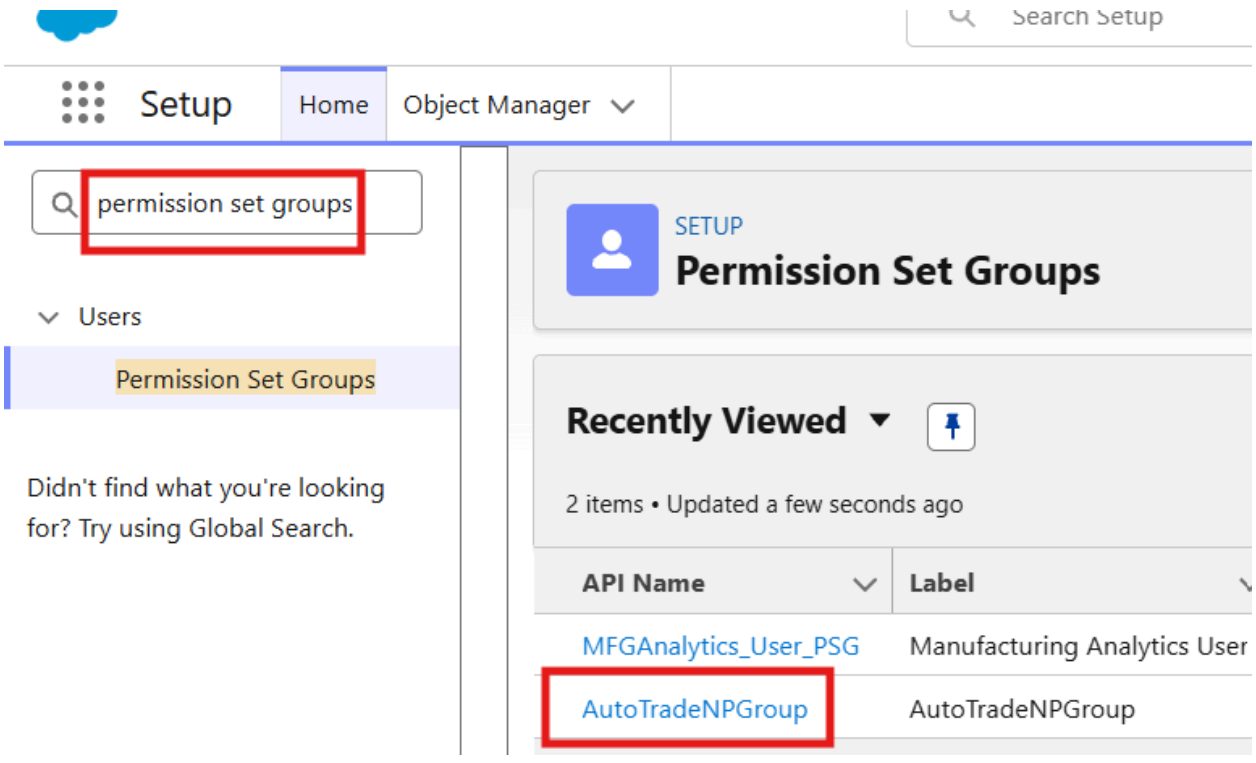
1 Pre-requested Salesforce Org and having Enterprise Edition.[Create Salesforce Org]
2 Install Robo app in Salesforce org.[Prod Org-App link] or [Sandbox Org-App link]
3 Configure Robo App using installation steps document defined below, take our support in configuration via
[Schedule a call with us for configuration]
4 Also supports Mobile App. Install Salesforce Mobile App:
[Apple App Store (iOS / iPhone / iPad)]
[Google Play Store (Android)]
5 Complete payment and subscribe before Trial expiry
6 Create a case below for payment confirmation (or email us)
7 New plan changes applied same/next business day by support team

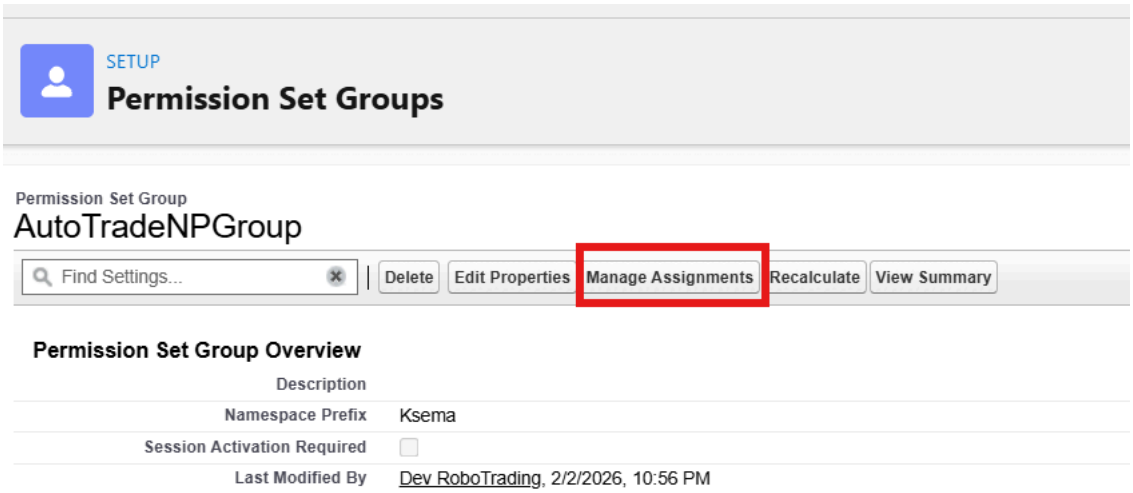


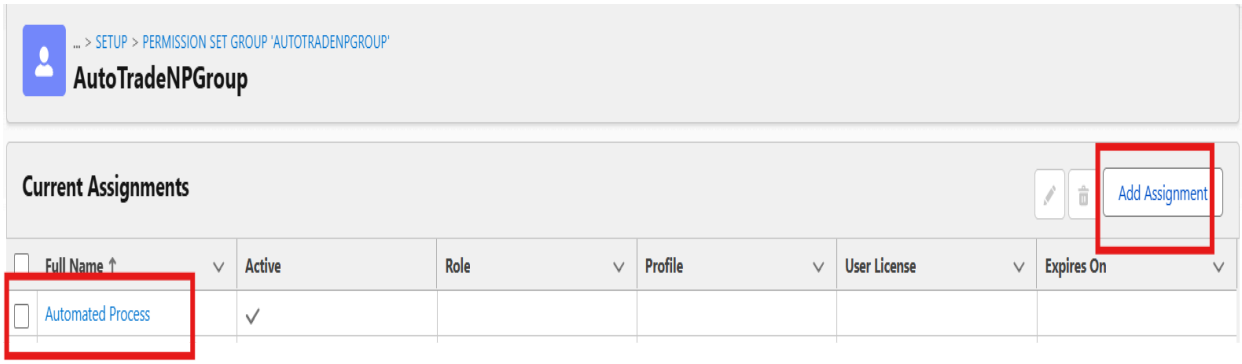
- **Assign NPPS to Automation User**

    - Automation users should have this permission so it can access all Robo users Authorize settings and run in the background for the automation process. Click on setup


Help for this Page


Search Setup
Setup
Home
Object Manager
permission set groups
Users
Permission Set Groups
Didn't find what you're looking for? Try using Global Search.
SETUP
Permission Set Groups
Recently Viewed
2 items • Updated a few seconds ago
API Name
Label
MFGAnalytics_User_PSG
Manufacturing Analytics User
AutoTradeNPGroup
AutoTradeNPGroup

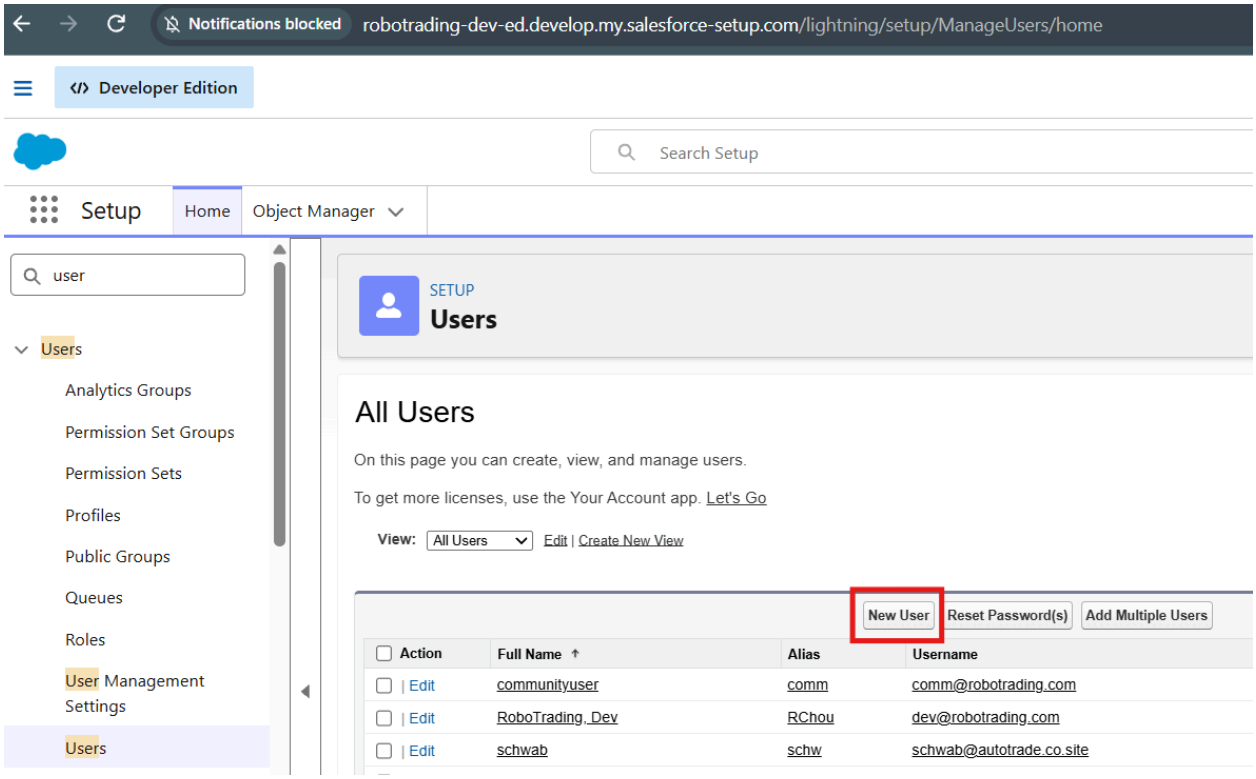


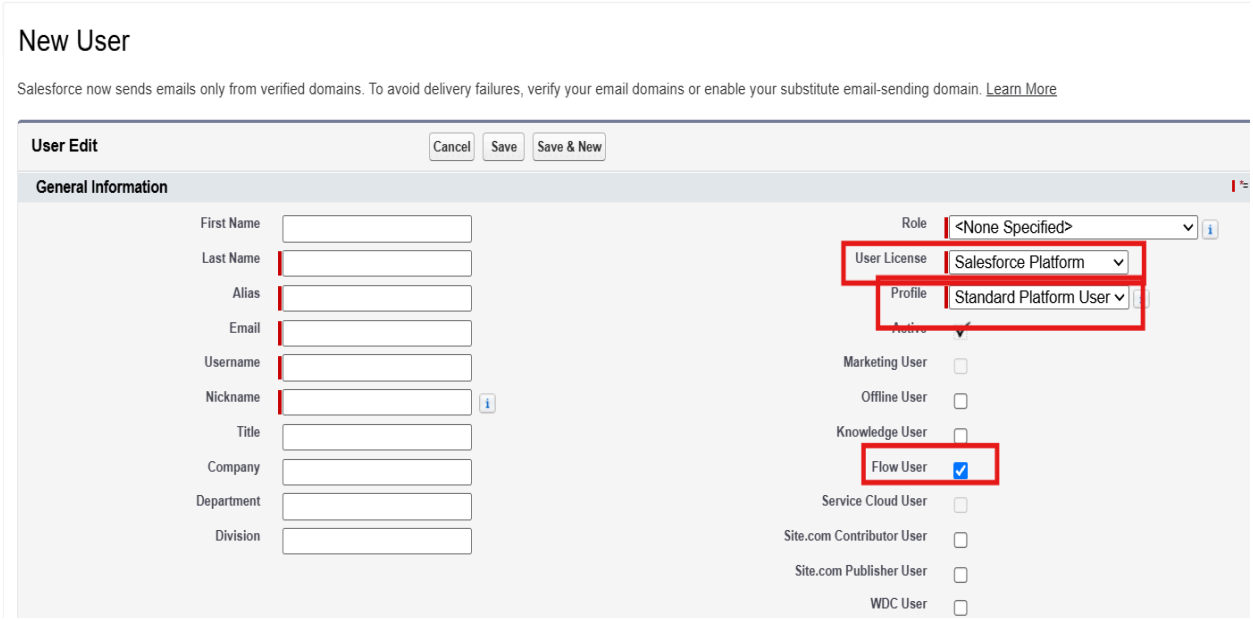


3. Setup Single/Multiple Robo User- By system Administrator

- Create new User or use existing user
    - Minimum Licence is “Salesforce Platform”. The app will support all higher licence too. if only one user exists then let it be a Salesforce licence but any new user creation should be “Salesforce Platform” for cheaper license cost.
    - Profile : Standard Platform User, if only one user exists then let it be System Administrator but any new user creation should be “Salesforce Platform”.

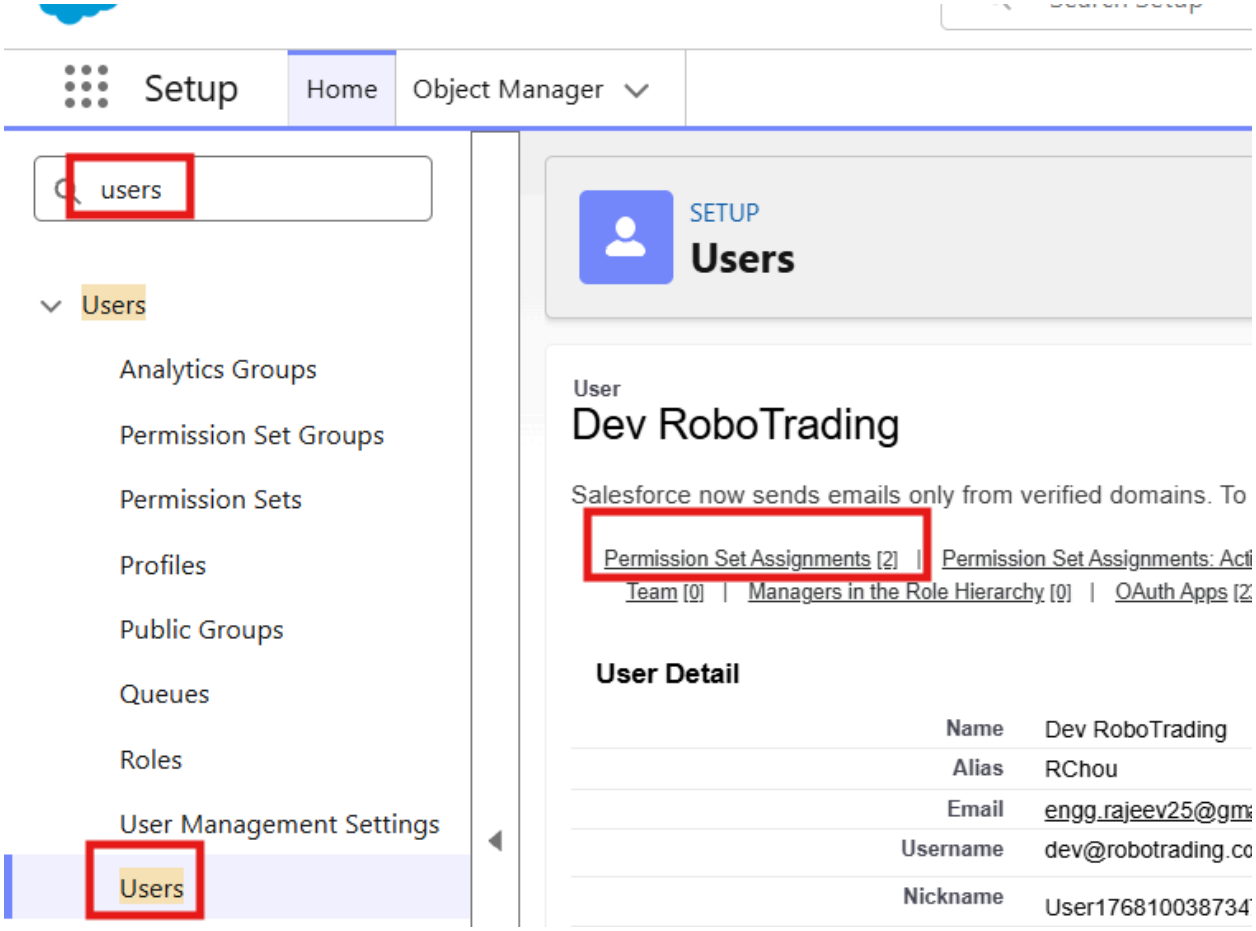
- Time zone should be as per your Broker Time zone





- **Assign Permission's to the user who wants to run a Robo Trading app .**

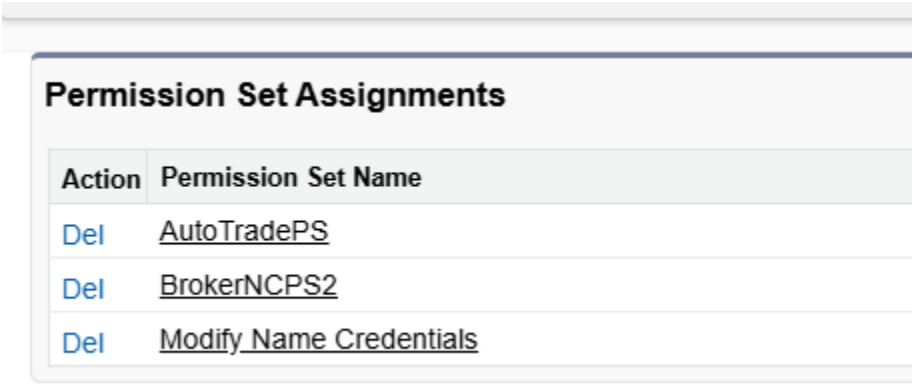
- AutoTradePS should be Assigned which gives full access to the Robo App.
- There are 10 pre-configured name credentials created by Robo manage package. Assign uniquely to each user.



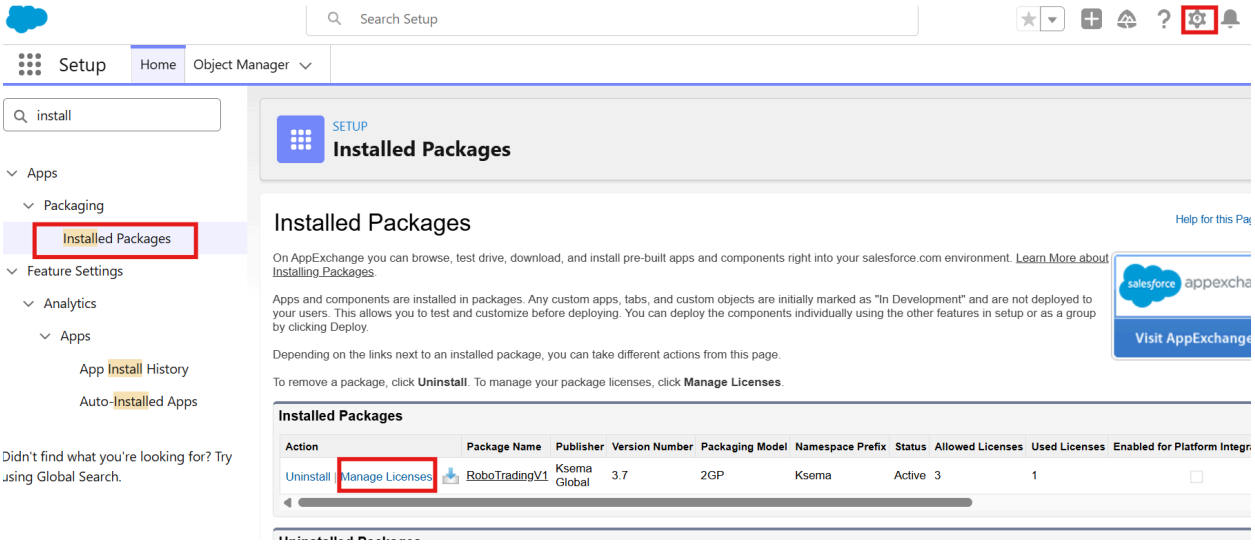
Assign all 3 Permission sets.

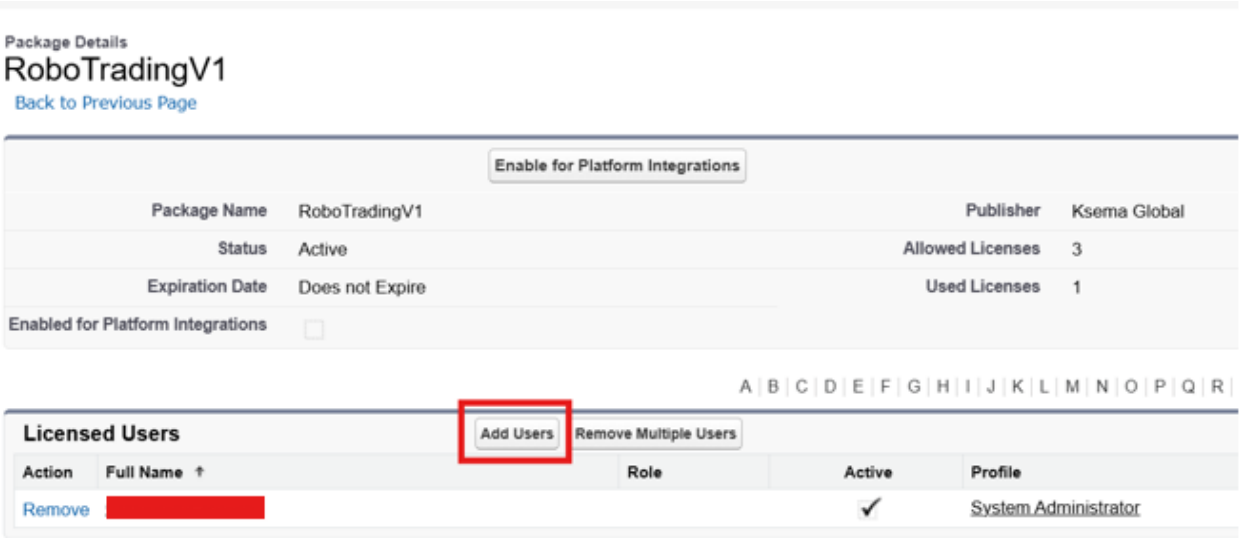
Package auto creates 10 NC on install : BrokerNCPS2,BrokerNCPS2, BrokerNCPS3... BrokerNCPS10. Assign a unique BrokerNCPS one to each user who wants to run an App.

“Modify Name Credentials” PS : is required for authorizing brokers by individual users when the token expires.



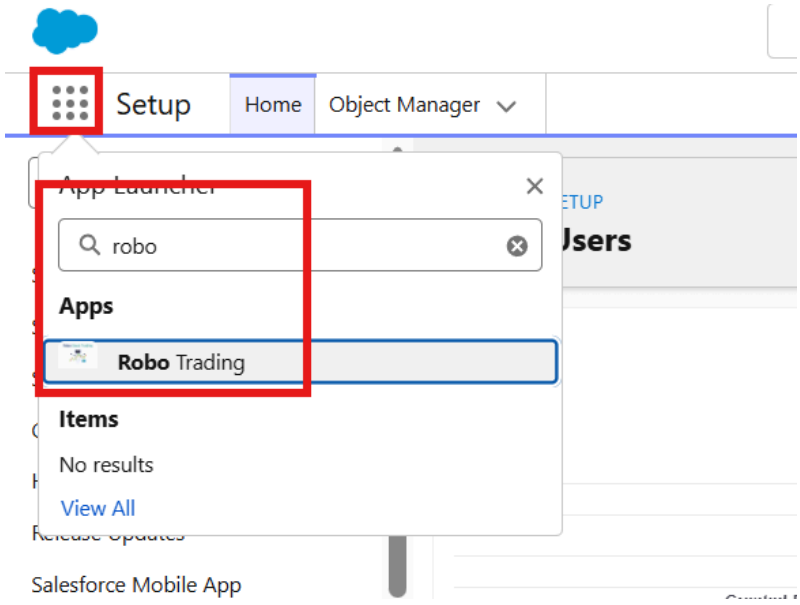
- Assign Manage package License to User. Packages have default 10 user License under free trial and once subscribed we will set user licence based on subscribed plans. Contact support team if you require more than 10 users to use Robo app.



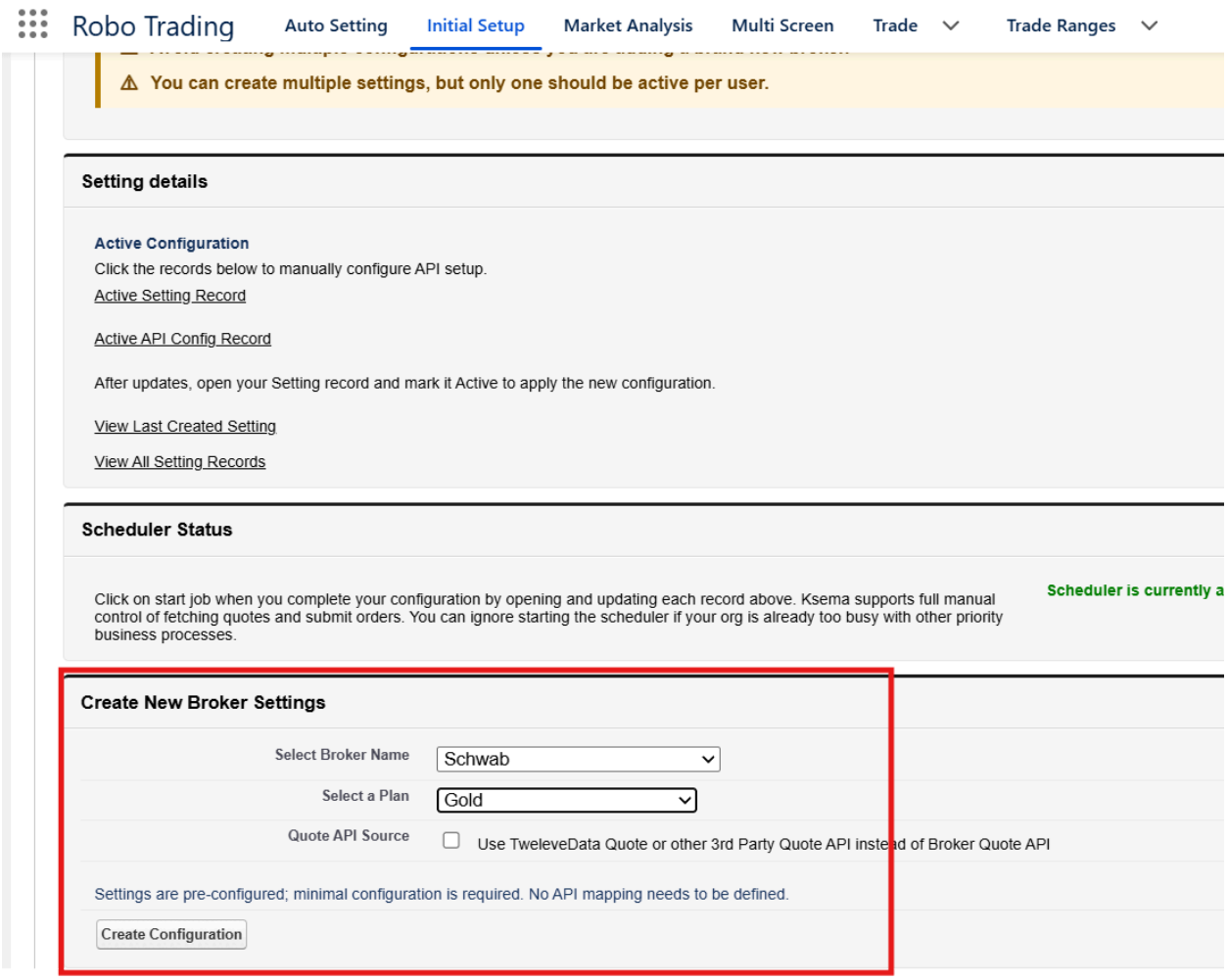


4. Lunch App and Configure Setting- By each User

- **Launch App, click on 9 dots and search app.**

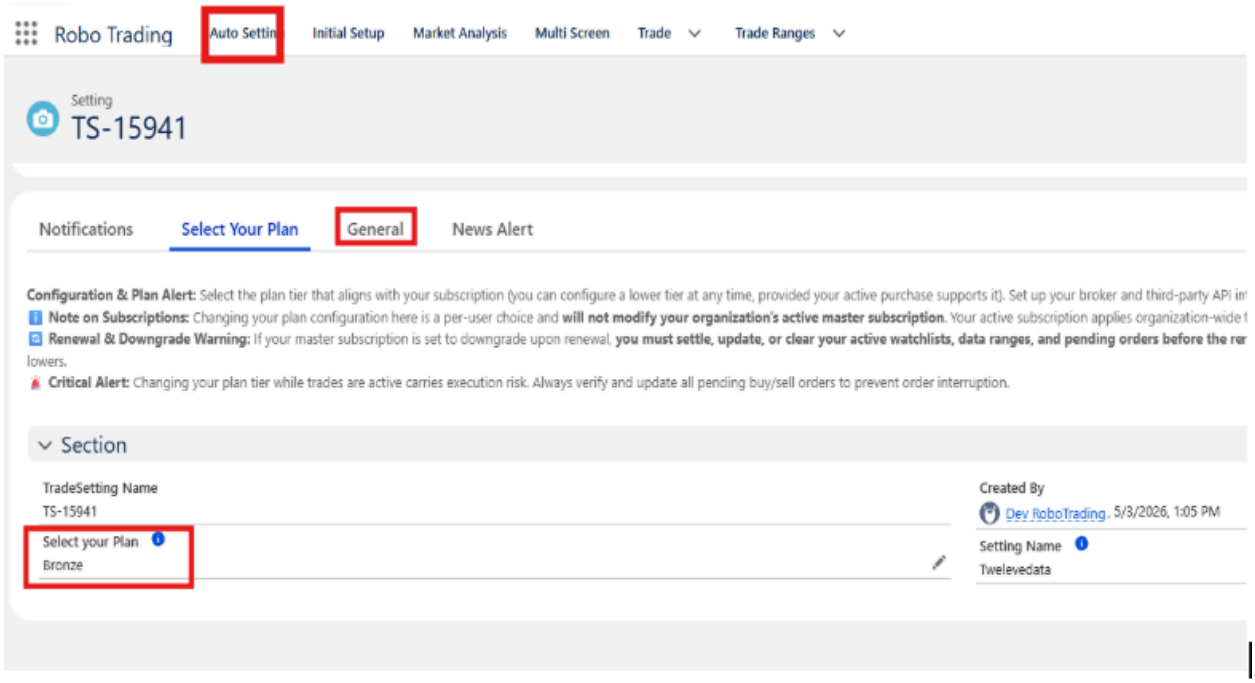


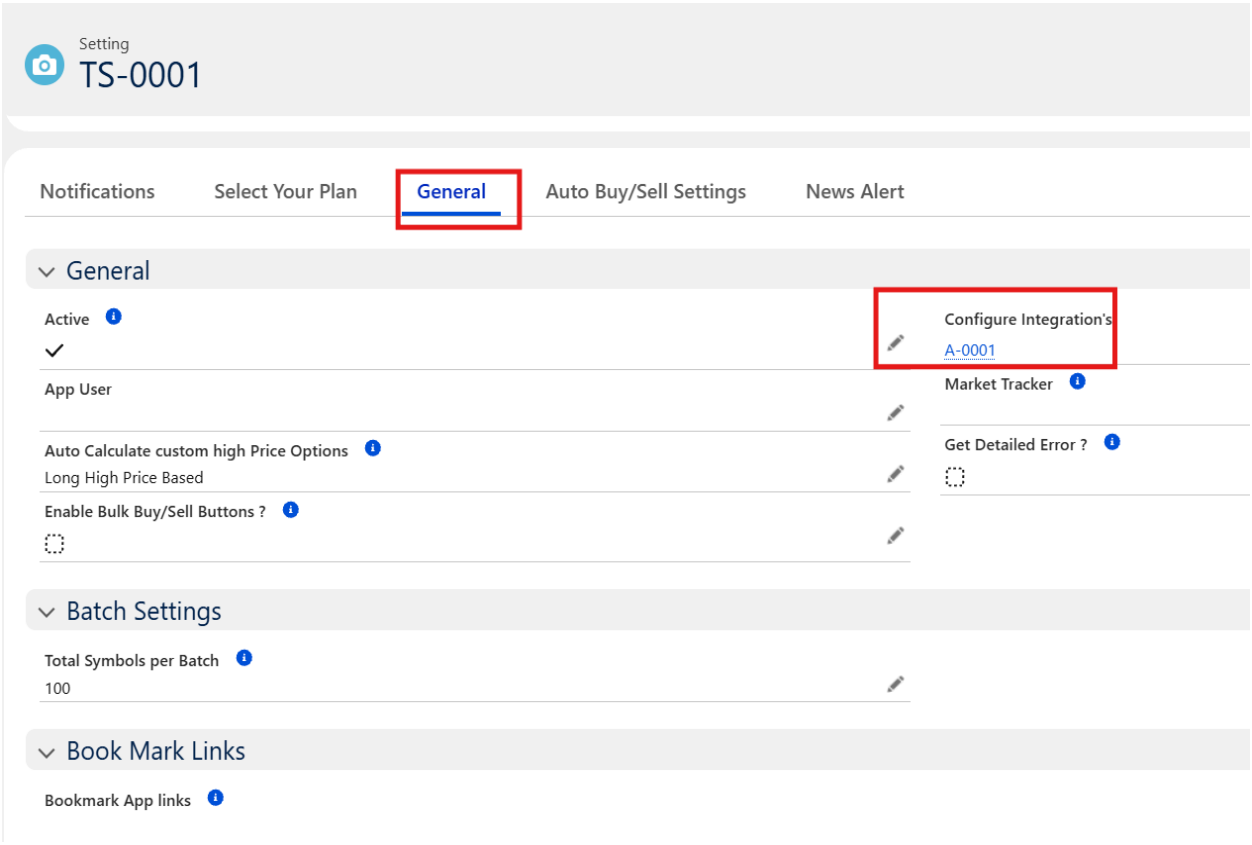
- **Initial Setup & Broker Configuration**
    - Select Broker (Schwab Broker settings are fully tested and working) as per your choice. You can choose any other Broker who supports Rest API and we give options to test before starting to use APP.
    - Zerodha Quote API supports but order apis not not supported now.
    - Each setting will have a unique “API Config” record and API config will have Quote, Order Submit, Order Status , “Get Account No” and “TwelvedataQuoteAPI” SubAPIConfig records.
    - Basically, creating configuration generates total 5 records with some preconfigured values and some user have to check and update according to their Broker system



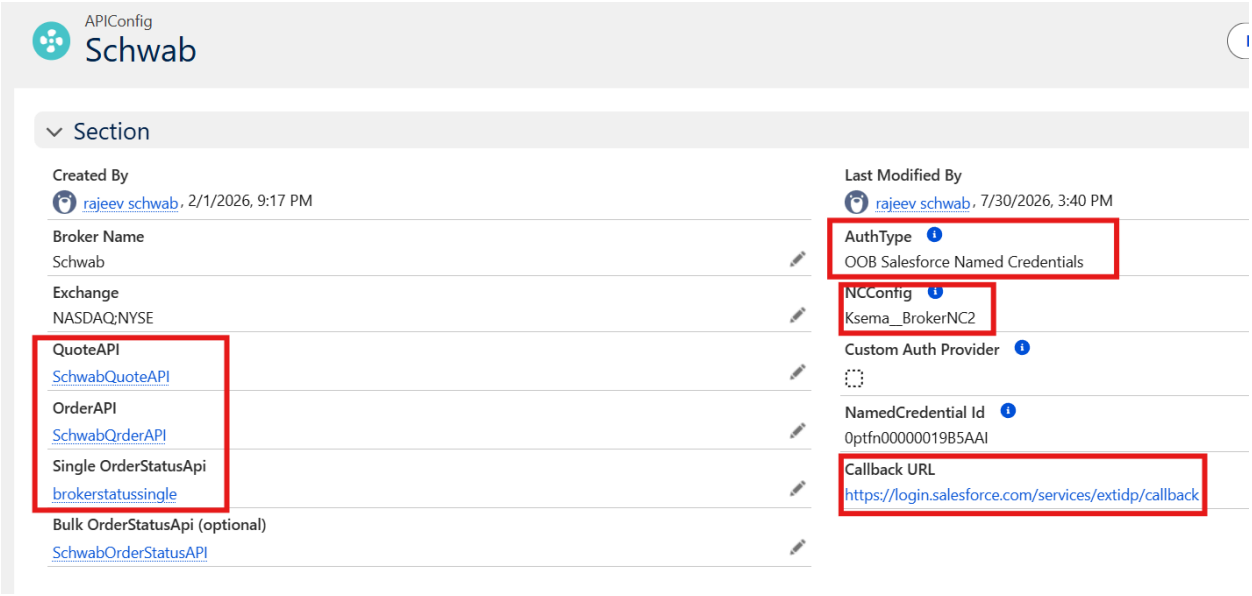
5. Broker App Registration

- Open newly created Setting record click on Configure Integeration field.





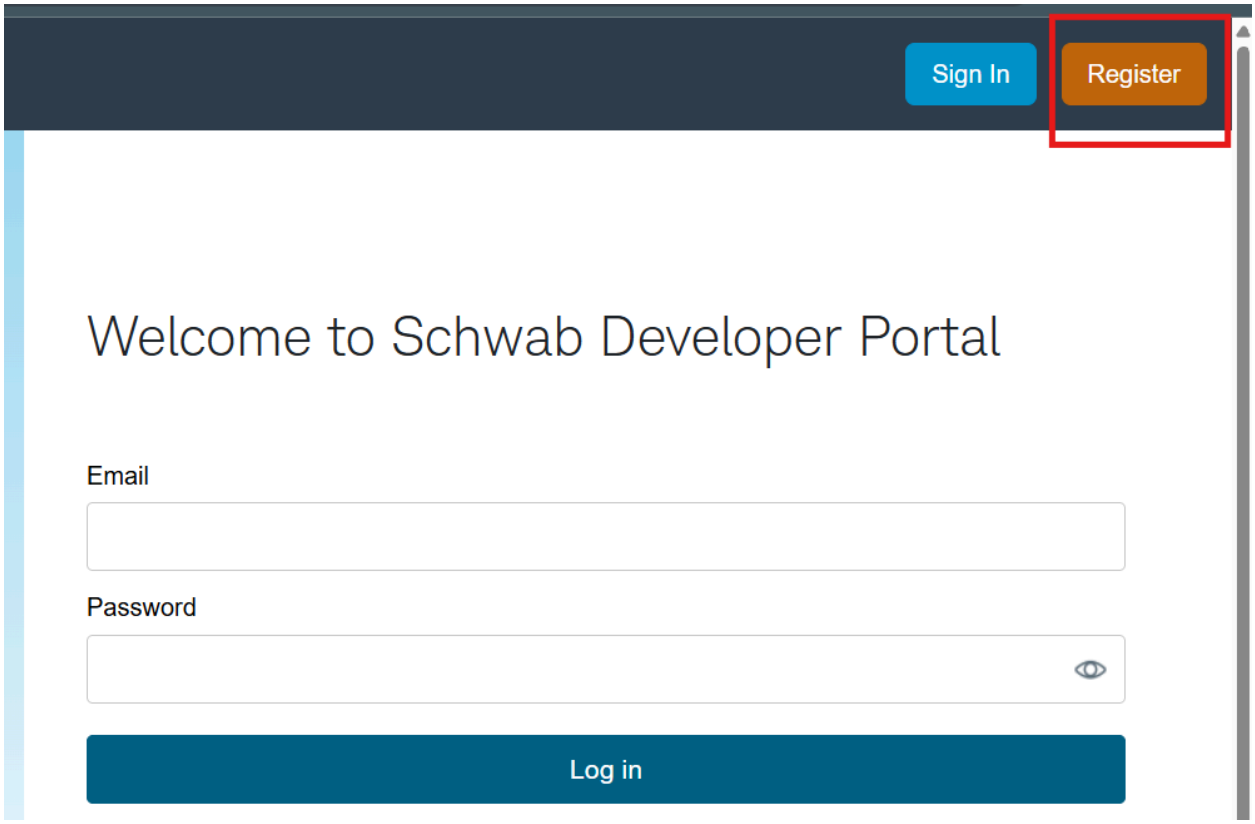
- Choose NCConfig unique per user and verify other details.
    - Select NCConfig number(like BrokerNCP2 map to Ksema__BrokerNC2) should be the same during what you selected in previous steps under user setup

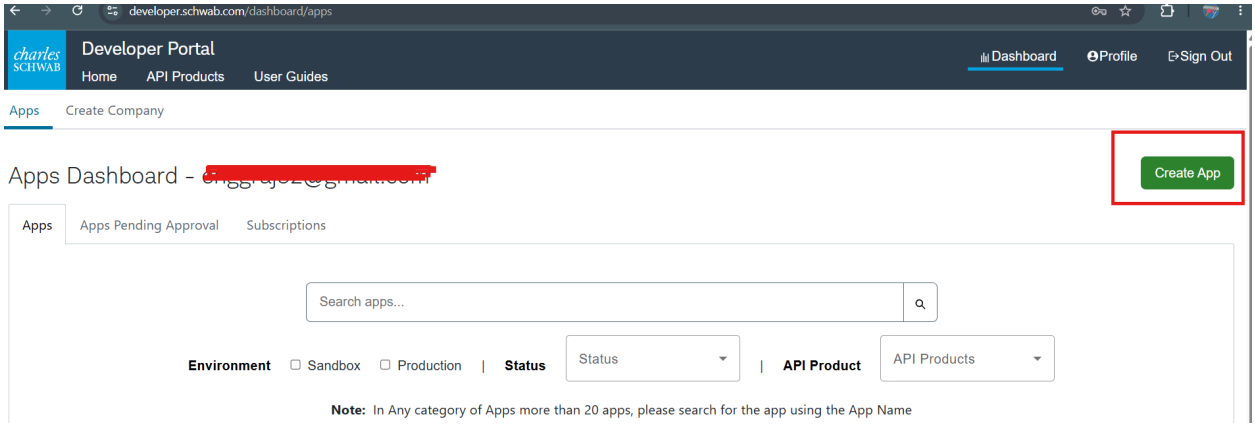


- Register Broker App and enter a callback URL to broker APP(Create Schwab App) to generate app secret and key.

- If your broker does not support APIs, you can use our pre-built Twelve Data quote API integration (just configure the quote API) .you can still receive stock alerts and perform data analysis, or you can switch to a broker that supports APIs, such as Charles Schwab.

- Enter call back url in broker APP : https://login.salesforce.com/services/extidp/callback


Sign In
Register
Welcome to Schwab Developer Portal
Email
Password
Log in


developer.schwab.com/dashboard/apps
charles SCHWAB
Developer Portal
Home
API Products
User Guides
Dashboard
Profile
Sign Out
Apps
Create Company
Apps Dashboard -
Create App
Apps
Apps Pending Approval
Subscriptions
Search apps...
Environment
Sandbox
Production
Status
Status
API Product
API Products
Note: In Any category of Apps more than 20 apps, please search for the app using the App Name

Create App

Environment:

Select an API Product

Trader API - Individual

Accounts and Trading Production

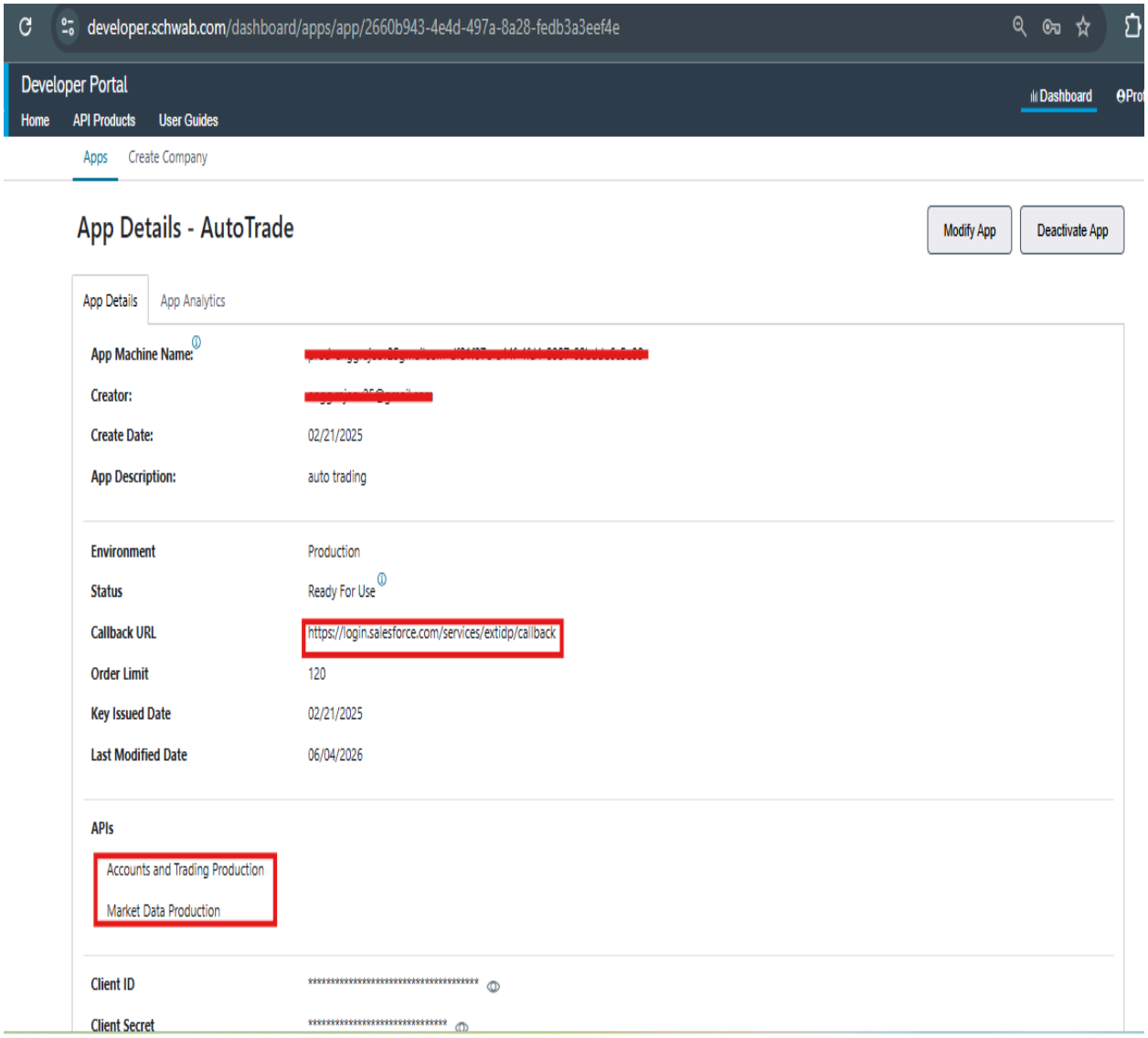
Market Data Production

clients/customers. Ch

Enter App Description (Optional)

App Description can be used for anything to help identify the app or define the a

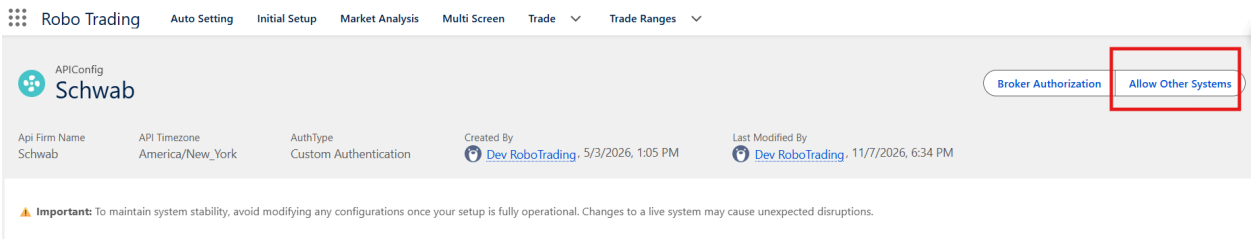
Enter Callback URL(s)



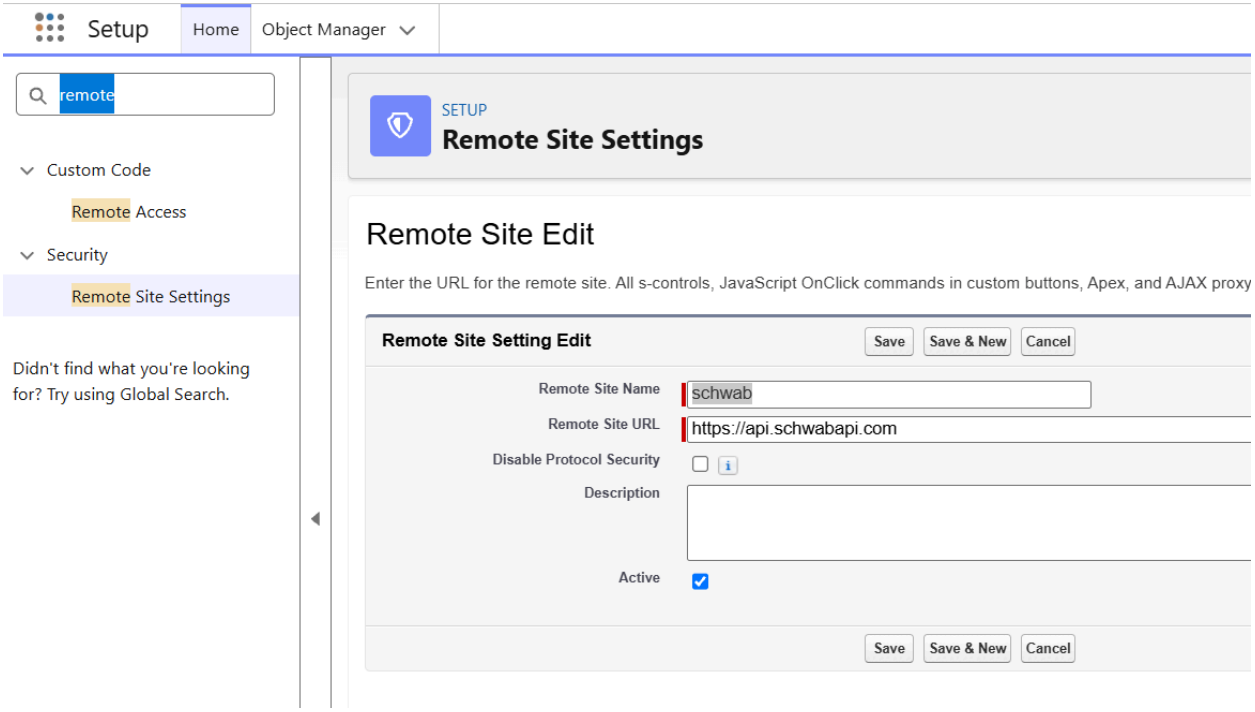
Copy generated Client Id and Secret.

6. Allow External Systems- By System Administrator

- Allow Integration: Salesforce requires you to add any new external system in remote site settings. Schwab,Zherodha,Twelevedata are already added by package and you can ignore adding them again.

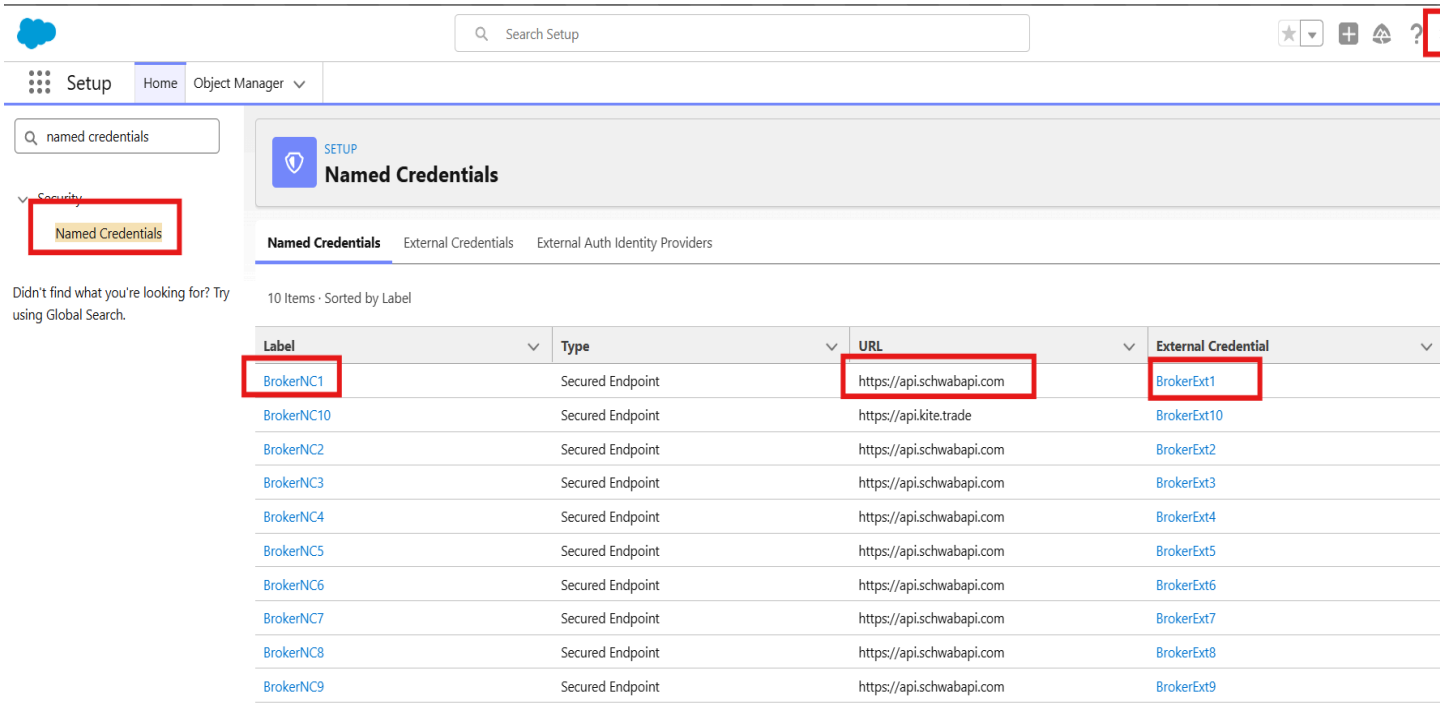


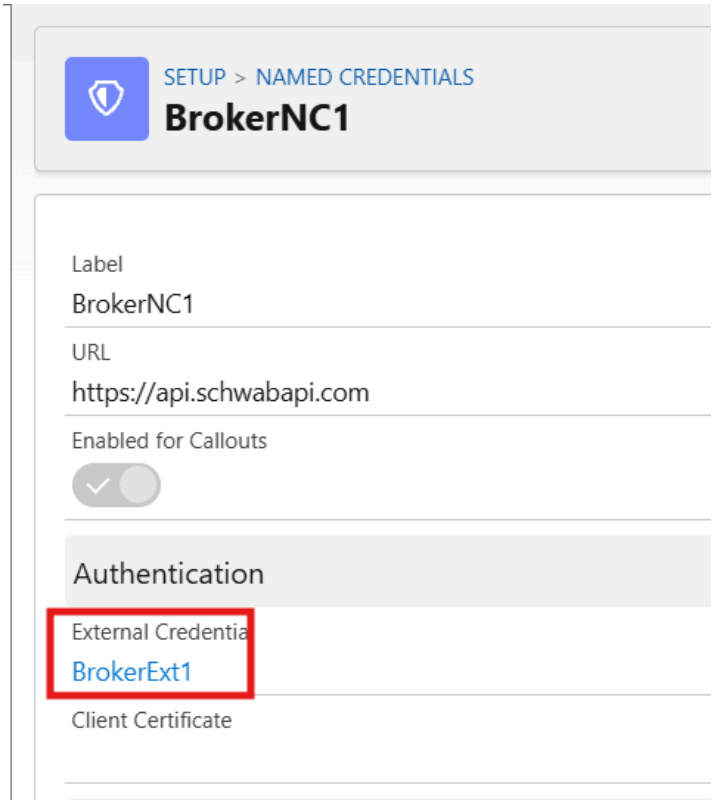
- Enter all new endpoints here

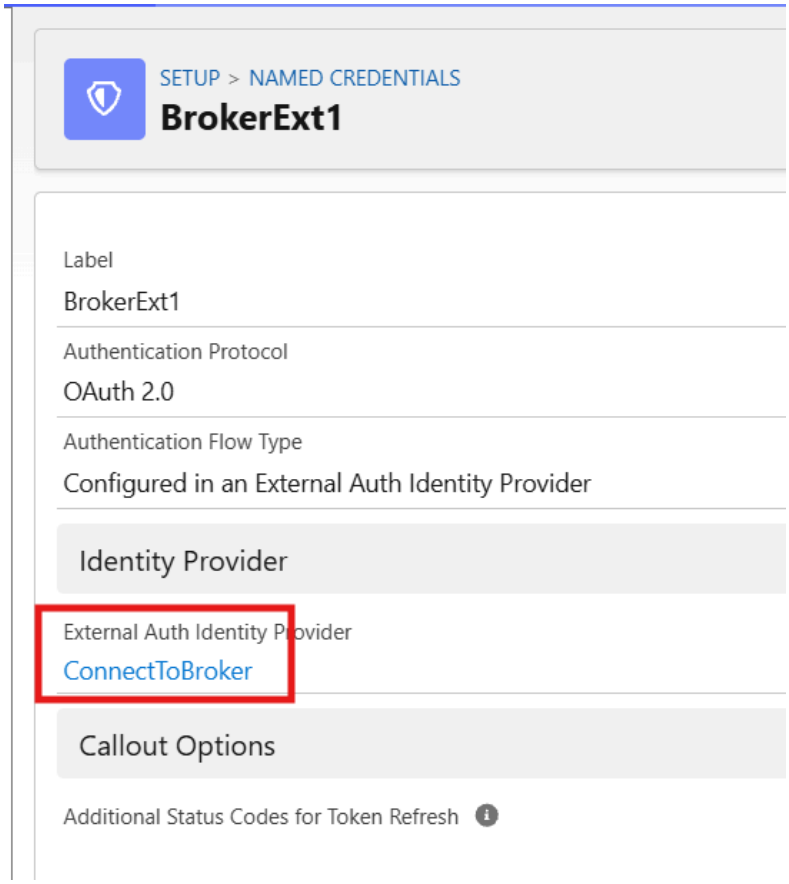


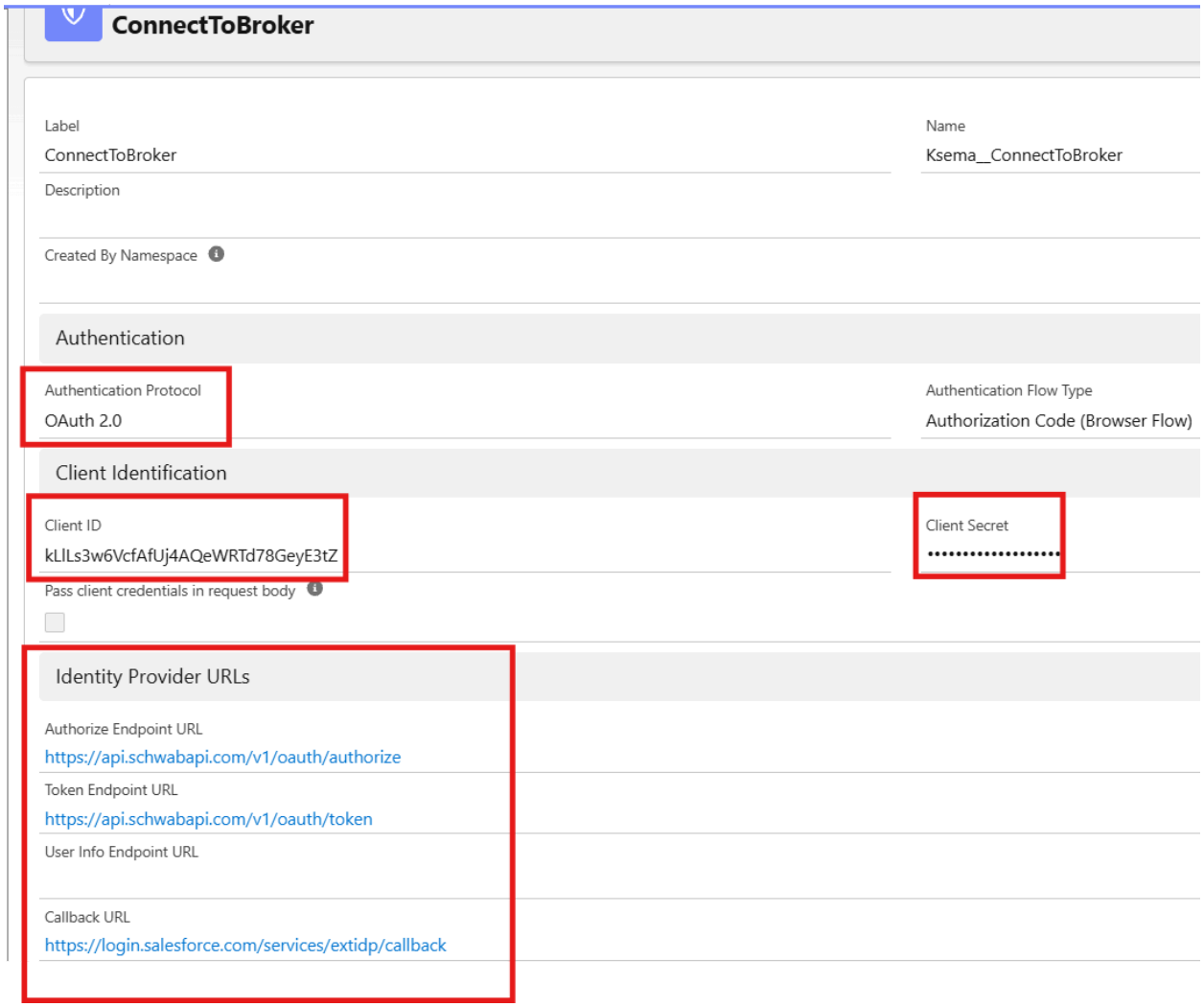
7. Configure Named Credentials and Authorize Broker - By Each User

- Configure Broker settings : Open assigned NC assigned by system administrator to current login user. Preconfigured NC's have Schwab broker settings. You can replace it with your desired broker system details. Do not modify other users NC as it can break their automation process.



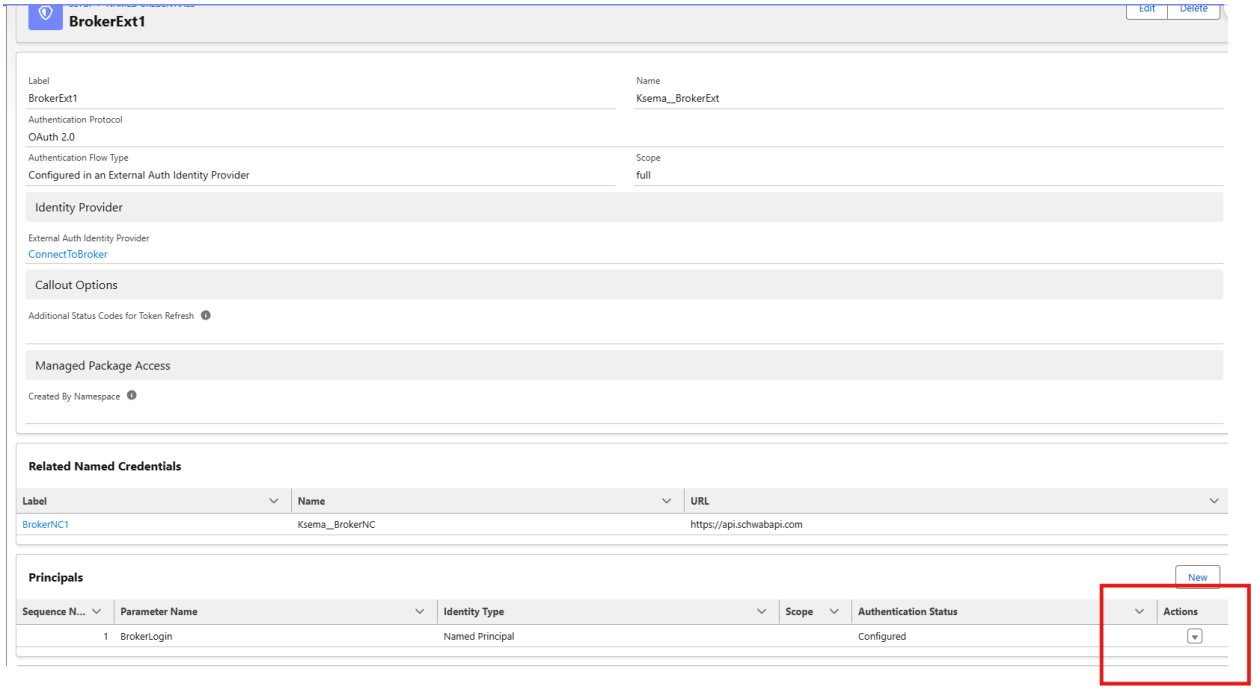

SETUP > NAMED CREDENTIALS
BrokerNC1
Label
BrokerNC1
URL
https://api.schwabapi.com
Enabled for Callouts
Authentication
External Credentia
BrokerExt1
Client Certificate


SETUP > NAMED CREDENTIALS
BrokerExt1
Label
BrokerExt1
Authentication Protocol
OAuth 2.0
Authentication Flow Type
Configured in an External Auth Identity Provider
Identity Provider
External Auth Identity Provider
ConnectToBroker
Callout Options
Additional Status Codes for Token Refresh

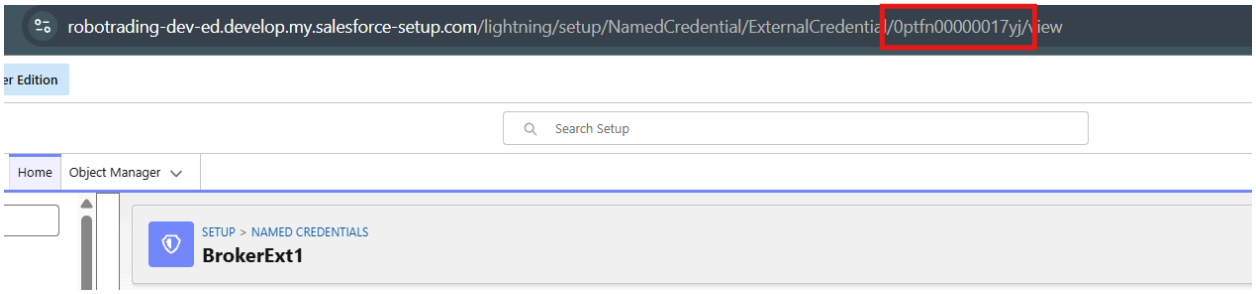


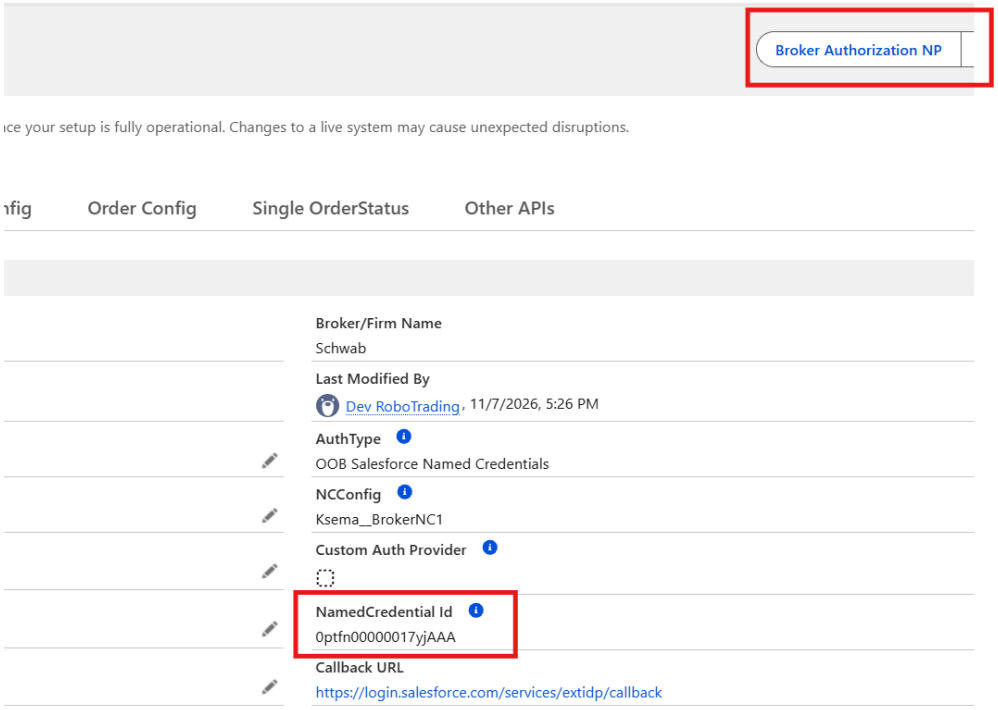
Update Settings as per your broker and update previously generated API key and secret from broker App in NC settings .

- Go back to BrokerExt record and see the Authorize button is enabled under the Principal section.



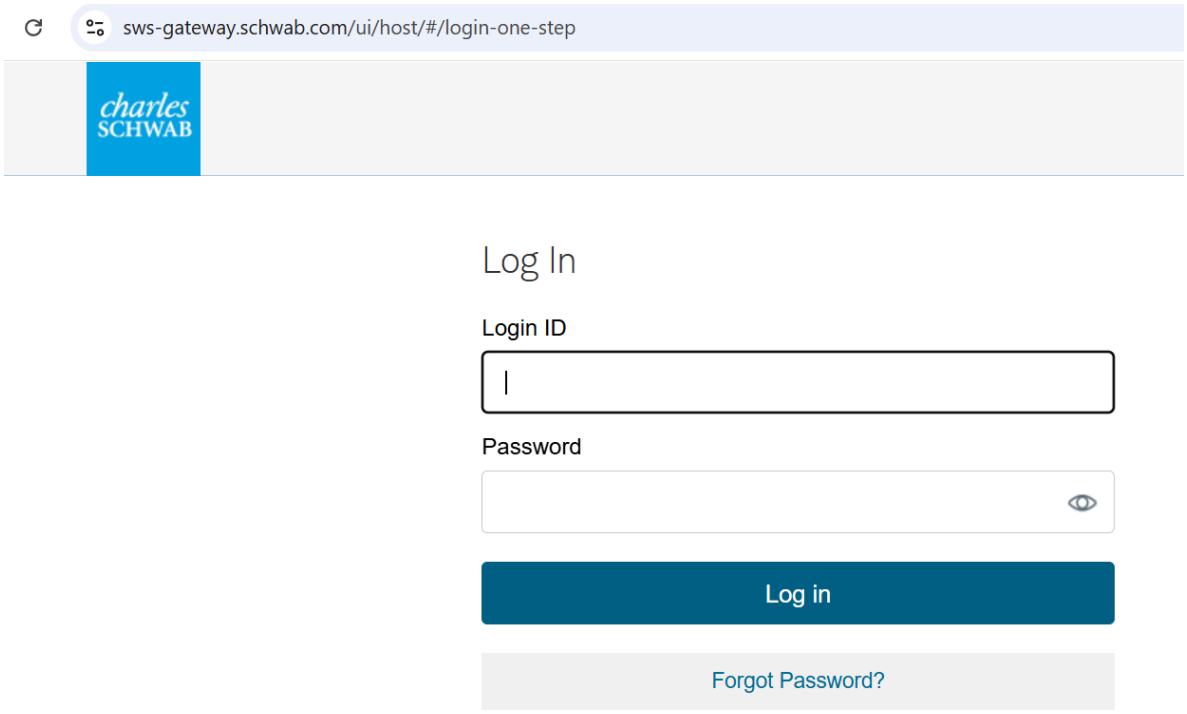
- Copy ID from Top windows NC url and put into name credentials ID. This makes the “Authorize NP” button shortcut url working and you can avoid multiple clicks to find the actual authorize button next time .





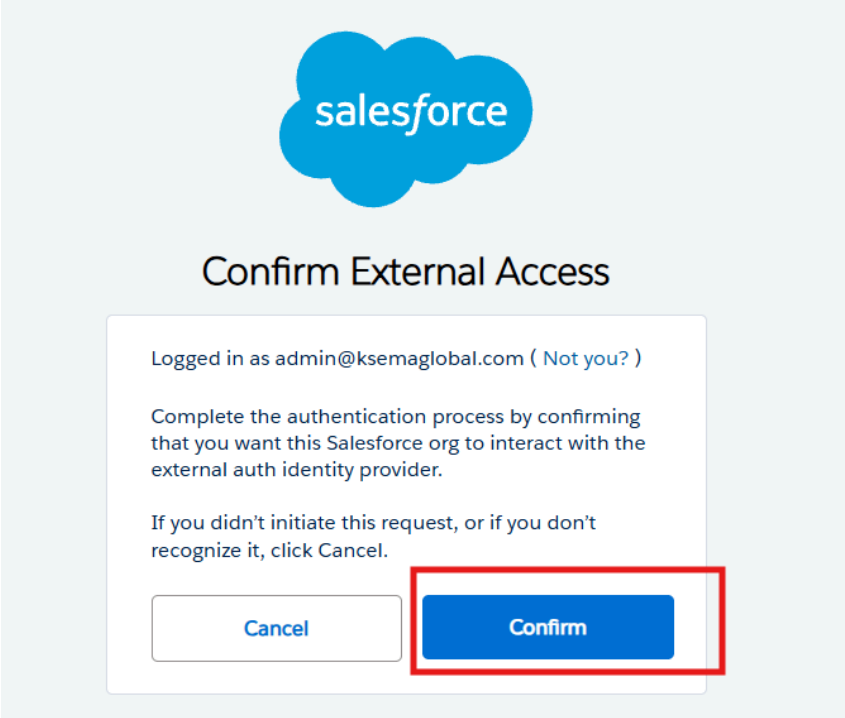
- Authorize Broker : Under Actions you will see an Authorize button(if your setup is done properly) and complete the authorization process which eventually asks you to save access tokens securely in salesforce.



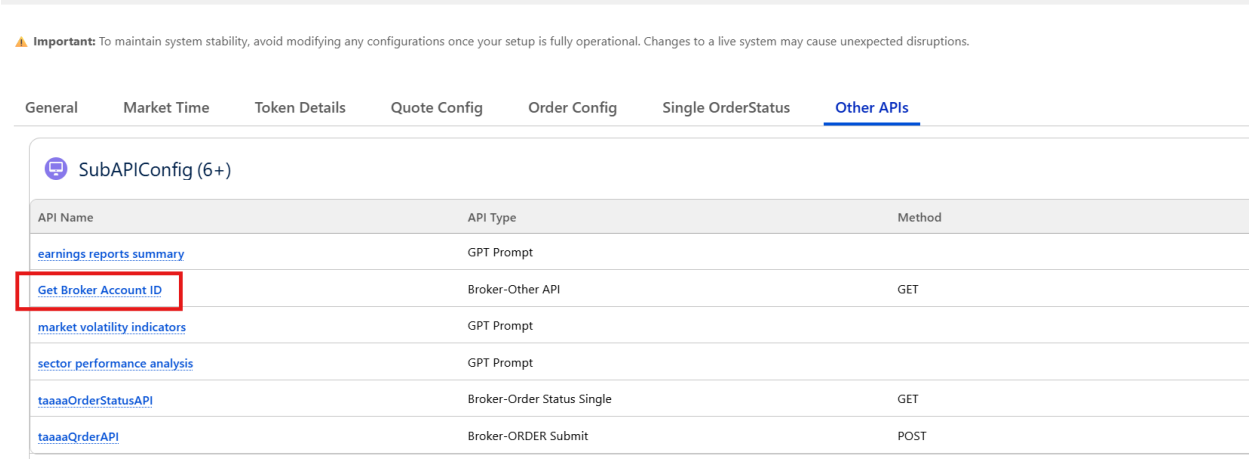


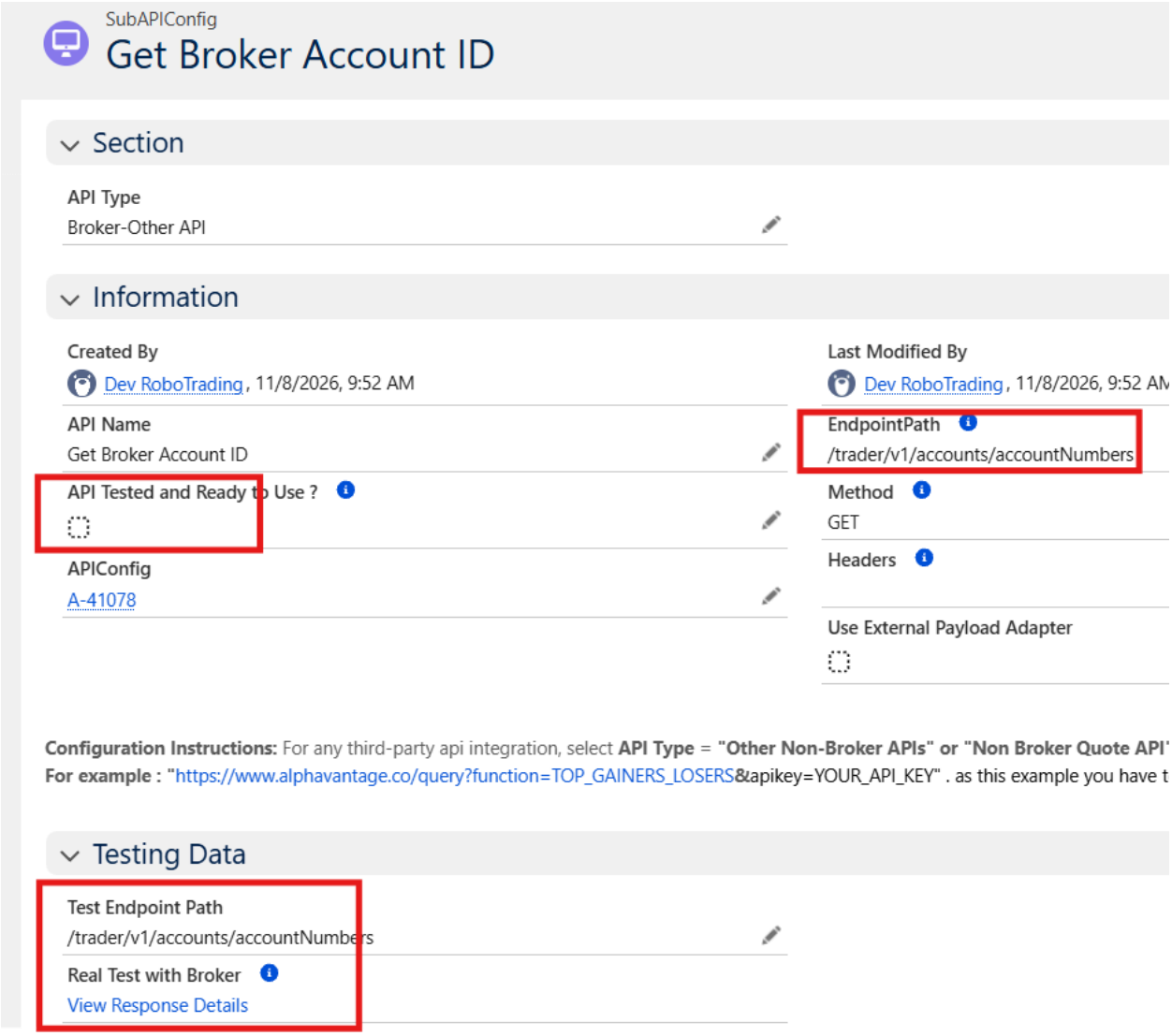
Enter your Broker credentials → select broker account (Account should be Margin account if you want intraday buy/sell same stock multiple times).

- On successful authorization with the broker , click confirm to save token and refresh token by seamless connection between both system.



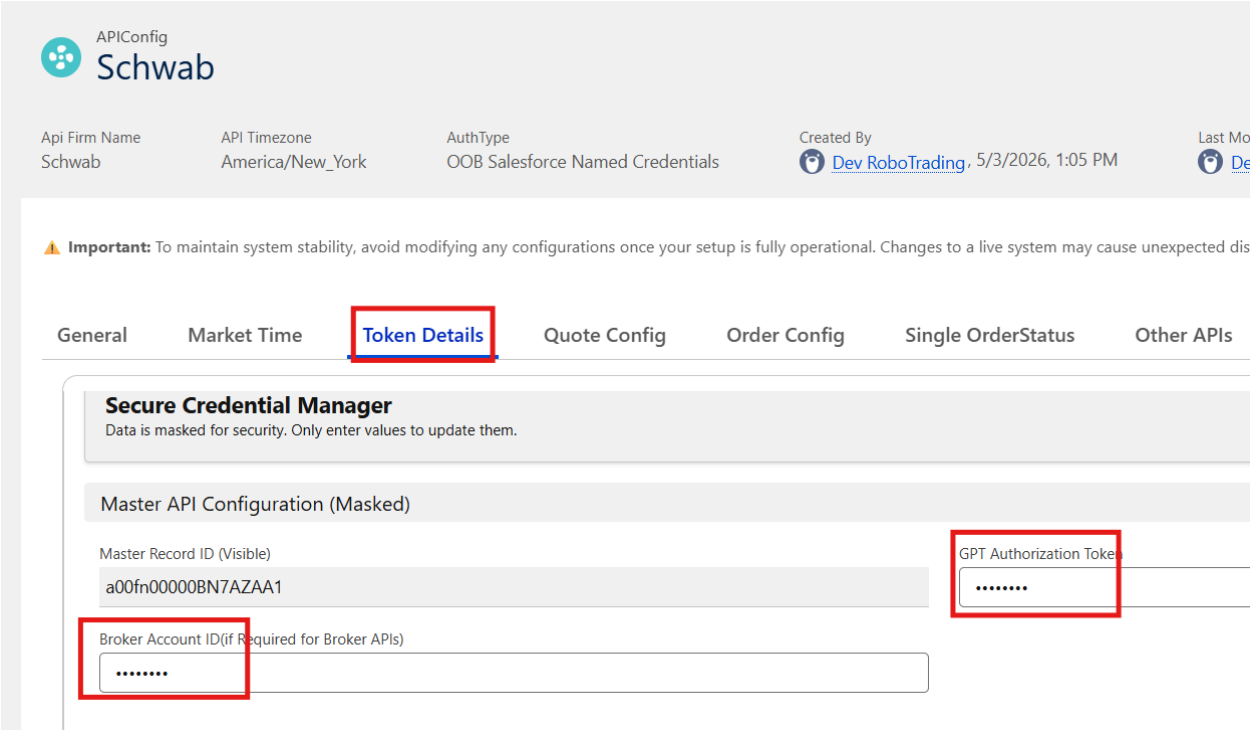
- "Broker Account Id". (Requirement for Schwab Or other brokers who need accountid during api calls.)





Test url will generate schwab to get hashed accountid which u need to enter under Token Details tab.

- API Configurations “Token Details” tab.
    - Enter GPT token if you want GPT based news, data analysis and trading buy-sell signal automations(optional).
    - Schwab requires Account Id to be entered(Schwab order api’s require to be passed in the endpoint url) . Account Id can be generated after broker authorization and by calling Fetch account Id under Other API tab. More detail later in setup.



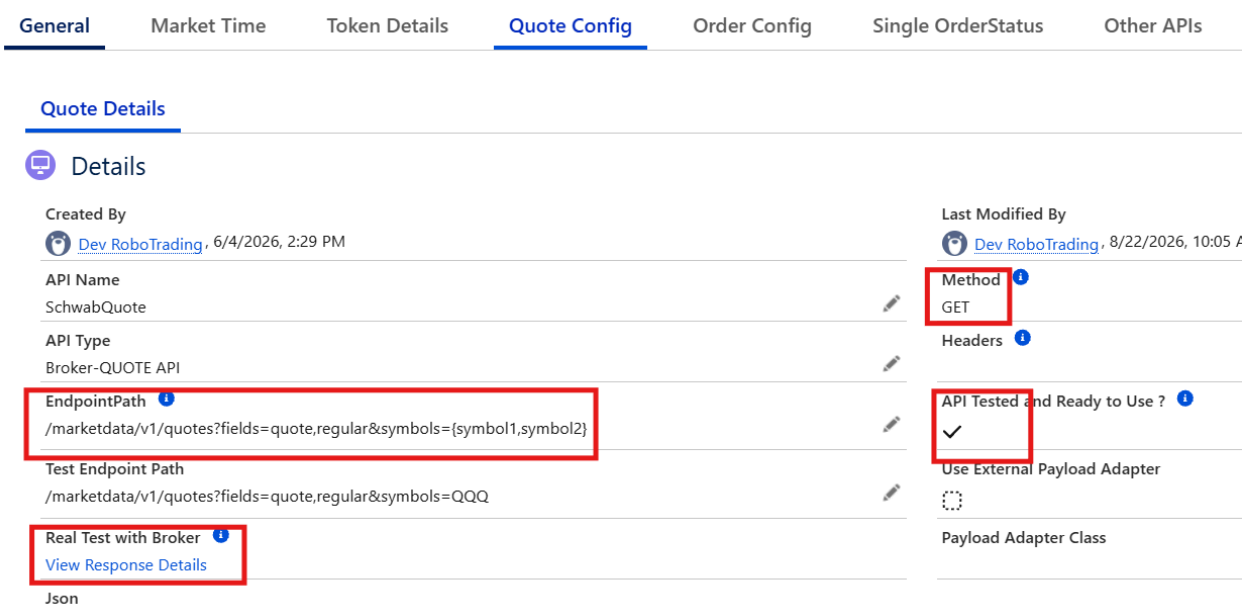
8. Un-Supported Broker’s

- Default Broker support is Schwab and Zerodha(only Quote API now and adapter class is required to enter), Any other brokers(who do support Rest API’s) create a case in Ksema portal or schedule a call with us so we can generate an external payload adapter class(specific to broker) which requires defining mapping between your broker and Robo App. For Schwab brokers we already define mapping in Robo app by default and external payload adapter is not required.

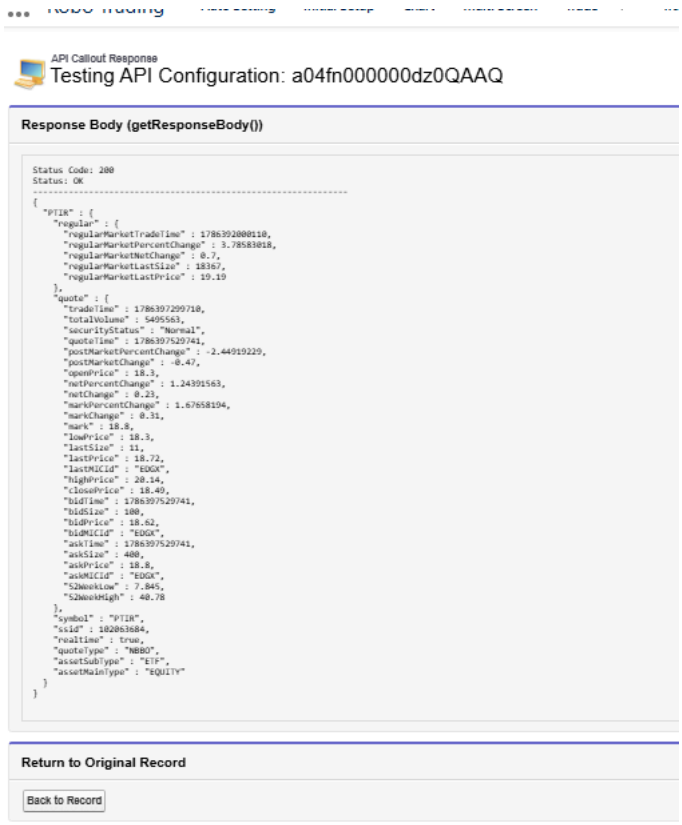
9. API Testing & Verification - By each user

- API Testing : After authorizing, you can test each “API through Real time” with a broker link button to check if connectivity with the broker is happening.
    - For non-Schwab brokers a separate mapping class is required , so create a case in Ksema portal or schedule a call with us so we can generate an external payload adapter class(specific to broker) which requires defining mapping between your broker and Robo App. For Schwab brokers we already define mapping in Robo app by default and external payload adapter is not required.

    - Define Quote , Order and single order status endpoints and other settings and do testing to check if API’s are connecting and giving results . Schedule a call if api’s connectivity is not working. Order and Order status require to run on actual data and you can do full testing once your setup configuration is done.



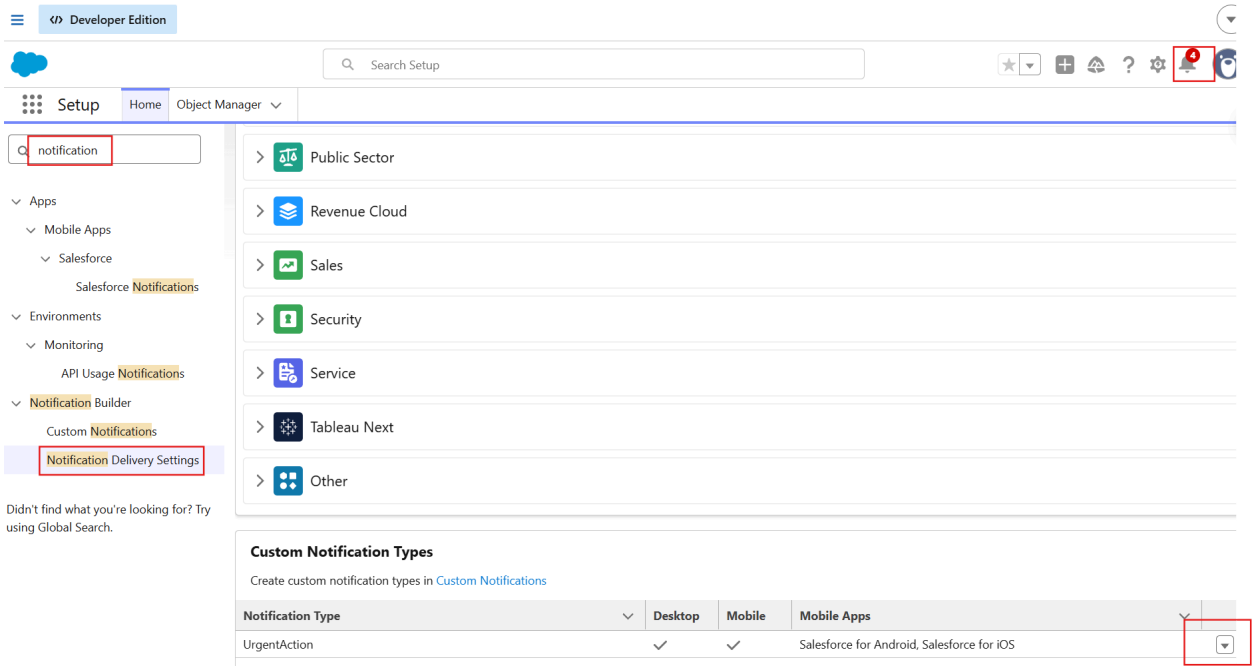
Test result:

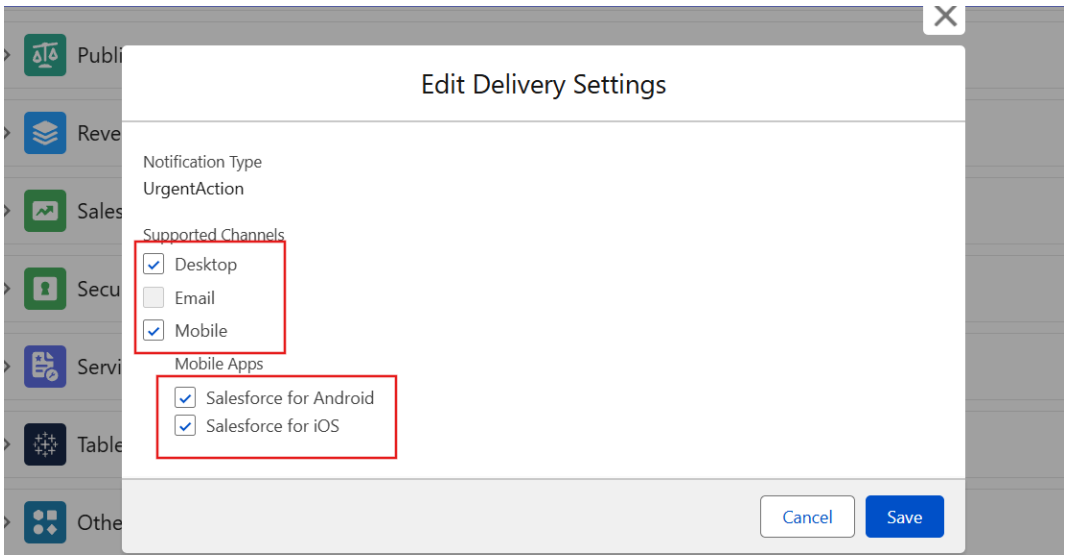


- There are many other configurations in settings record which are self-configured by users and help details are given on setting and apiconfig records and also given field level help .

10. Mobile Screen Notifications- By System Administrator

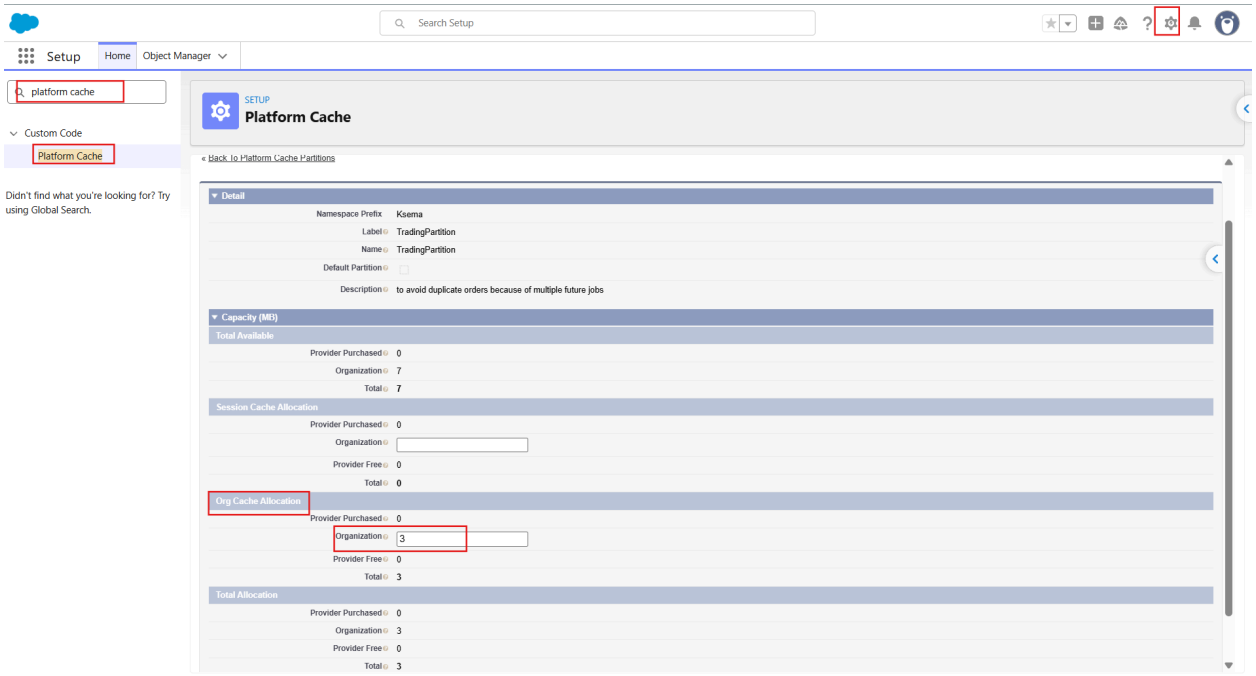
- Mobile screen notifications setting





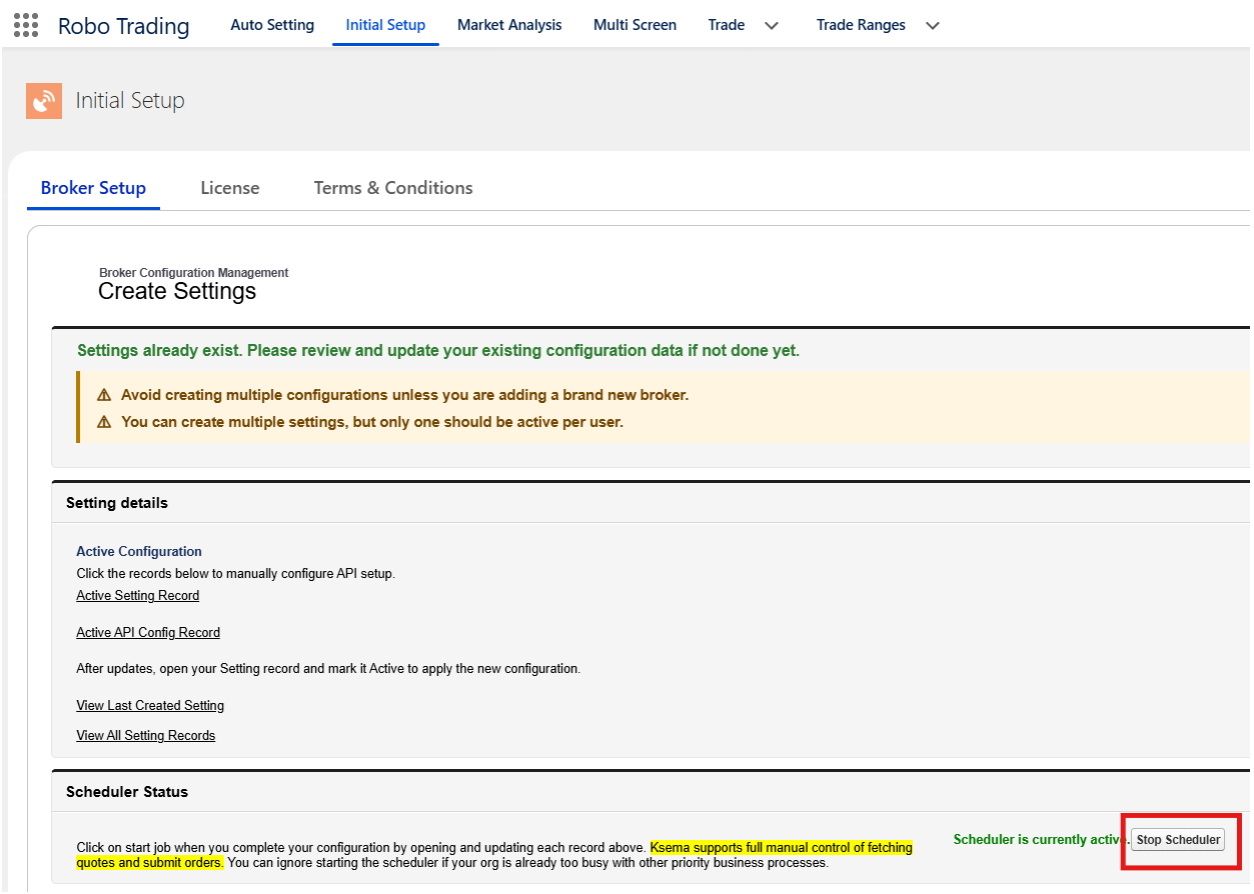
11. Extra Protection Layer Configuration

- Extra protection layer configuration : Salesforce background batches or events sometimes delay and can run in parallel . Robo app designed an extra protection layer to capture recent orders in cache and avoid duplicate order within 5 seconds.



12. Start Batch/Loop Process

- Once your configuration is complete then start the batch process which runs every min through life time until you explicitly stop.
- Batch runs in every 1 min to process news , and quotes data as per defined intervals.



13. User Manual Reference

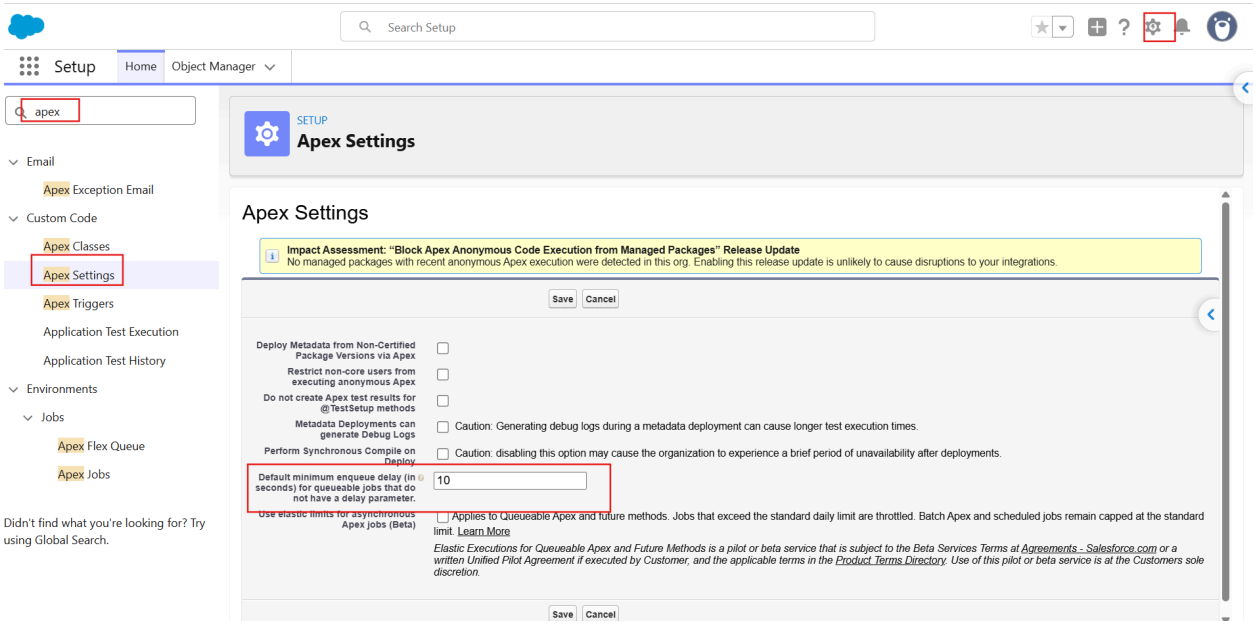
- Once configured then Create an actual Trade(symbol) entry and see if data is pulling from the broker - refer User Guide & Training Manual

  https://docs.google.com/document/d/1M9m4JxoeLL9kigApxkkY8w1vu3UgiQcy

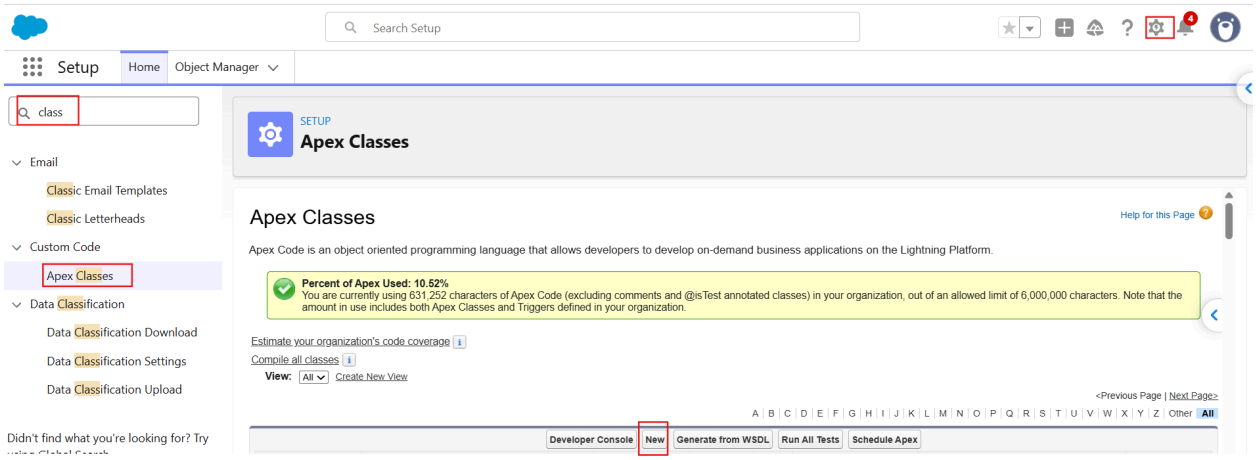
14. Premium Plan-10Second Batch-By System Administrator

- **Premium plan extra setup**: Make sure you have a dedicated salesforce org for Premium plan as new settings can impact other processes if any. Once enabled all users will get a 10 sec batch process and apply only Trade where you are configured 1 min batch interval.

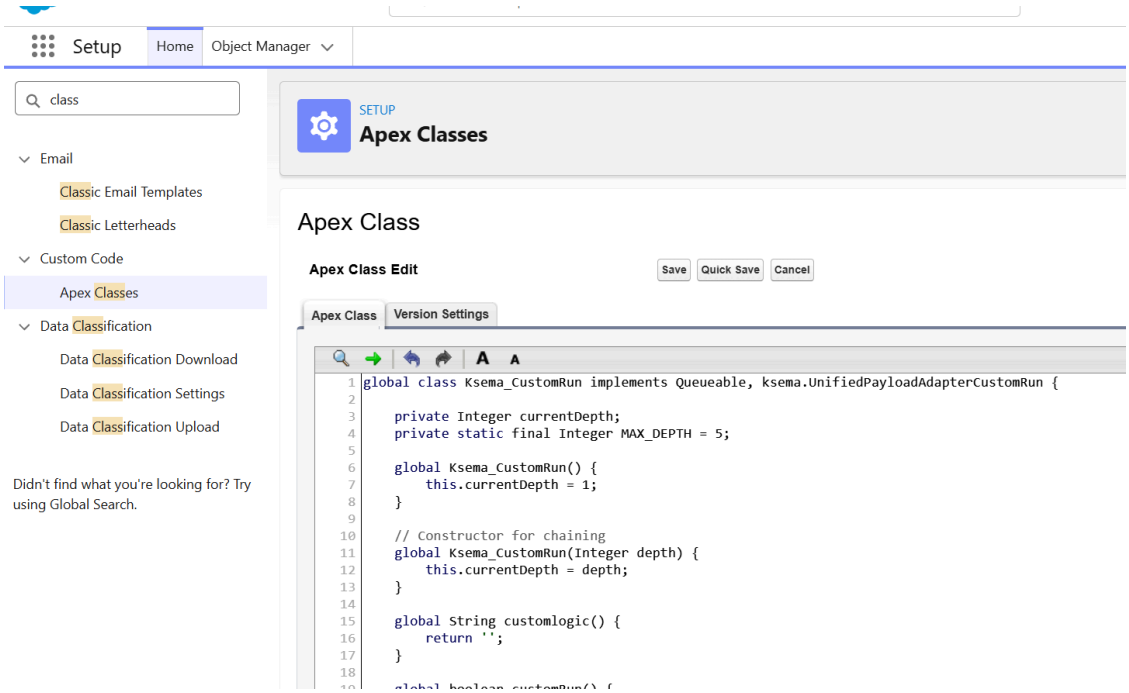
- Set 10 seconds in the configuration below..



- Create a new apex class .



Add the given code and save. Once saved go to setting record and select plan=Plantinum so new changes apply.



Copy below Code and save in new class :

```
global class Ksema_CustomRun implements Queueable,
ksema.UnifiedPayloadAdapterCustomRun {
```

```
    private Integer currentDepth;
    private static final Integer MAX_DEPTH = 5;

    global Ksema_CustomRun() {
        this.currentDepth = 1;
    }

    // Constructor for chaining
    global Ksema_CustomRun(Integer depth) {
        this.currentDepth = depth;
    }

    global String customlogic() {
        return '';
    }

    global boolean customRun() {
        // Correctly initiate the chain
        System.enqueueJob(new Ksema_CustomRun(1));
        return true;
    }

    public void execute(QueueableContext context) {
        try {
            //ksema.EventGenerator.CreateEvent('ONLYSELLRUN');
           ksema.EventGenerator.CreateEvent('BUYSELLRUN');


            if (currentDepth < MAX_DEPTH) {
                Integer nextDepth = currentDepth + 1;

                System.enqueueJob(new Ksema_CustomRun(nextDepth));

            } else {
                System.debug('Maximum chaining depth reached.');
            }

        } catch (Exception ex) {
        }
    }
}
```