Setup

Thursday, December 23, 2021 4:08 PM

Planloader Backend Services Setup (NodeJS)

Create following 5 environment variables to your host OS.

- 1) PlanloaderConfigDbHost=uat-database.c8htwvcfrdzd.eu-west-1.rds.amazonaws.com
- 2) PlanloaderConfigDbUsername=<db_user_with_read_access>
- 3) PlanloaderConfigDbPassword=<db user password>
- 4) PlanloaderConfigDbDatabase=PlanloaderConfigDb
- 5) PlanloaderConfigEnv=development (for test set it to 'test', for server set it to 'production')

Local/Development Setup:

Git clone your repositories from azure https://dev.azure.com/GagaMuller/PlanLoader/git

- Each service require some configurations to run, configurations keys are saved in config/customenvironment-variable.yml
- These configuration come from PlanloaderConfigDb
- Each service save its required configurations in .env file and start itself
- In order to get latest configurations run this command \$ node ./setup-self.js
- This Depend on what you set for PlanloaderConfigEnv variable, If you set it development then it get development configurations from db and create .env file.
- Then you can run your service by nodemon or pm2
- If you want to run with you can pm2 eliminate above step by running this ./restart-pm2.sh shell file. This execute above file ./setup-self.js and stop/restart service by pm2
- Give execute permission to restart-pm2.sh file as sudo chmod 755 ./restart-pm2.sh

Config-Listener Service:

- This service is use to monitor configuration changes in PlanloaderConfigDb
- It recheck after a specific period of time (1 min)
- If there is any change in configurations, 'update_delivered' field in the database will be 0 its mean there is a change in configuration, so rollback all the services
- If configuration change is found then it execute the restart-all-services.sh shell file which go to each directory of services and call ./restart-pm2.sh shell file. In short it restart all the services and service get the latest configurations.
- Give execute permission to restart-all-services.sh file as sudo chmod 755 ./restart-all-services.sh
- Make sure this service is in the same directory where you clone the planloader service

Config-Listener Service Additional:

This service once first start, create vhost configuration file "planloader-vhost.conf"

-> See section "setting Apache virtual host"

which is used in Apache http server this file is create in one directory back from this service

e.g: If config listener service is clone at -> /Users/basitraza/Repos/planloader/Config-Listener/

Then the generated file will be at -> /Users/basitraza/Repos/planloader/planloader-vhost.conf

And this file path is exactly used in Apache vhost configuration

After creating planloader-vhost.conf it tries to restart httpd service with linux OS command,

In-case your OS is different or httpd service failed to restart, still planloader-vhost.conf file has been generated you can restart http service manually

Server Setup:

1. Set PlanloaderConfigEnv=production (see above for detail)

Everything else is same.

Setting Apache Virtual Host

- 1. Install XAMPP on your system
- 2. Go to your Xampp httpd.conf and add below line, replace path by your path ----- INCLUDING PLANLOADER VHOST ---IncludeOptional <path_of_your_repositories_root_folder>/planloader-vhost.conf #e.g /Users/basitraza/Repos/planloader/planloader-vhost.conf ----- INCLUDING PLANLOADER VHOST --
- 3. All done now restart Apache web server (from XAMPP)

Clone all services, Start Config Listener and Setup Vhost Configuration and restart httpd service Automatically

- 1. Go to your main directory where you want to clone repositories
- 2. Create a file "clone_planloader_repos.sh" and give execute permission to this bash file as "sudo chmod 755 clone_planloader_repos.sh"
- 3. Open this file and add below content and follow step#4
- 4. Run this bash file from your terminal as "./clone_planloader_repos.sh"

#!/bin/sh

#Exit if any command failed

```
set -e
AuthService="master"
RouterService="master"
UserService="master"
LocationService="master-v2"
TaskActivityService="master"
AccountService="master"
ProjectService="master"
MessagingService="master"
PubnubService="master"
NotificationService="master"
BoardService="master"
SwaggerService="master"
ConfigListenerService="master"
# Cloning Auth Service
git clone -b $AuthService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-auth-
<u>service</u>
cd planloader-auth-service
npm install
cd ..
# Cloning Router Service
git clone -b $RouterService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/Planloader-API-
<u>gateway</u>
cd Planloader-API-gateway
npm install
cd ..
# Cloning User Service
git clone -b $UserService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-user-
<u>service</u>
cd planloader-user-service
npm install
cd ..
```

```
git clone -b $LocationService
qit@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-web-
location-service
cd planloader-web-location-service
npm install
cd ...
# Cloning Task Activity Service
git clone -b $TaskActivityService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/Planloader-task-
<u>activity-service</u>
cd Planloader-task-activity-service
npm install
cd ..
# Cloning Account Service
git clone -b $AccountService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-
accounts-service
cd planloader-accounts-service
npm install
cd ..
# Cloning Project Service
git clone -b $ProjectService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-
projects-service
cd planloader-projects-service
npm install
cd ..
# Cloning Board Messaging Service
git clone -b $MessagingService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-board-
messaging-service
cd planloader-board-messaging-service
npm install
cd ..
# Cloning Pubnub Service
```

```
git clone -b $PubnubService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-pubnub-
subscription-service
cd planloader-pubnub-subscription-service
npm install
cd ...
# Cloning Board Service
git clone -b $BoardService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-boards-
service
cd planloader-boards-service
npm install
cd ..
# Cloning Notification Service
git clone -b $NotificationService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-
notification-service
cd planloader-notification-service
npm install
cd ..
# Cloning Swagger Service
git clone -b $SwaggerService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/planloader-swagger
cd planloader-swagger
npm install
cd ...
# Cloning Config Listener Service
ait clone -b $ConfigListenerService
git@ssh.dev.azure.com:v3/GagaMuller/PlanLoader/PlaLoader-
<u>ConfigListener</u>
cd PlaLoader-ConfigListener
npm install
echo 'All planlaoder services are cloned'
echo 'Starting Config Listener services with PM2'
pm2 restart ecosystem.config.js
echo 'All Done!'
```

```
# keep track of the last executed command
trap 'last command=$current command;
current_command=$BASH_COMMAND' DEBUG
# echo an error message before exiting
trap 'echo "\"${last_command}\" command filed with exit code $?."'
```

Verify Results

After cloning all repositories and setting Apache XAMPP, make sure atleast swagger-service is running Then go to browser and hit http://localhost.planloader.com/api-docs