1. Overview

Supports Oauth 2.0 authorization which is the latest and best in industry and most brokers support. Each user can set up one time with the help of System Administrator and connect with their broker accounts . You can also refer to the “Setup Guide-Broker-NamedCredentials” file and check which configuration is best for you.

2. Subscription Workflow & Installation-By system Administrator

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

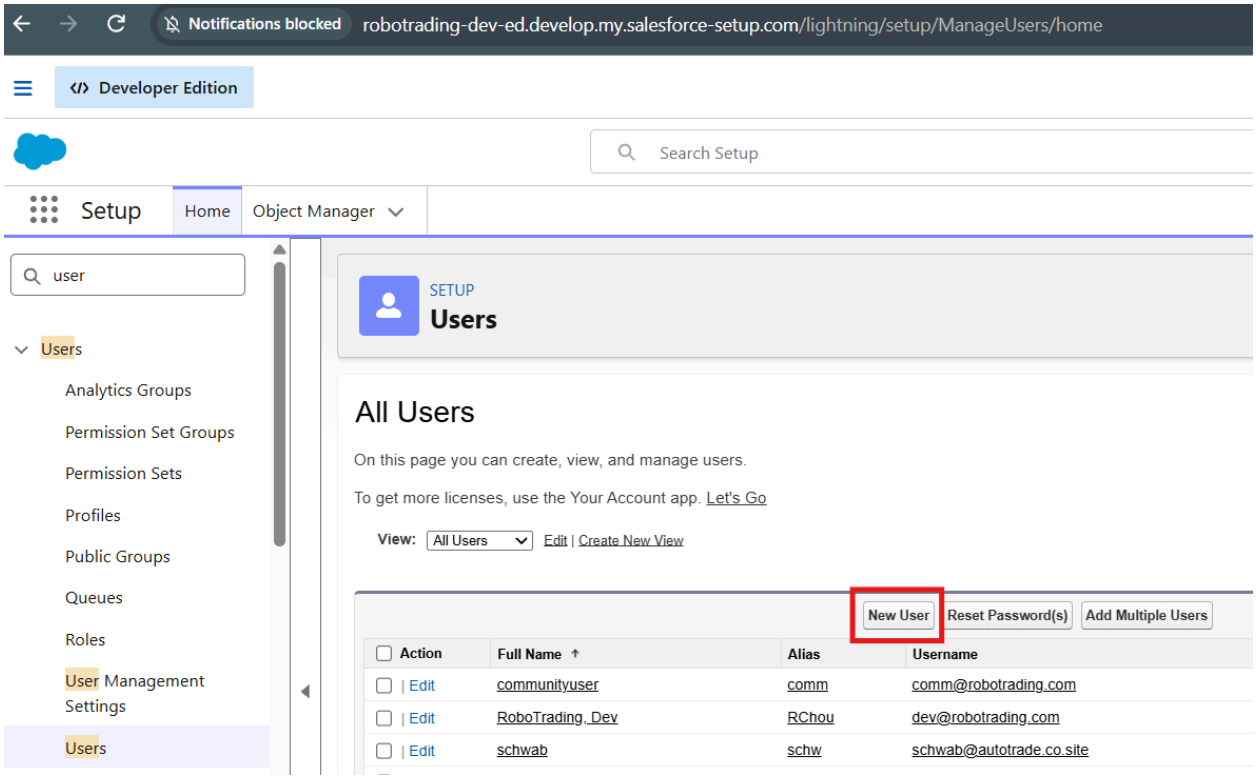
Subscription Workflow Guide

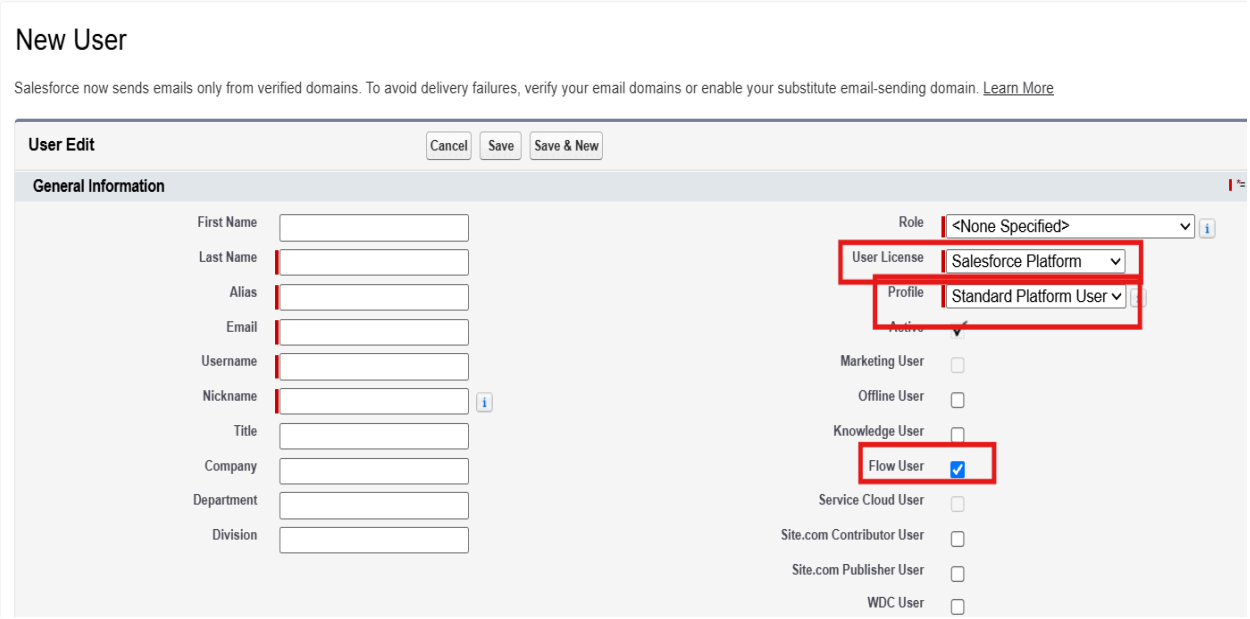
Installed App
1 Pre-requested Salesforce Org and having Enterprise Edition.Create Salesforce Org 2 Install Robo app in Salesforce org.Prod Org-App link or Sandbox Org-App link 3 Configure Robo App using installation steps document defined below, take our support in configuration via **Schedule a call 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 for payment confirmation (or email us)

7 New plan changes applied same/next business day by support team

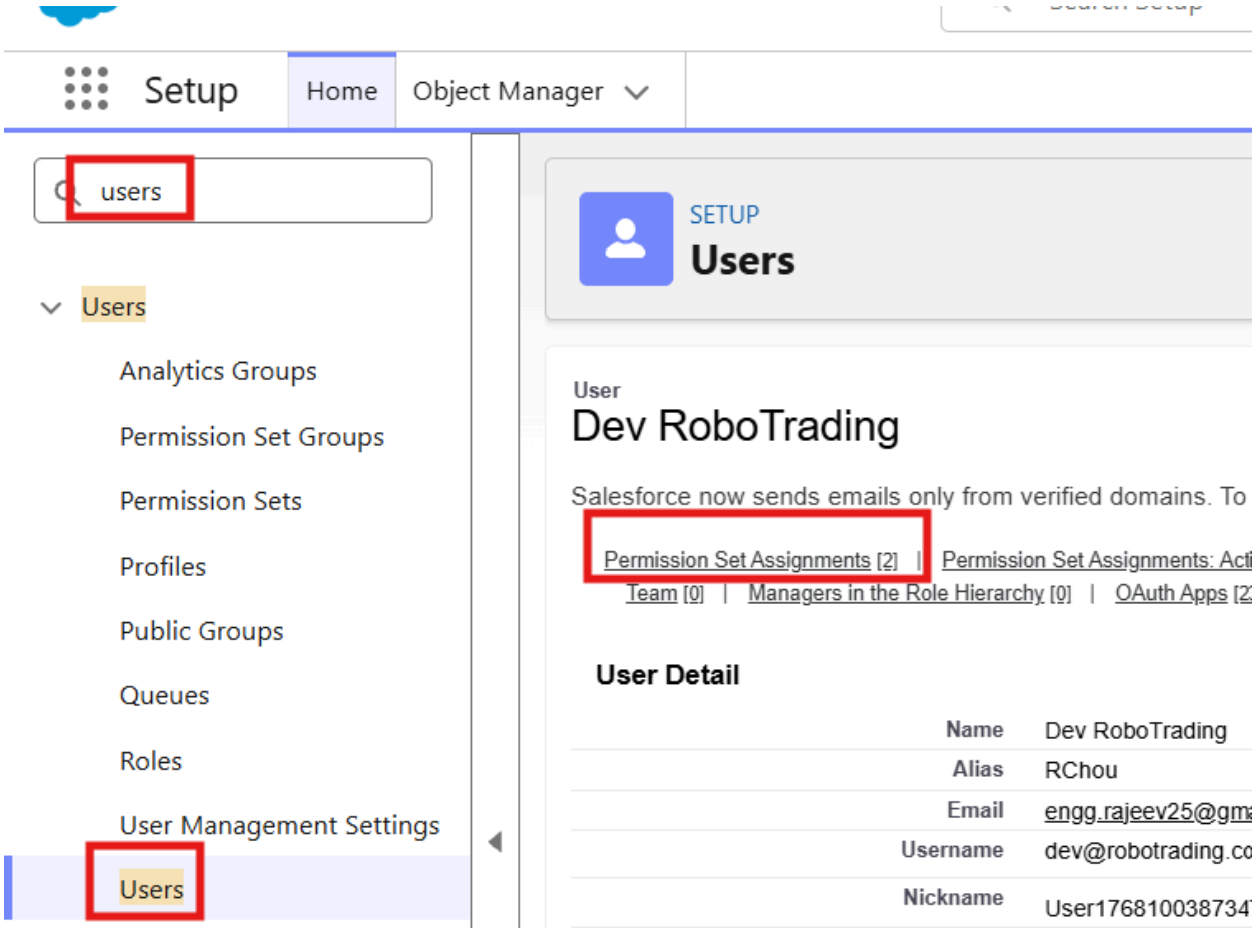
3. Setup Single/Multiple Robo User- By system Administrator

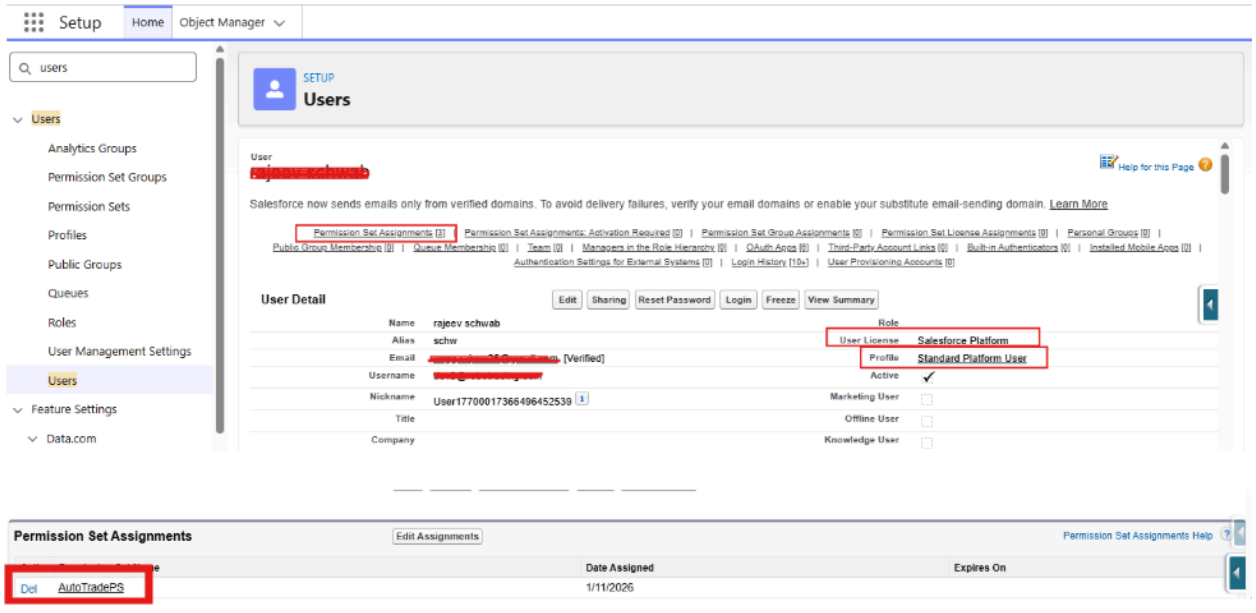
- Create new User or use existing user
    - Minimum Licence is “Salesforce Platform”. The app will support all higher licence too. if only one user exists then let it be a Salesforce licence but any new user creation should be “Salesforce Platform” for cheaper license cost.
    - Profile : Standard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





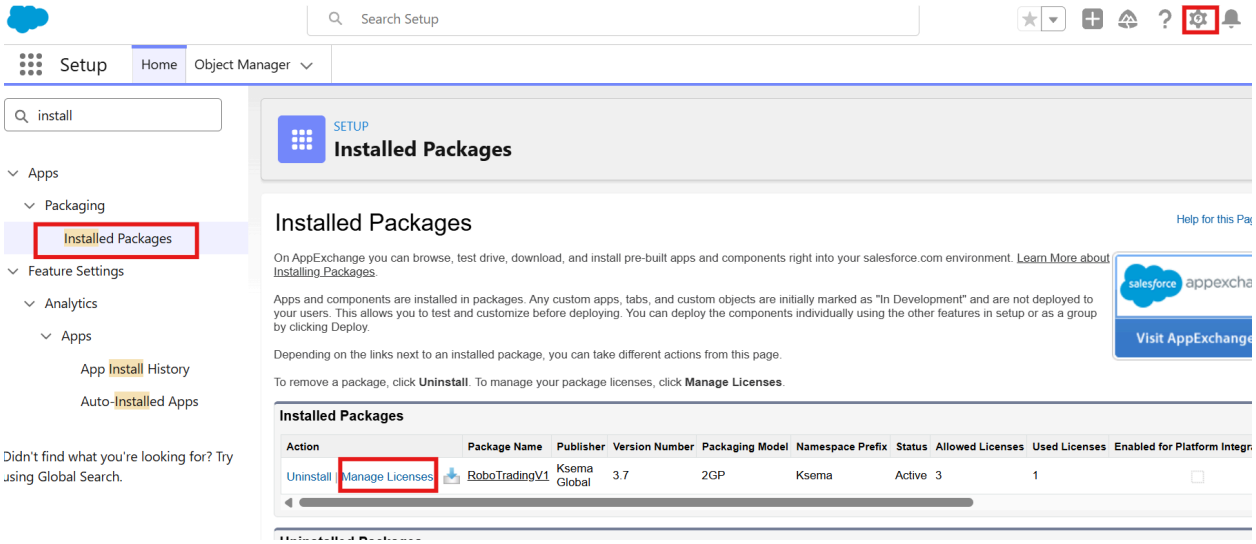
- **Assign Permission's to the user who wants to run a Robo Trading app**
    - AutoTradePS should be Assigned which gives full access to the Robo App.

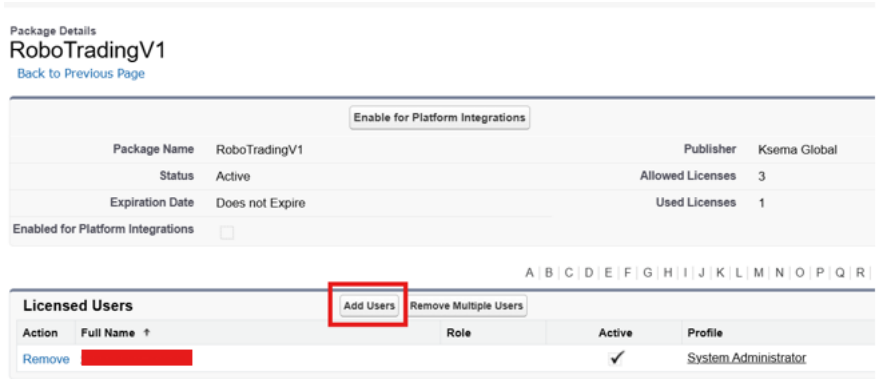




Only AutoTradePS set is required to assign.

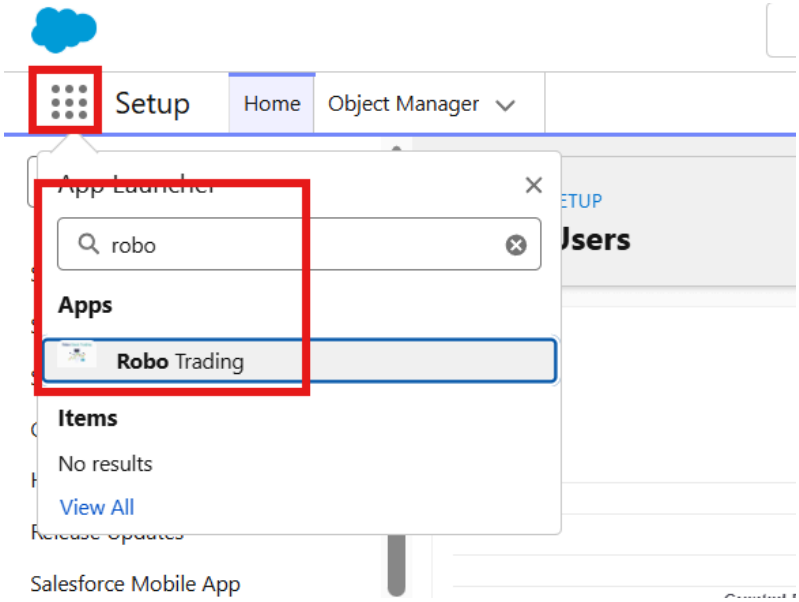
- Assign Manage package License to users who want to use Robo Trading. Packages have default 10 user License under free trial and once subscribed we will set based on the number of user plans. Contact support team if you require more than 10 users to use Robo app.



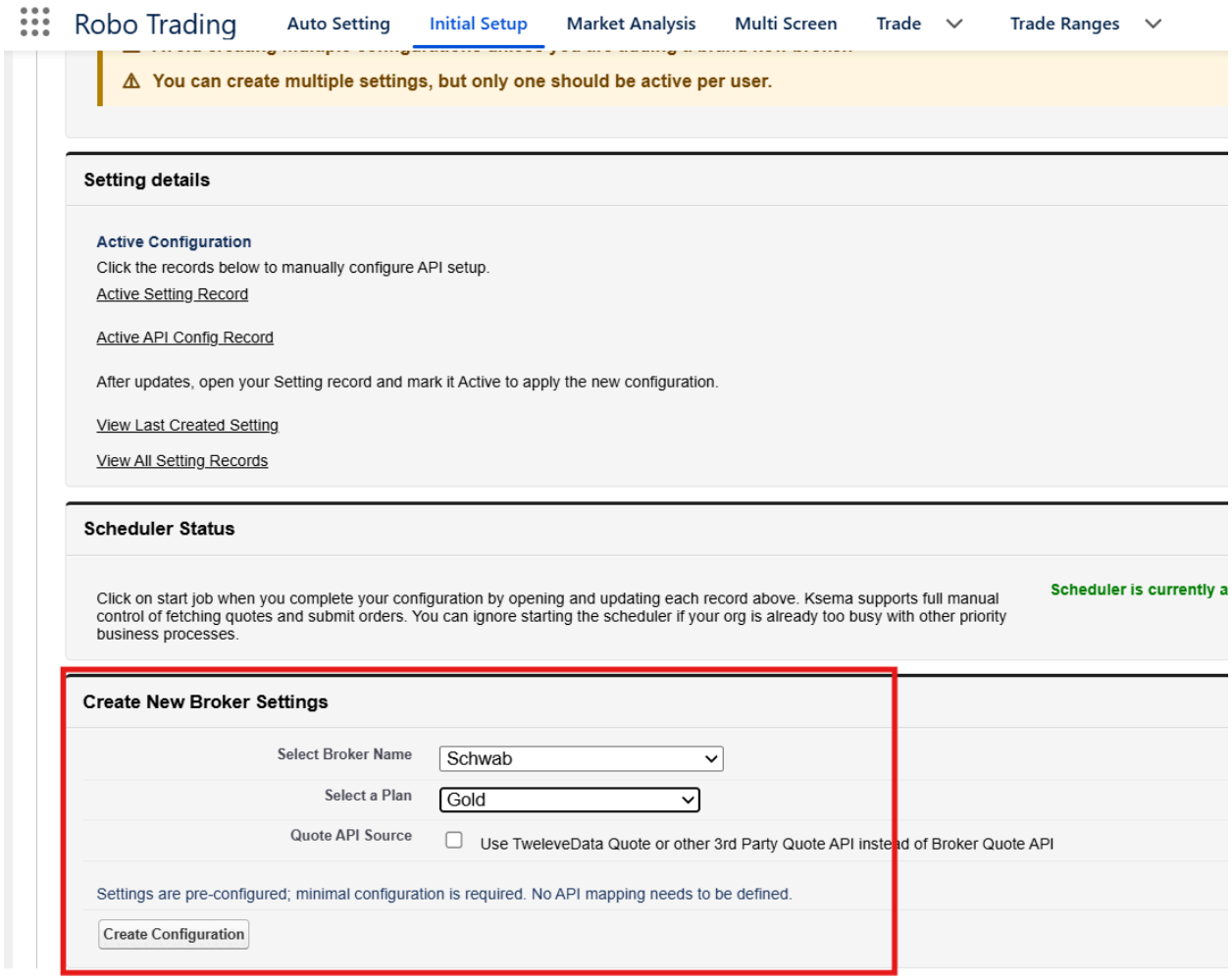


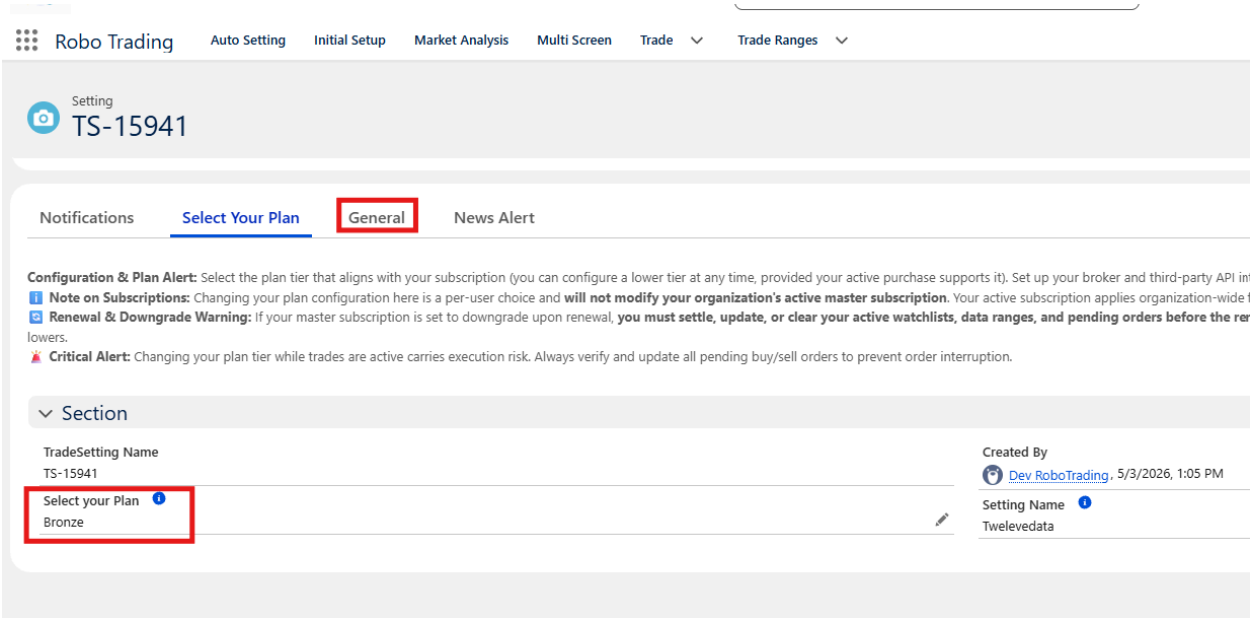
4. Launch App and Configure setting- By Each User

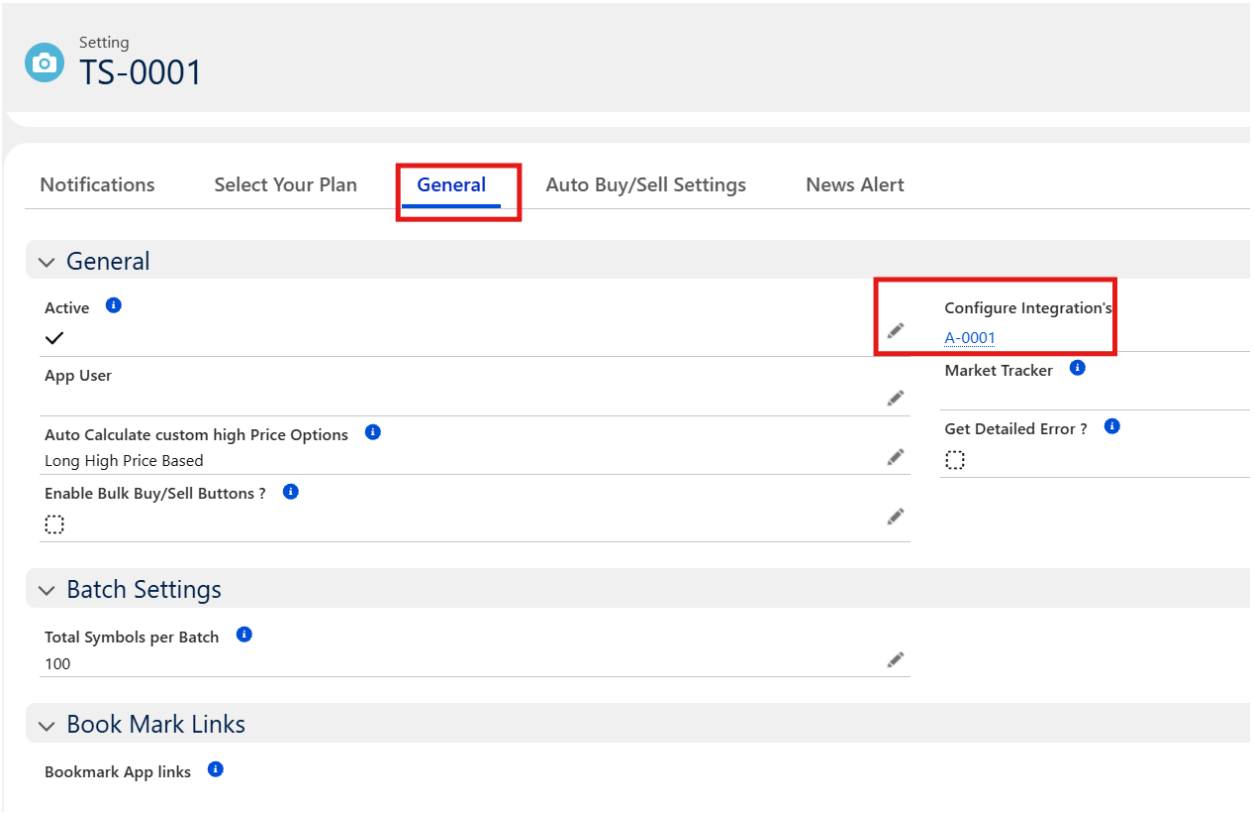
- Launch App



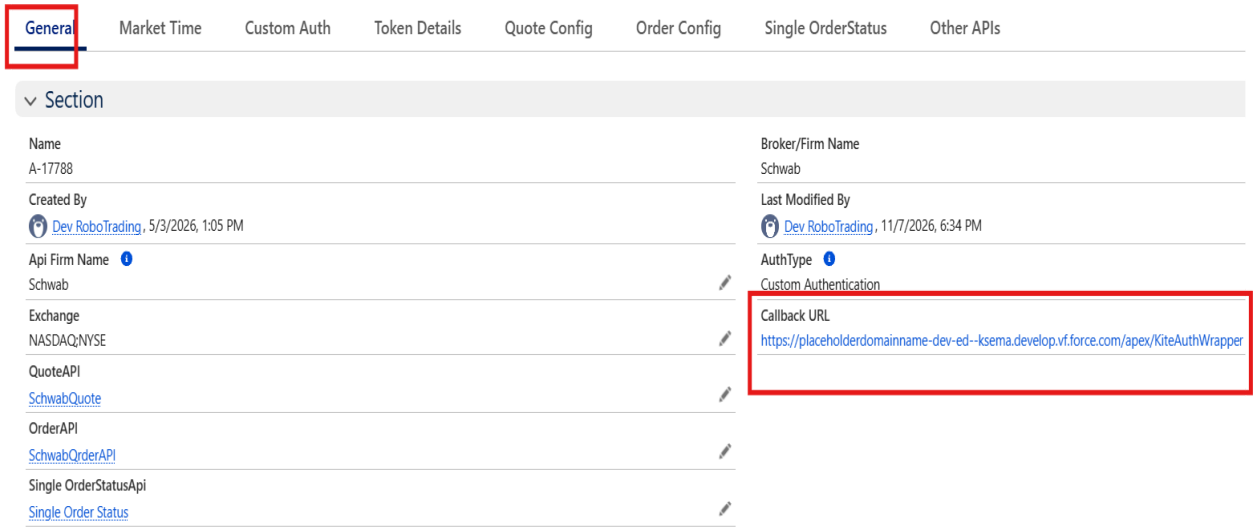
- **Initial Setup & Broker Configuration**
  - Select Broker (Schwab Broker settings are fully tested and working) as per your choice. You can choose any other Broker who supports Rest API and we give options to test before starting to use APP.
  - Limited to 2 settings per user and users can switch brokers as per their needs or update existing settings with new brokers settings.
  - Each setting will have a unique “API Config” record and API config will have Quote, Order Submit, Order Status and “Get Account No” SubAPIConfig records auto generated during broker selection.
  - Basically, creating configuration generates total 5 records in background with some preconfigured values and user have to check and update configuration according to their Broker system


Robo Trading
Auto Setting
Initial Setup
Market Analysis
Multi Screen
Trade
Trade Ranges
You can create multiple settings, but only one should be active per user.
Setting details
Active Configuration
Click the records below to manually configure API setup.
Active Setting Record
Active API Config Record
After updates, open your Setting record and mark it Active to apply the new configuration.
View Last Created Setting
View All Setting Records
Scheduler Status
Click on start job when you complete your configuration by opening and updating each record above. Ksema supports full manual control of fetching quotes and submit orders. You can ignore starting the scheduler if your org is already too busy with other priority business processes.
Scheduler is currently a
Create New Broker Settings
Select Broker Name
Schwab
Select a Plan
Gold
Quote API Source
Use TweleveData Quote or other 3rd Party Quote API instead of Broker Quote API
Settings are pre-configured; minimal configuration is required. No API mapping needs to be defined.
Create Configuration

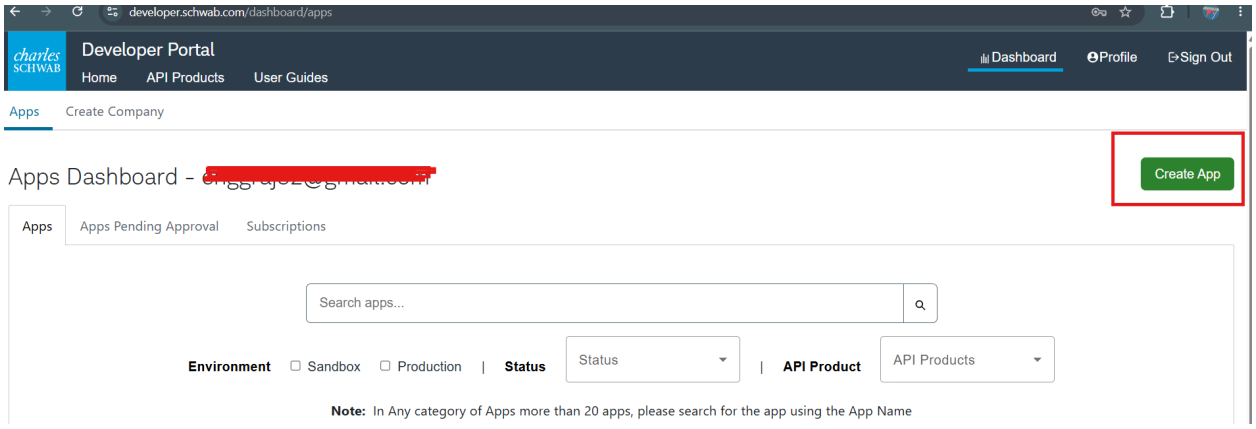




- Click on API configuration.



- Choose Authtype = Custom Authorization
- Register callback URL to broker APP(Create Schwab App) to generate app secret and key. Modify you call back url
- If your broker does not support APIs, you can use our pre-built Twelve Data quote API integration (just configure the quote API) or any other quote API (which requires special setup by us). With only a Bronze license, you can still receive stock alerts and perform data analysis, or you can switch to a broker that supports APIs, such as Charles Schwab.
- Copy call back url from apiconfig record and replace with your app domain name.

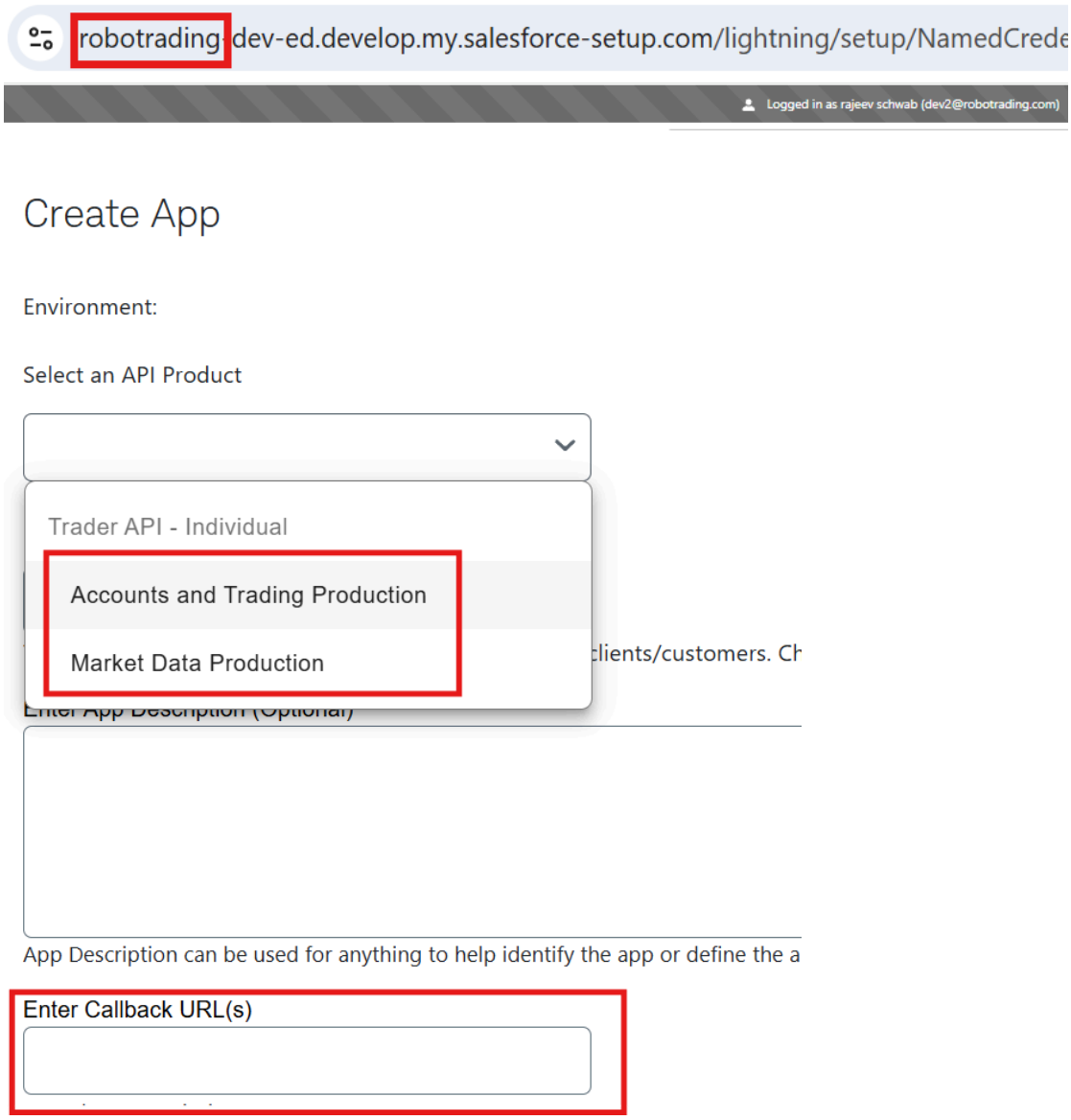


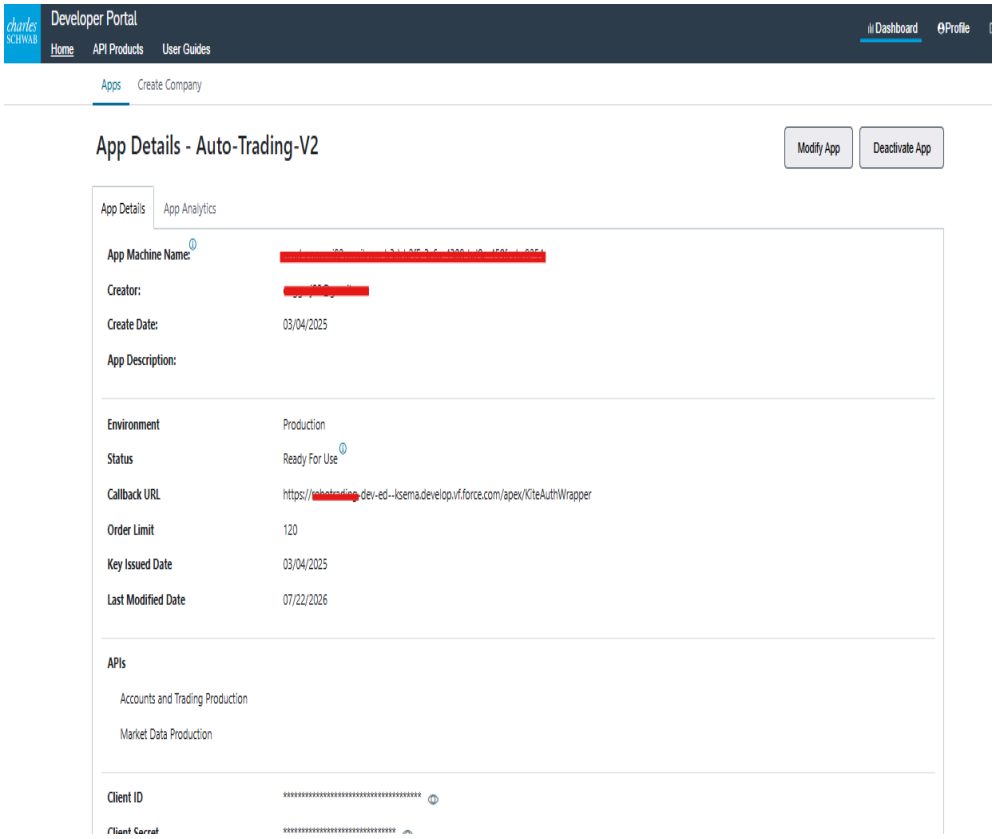
- Choose you Org domain and replace “Placeholderdomainname” with actual value and enter into Schwab app callback url.
- Select both account and trading product and market data production.
- For example , if domain is robotrading(value between https:// and -dev) then

  sample :
  https://placeholderdomainname-dev-ed--ksema.develop.vf.force.com/apex/KiteAuthWrapper

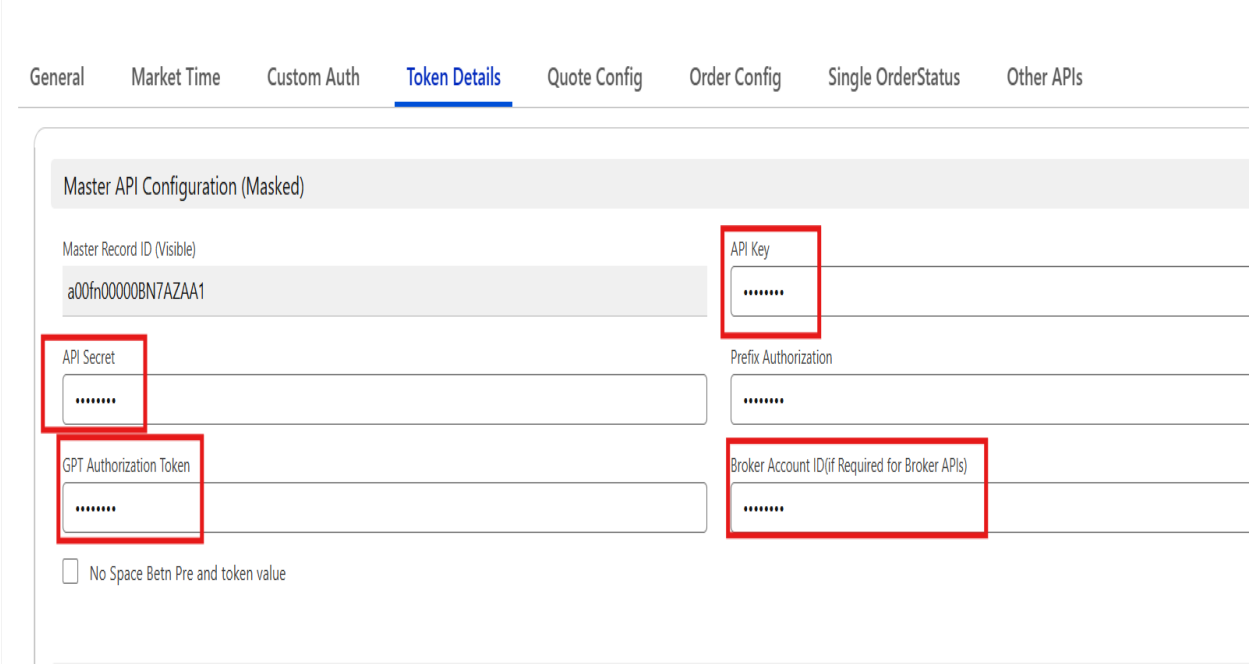
  Then actual call back url will be:

  https://robotrading-dev-ed--ksema.develop.vf.force.com/apex/KiteAuthWrapper





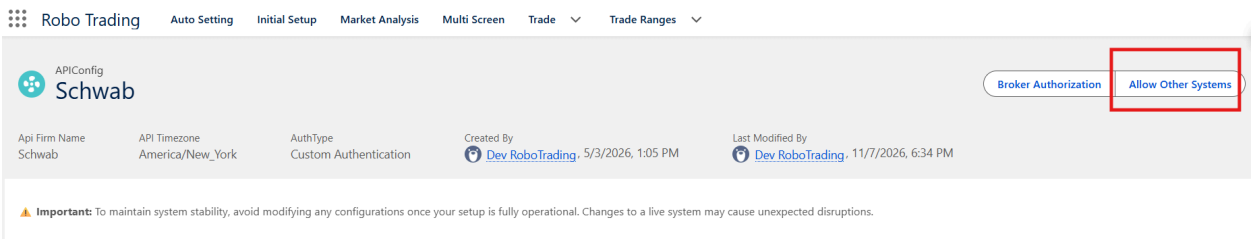
- Copy app Id and Client secret from Broker App and enter under token details.Follow other details under the same page.



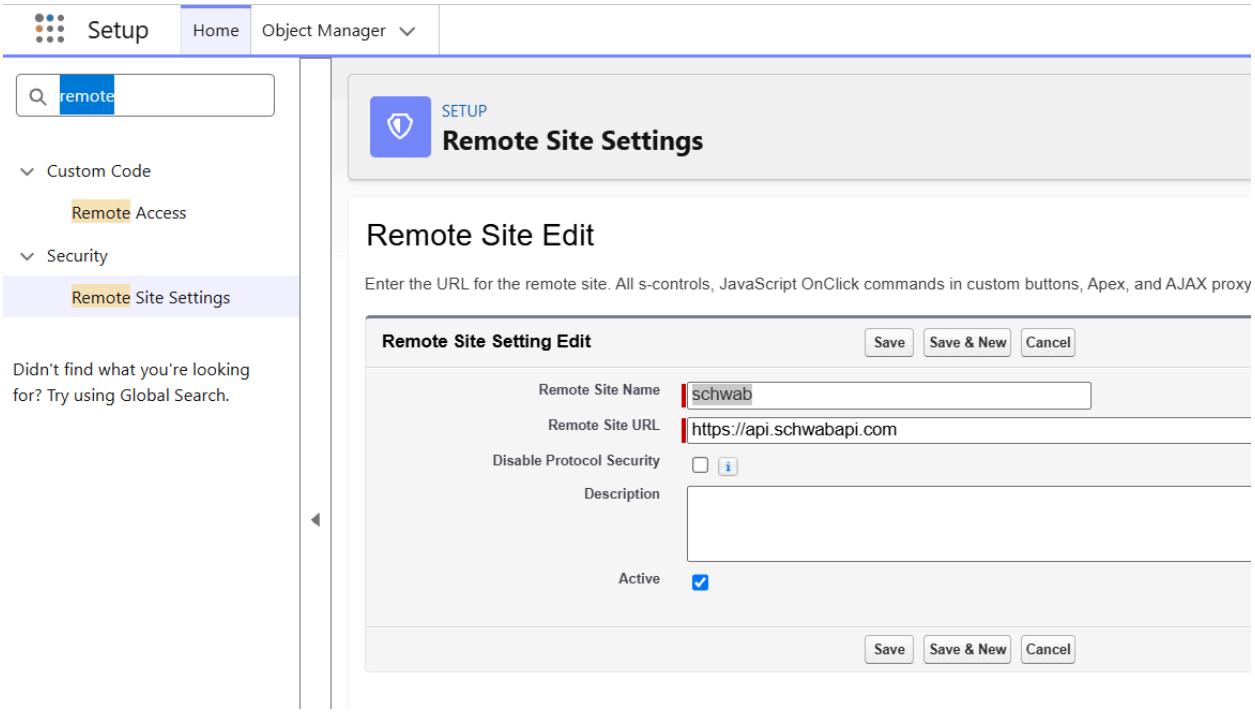
- Enter GPT token if you want GPT based news, data analysis and trading buy-sell signal automations.
- Schwab requires Account Id to be entered. This is hashed account Id which you can generate after broker authorization and by calling Fetch account Id under Other API tab. More detail later in setup.

5. 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.



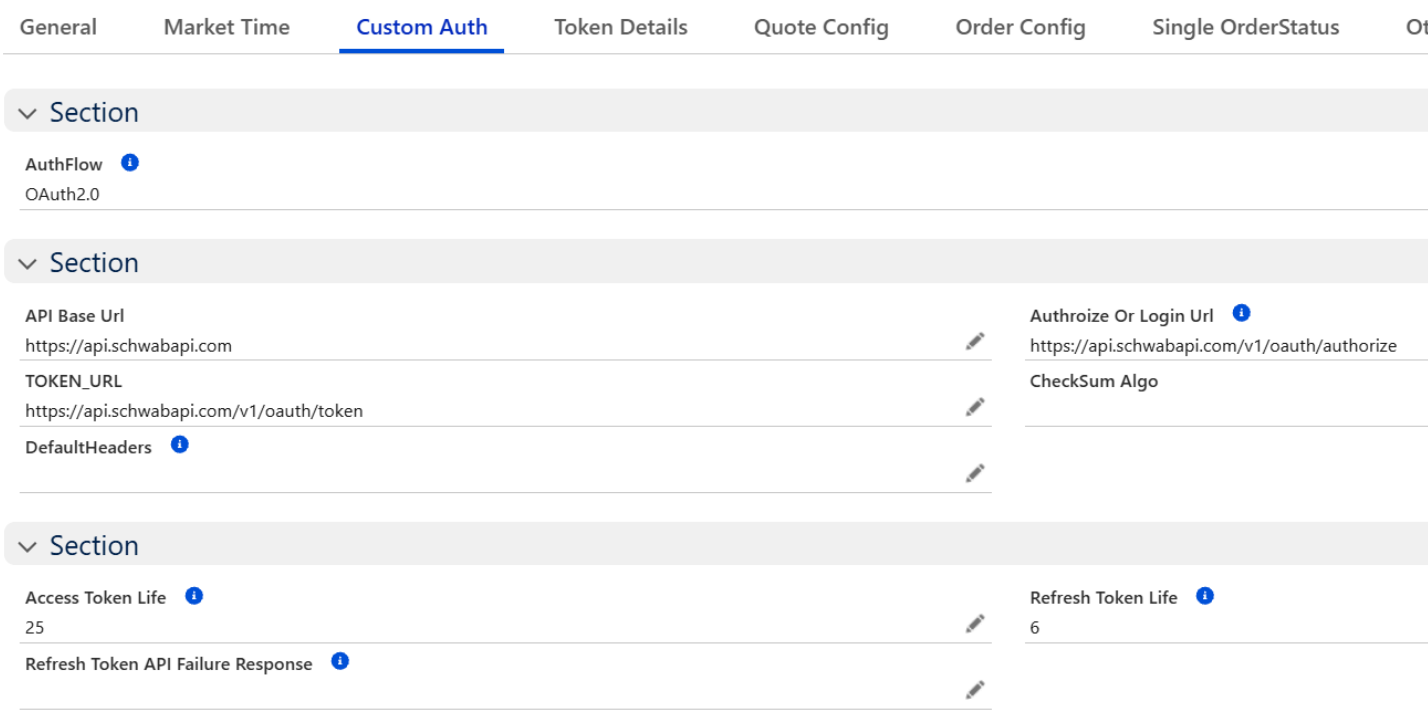
- Enter all new endpoints here



6. Custom Auth Setting and Authorize- By each User

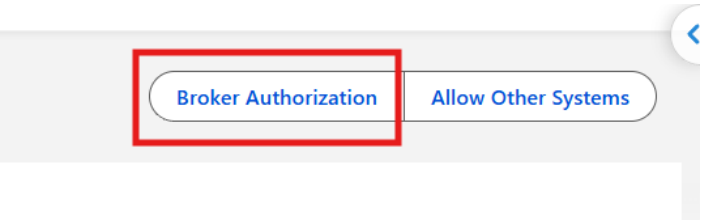
- Enter broker connectivity settings under Custom Auth tab. .

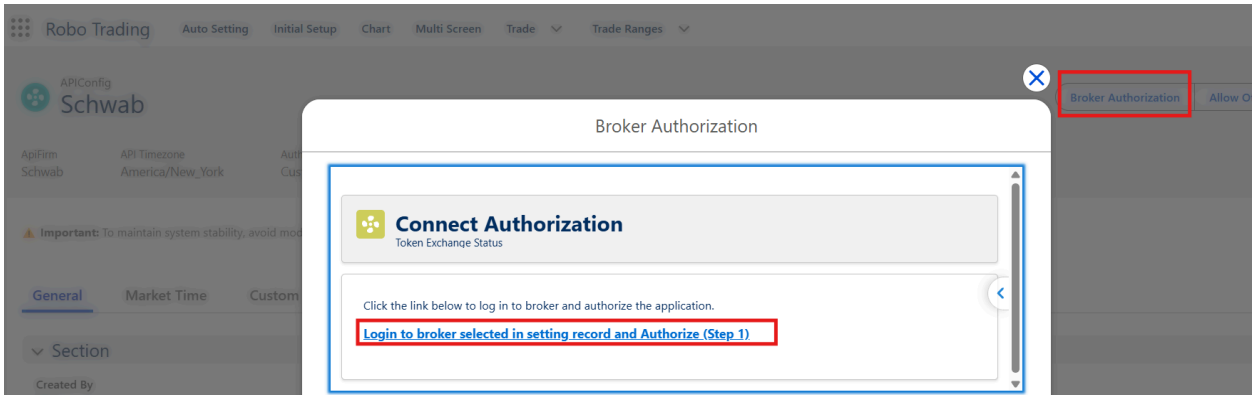
1. Every Broker has different settings , Refer broker documentation or use GPT help to find your broker setting and update here. Schwab settings are defined on the same page and copy-paste in given fields.
2. Every broker has a different access token expiry time . Values are defined under the Auth tab page , copy- paste values defined in screen shot fields..



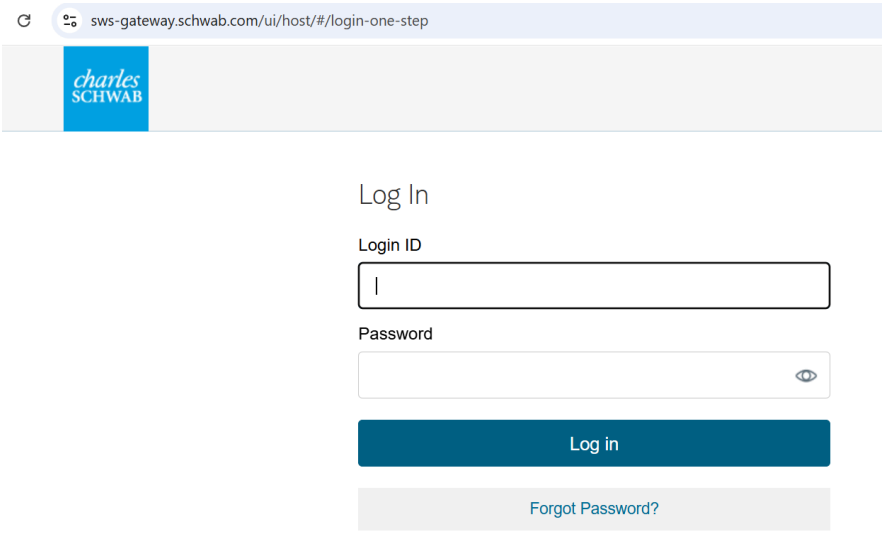
Add access token and refresh token life for auto authorization by automation system for your seamless integration.

- After saving all data try the broker authorization button.
  Login to broker only works when you set up your configuration properly in previous steps.



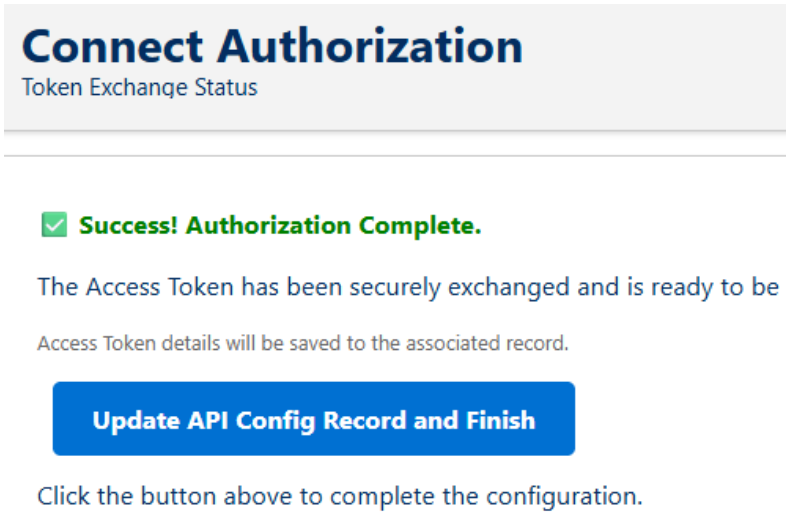


- On authorize button click: Salesforce opens broker system for authorization and completes the connectivity.

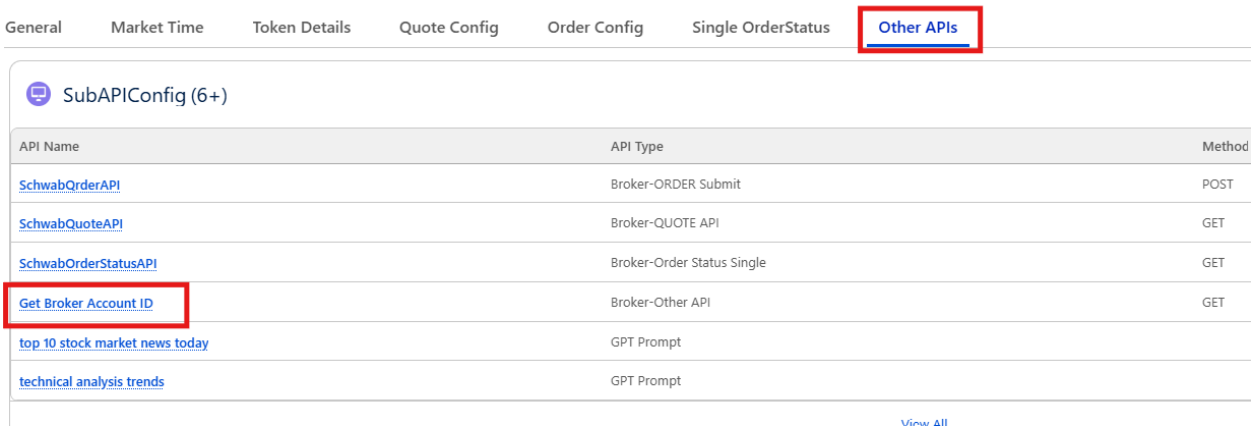


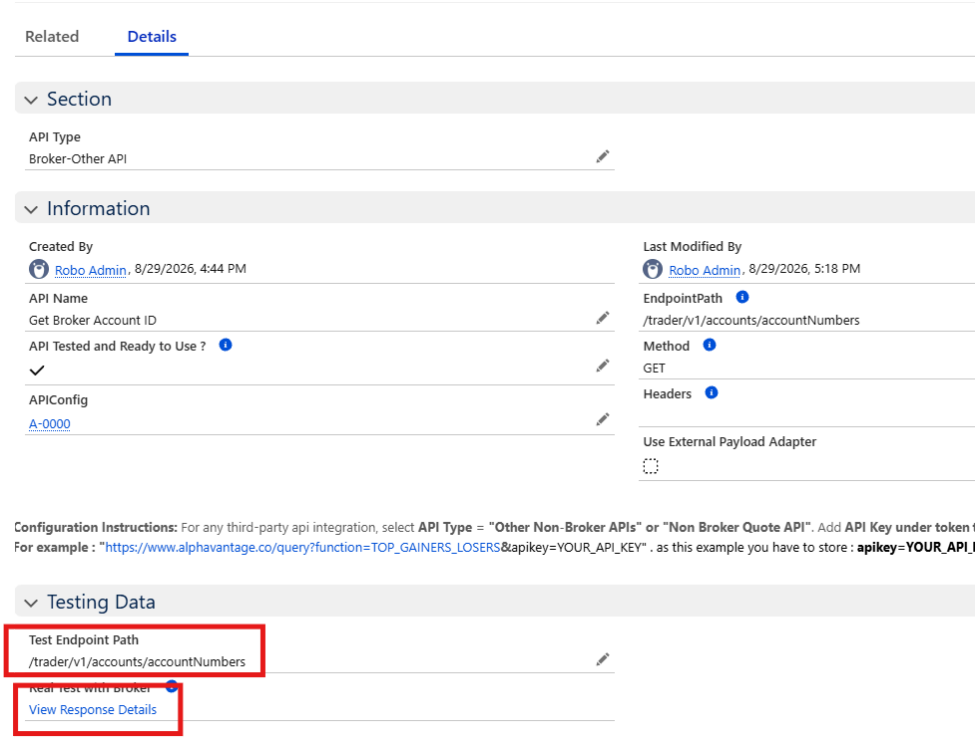
Enter your Broker credentials → select broker account (Account should be Margin account if you want intraday buy/sell same stock multiple times).

- 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.)



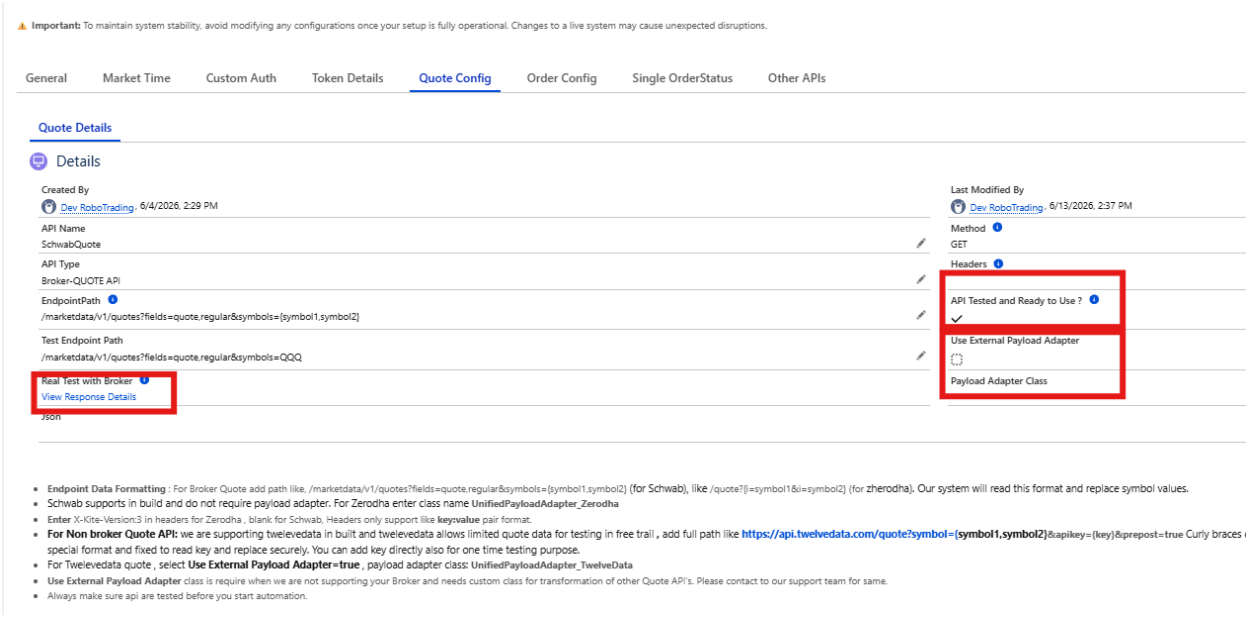


Test url will generate schwab hashed accountid which u need to enter under Token Details tab.

7. API Testing & Verification

- API Testings : Once you authorize then you can test each “API through Real time” with a broker link button to check if connectivity with 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:

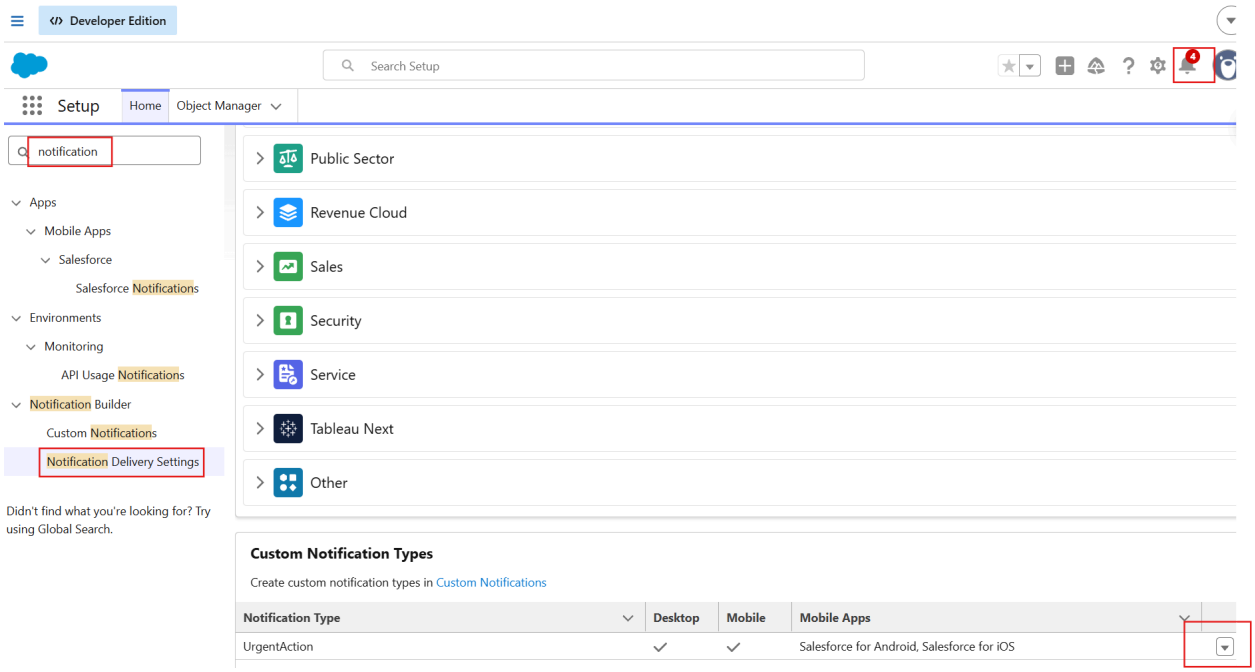


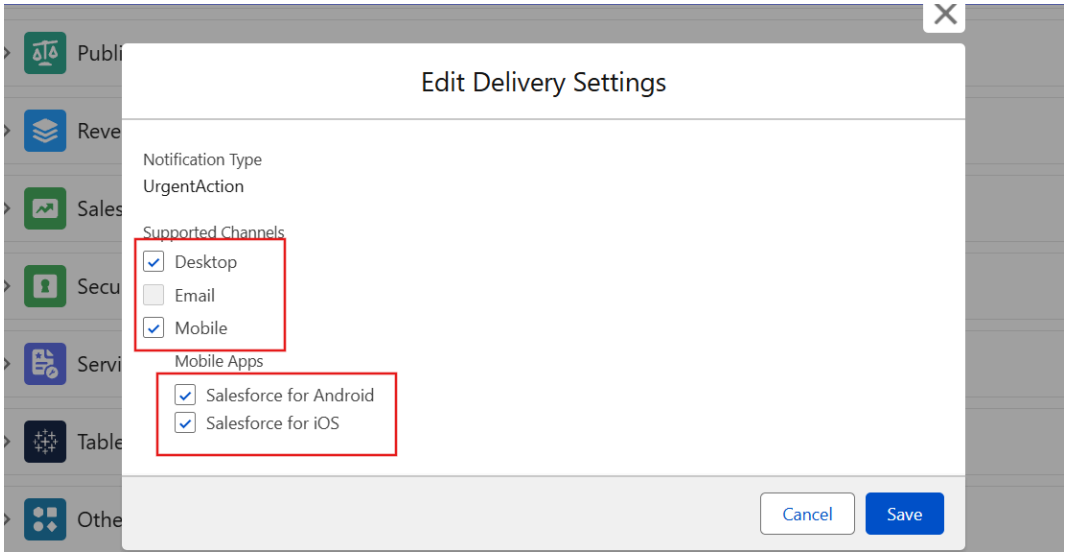
8. Un-Supported Broker

- 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.

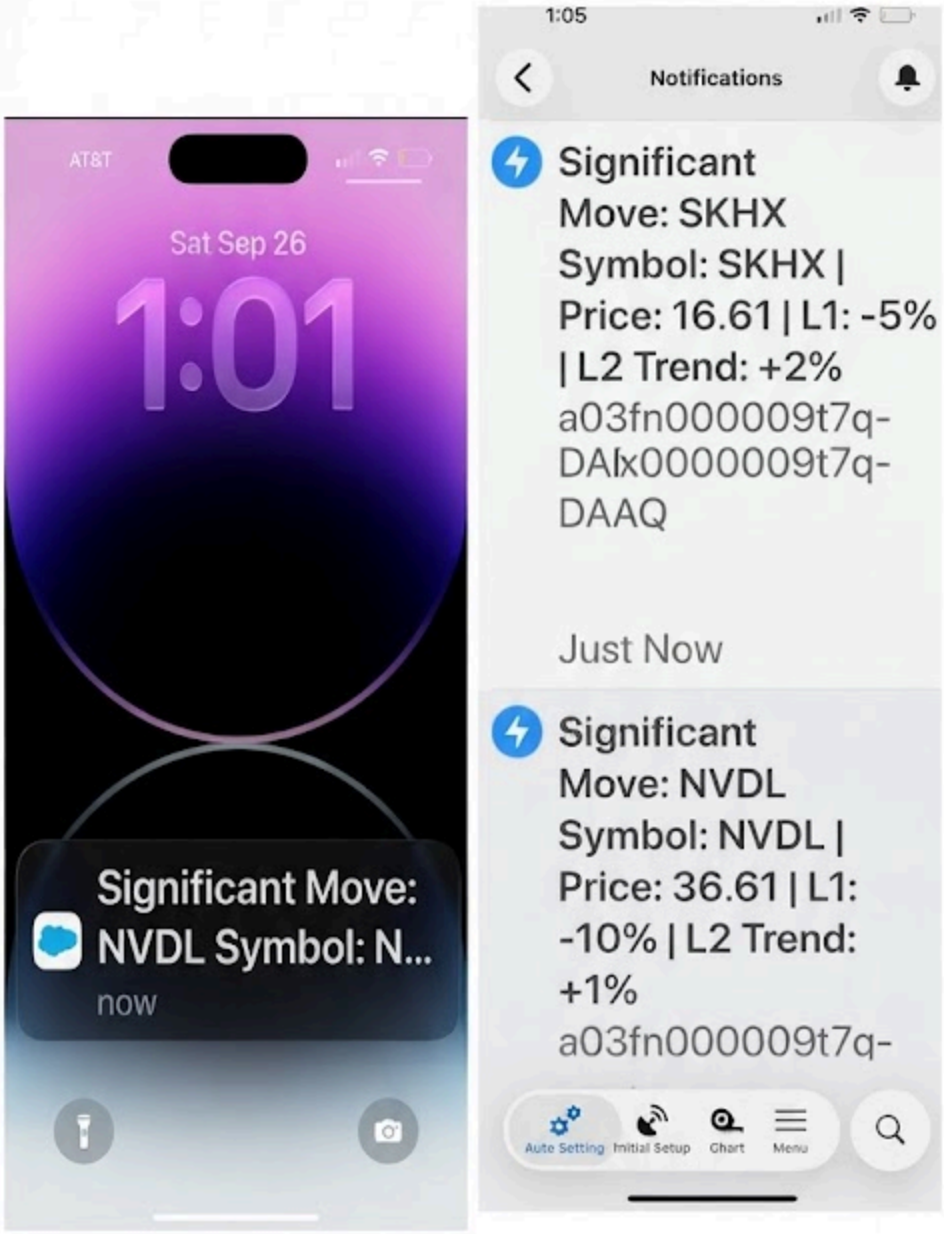
9. Mobile Screen Notifications- By System Administrator

- Mobile screen notifications setting



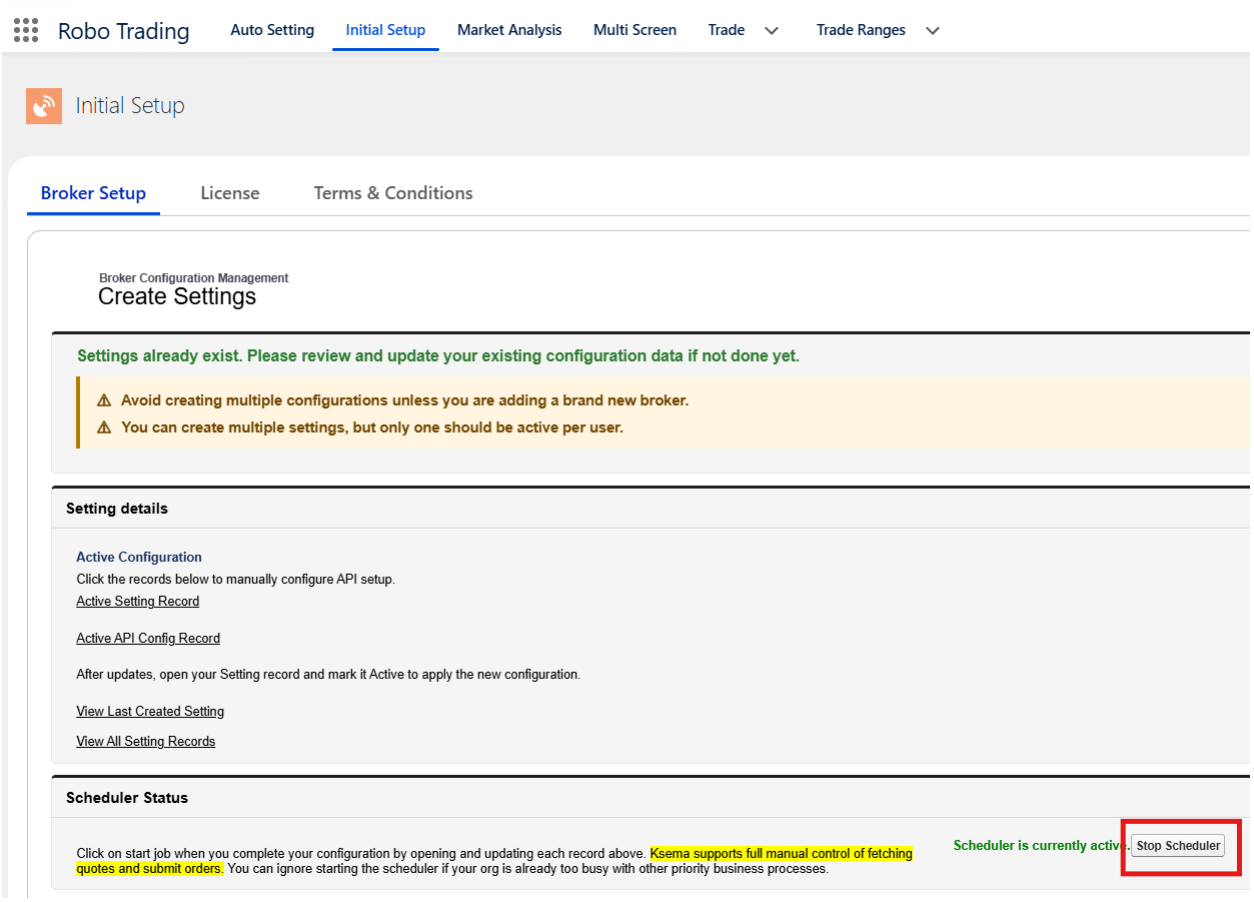


Based on you price alert configuration later ，you will get App notification in you mobile screen like below


AT&T
Sat Sep 26
1:01
Significant Move: NVDL Symbol: N...
now
1:05
Notifications
Significant Move: SKHX Symbol: SKHX | Price: 16.61 | L1: -5% | L2 Trend: +2%
a03fn000009t7q-DAIx0000009t7q-DAAQ
Just Now
Significant Move: NVDL Symbol: NVDL | Price: 36.61 | L1: -10% | L2 Trend: +1%
a03fn000009t7q-
Auto Setting
Initial Setup
Chart
Menu

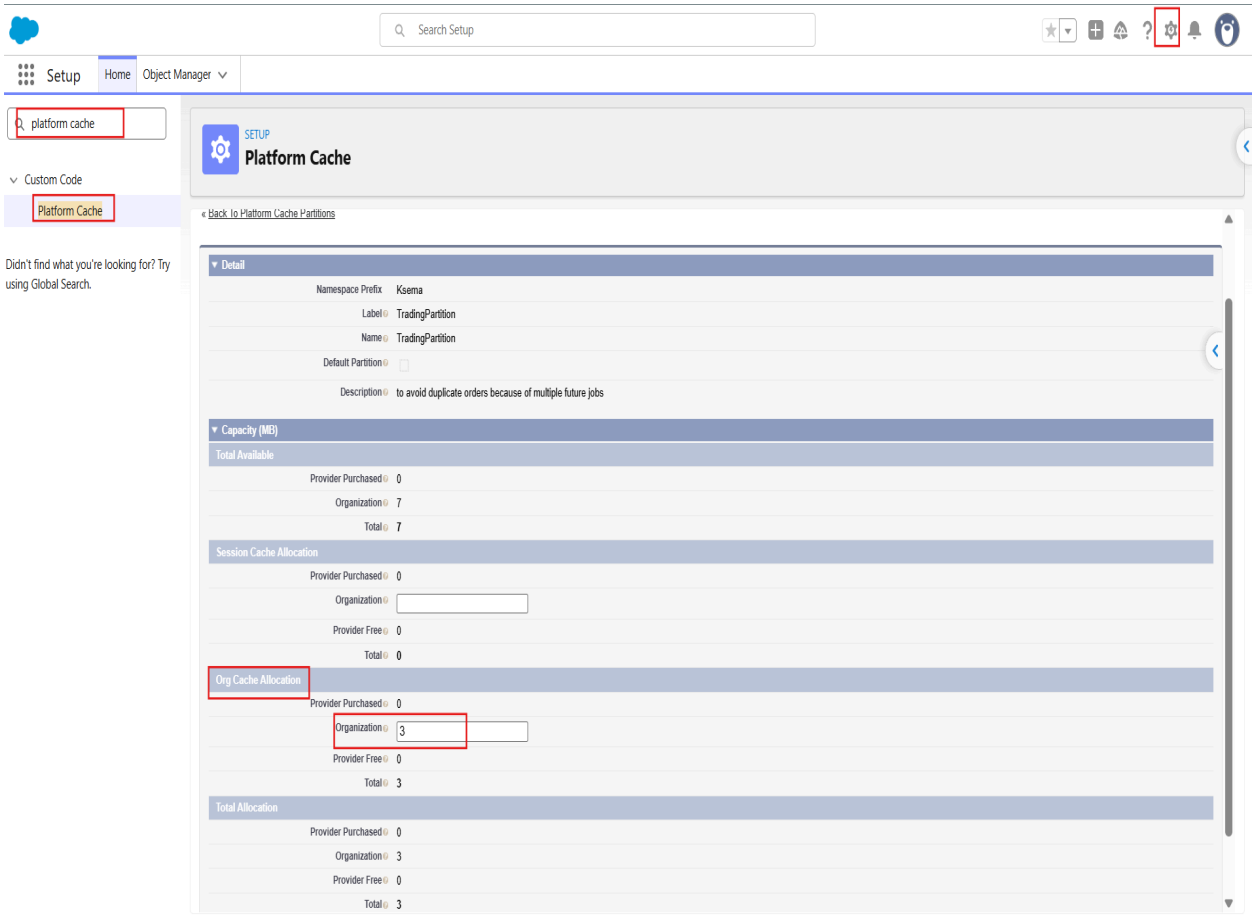
10. Start Batch/Loop Process

- 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.



11. Extra Protection Layer- By System Administrator

- 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. User Manual Reference

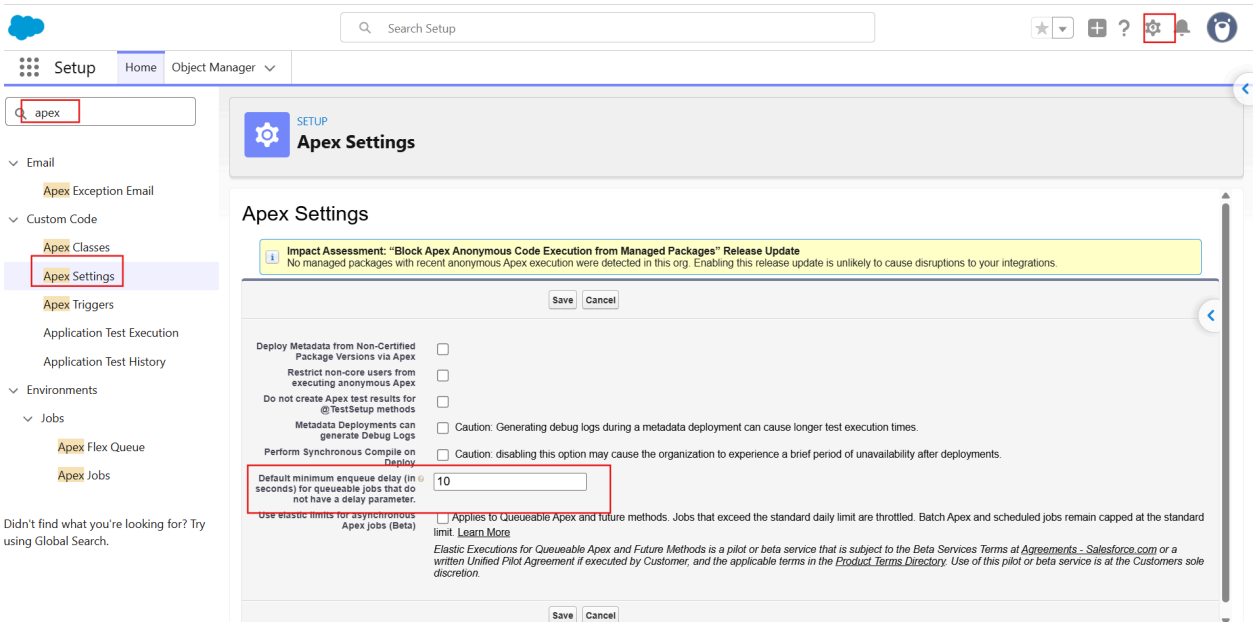
- Once configured then Create an actual Trade(symbol) entry and see if data is pulling from the broker - refer User Guide & Training Manual

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

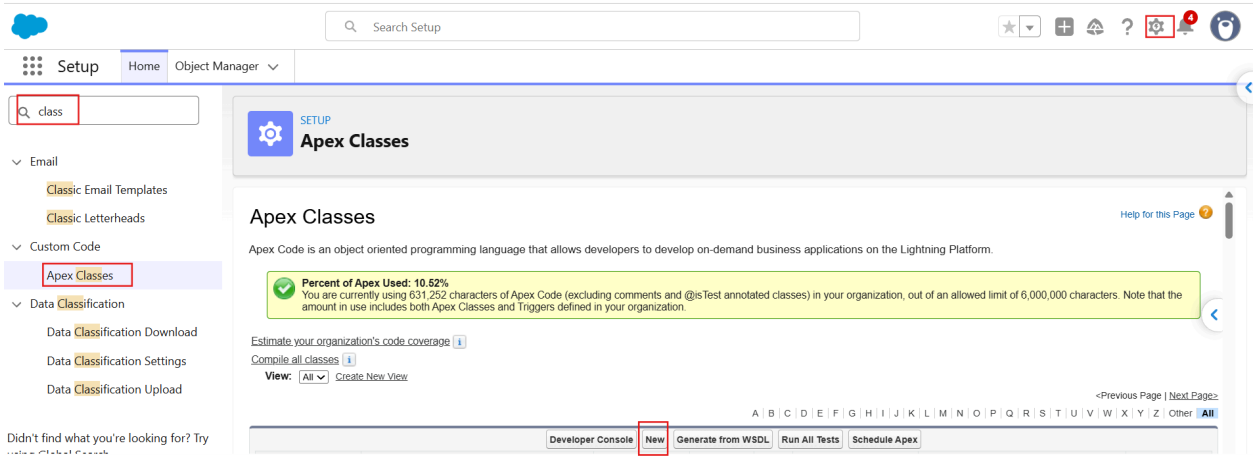
13. Premium Plan-10 Second Batch-By System Administrator

- **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.

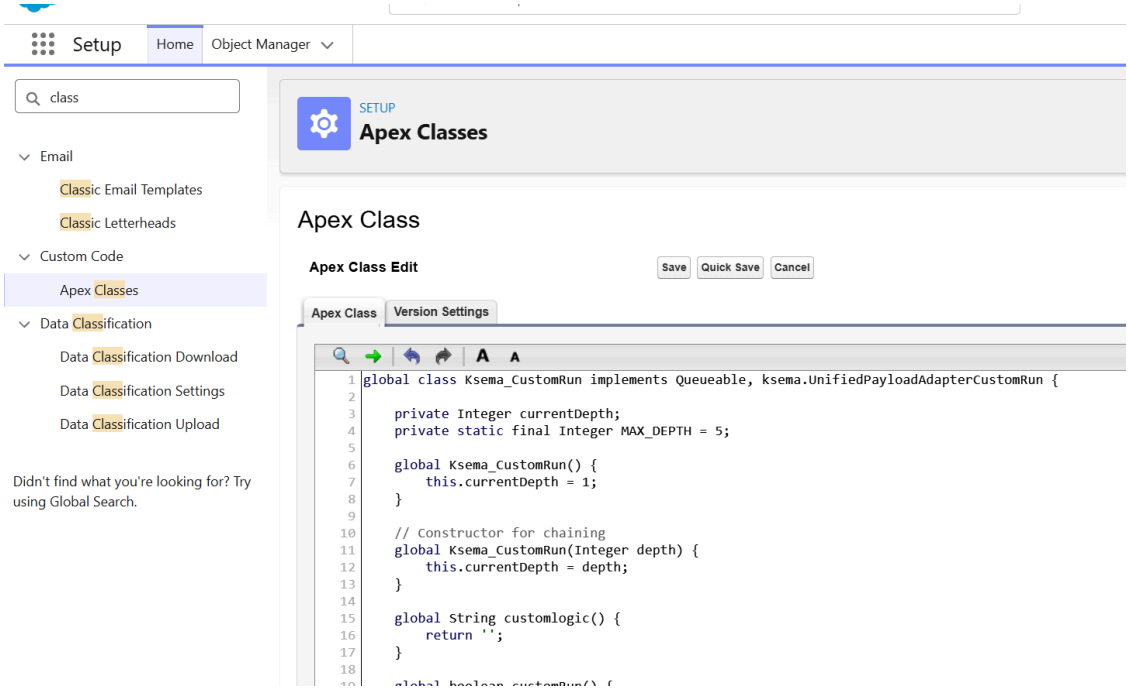
- Set 10 seconds in the configuration below.



- 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 Code :

```
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) {
        }
    }
}
```