SAP Deployment Procedure

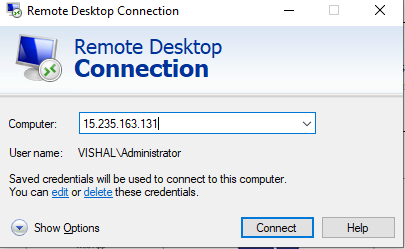
**SAP Frontend**

Step 1 : Open the Remote desktop connection.

IP : 15.235.163.131

Username : .\ Administrator (or) .\mangai

Password : [T3lln00n1$bb5@G4.Li](mailto:T3lln00n1$bb5@G4.Li)

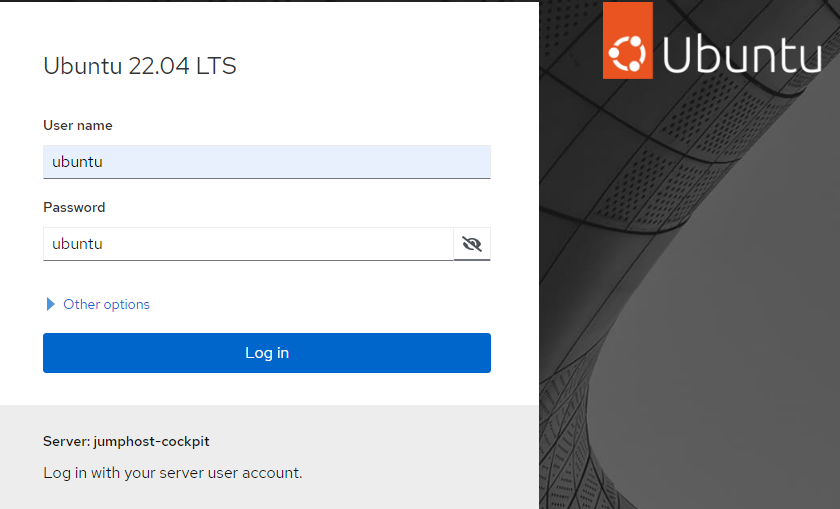


Step 2: Open the chrome and Go to this link address - <https://54.39.122.20:9090/>

Step 3 : Login the Cockpit terminal with

Username: ubuntu

Password : ubuntu



Step 4 : Type the code : ssh 172.168.1.201C:\Users\Admin\Pictures\Screenshots\Screenshot (21).png

Step 5 : To change the directory : **cd /var/www**

C:\Users\Admin\Pictures\Screenshots\Screenshot (22).png

Step 6 : To create the new folder : **mkdir production**

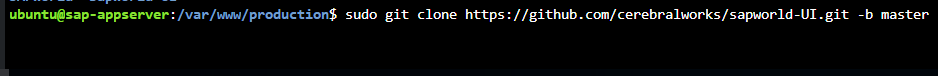
C:\Users\Admin\Pictures\Screenshots\Screenshot (23).png

Step 7 : To change the directory to production : **cd production**

C:\Users\Admin\Pictures\Screenshots\Screenshot (26).png

Step 8 : To clone the Sap frontend code from Git :

**sudo git clone https://github.com/cerebralworks/sapworld-UI.git -b master**



Step 7 : To change the directory to frontend path: **cd sapworld-UI/frontend**

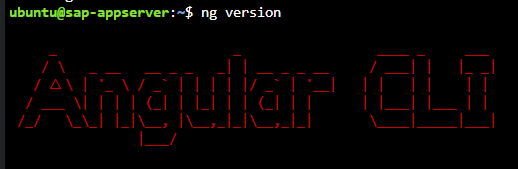
C:\Users\Admin\Pictures\Screenshots\Screenshot (28).png  
Step 8 : To install Nodejs : **sudo apt install –g nodejs** (or) To install the node package by using NVM

1. curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.3/install.sh | bash
2. source ~/.bashrc
3. command -v nvm
4. nvm install 18.17.1
5. nvm use 18.17.1
6. check the node is installed or not : node –v

C:\Users\Admin\Pictures\Screenshots\Screenshot (33).png

Step 9 : To install angular in root path : **sudo npm install –g @angular/cli**

Step 10 : To check the angular latest version (16) is installed or not : **ng version**



Step 11 : To install all dependency used in the project: **sudo npm install –ignore-script**

C:\Users\Admin\Pictures\Screenshots\Screenshot (82).png

Step 12 : To check all the packages install without any error : **sudo npm start**

C:\Users\Admin\Pictures\Screenshots\Screenshot (83).png

Step 13 : To change the environment variable in **src/environments/environment.prod.ts** file and commit in repository

**apiUrl:'https://apiurl:5003'**

**serverUrl:'https:// apiurl:5003'**

**clientUrl:'https://sapworld.io' APP url**

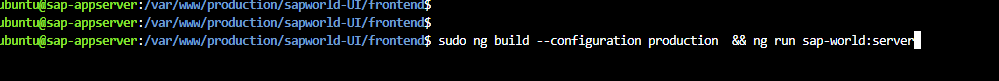
Step 14 : After commiting, pull the code from the repository : **sudo git pull origin master**

C:\Users\Admin\Pictures\Screenshots\Screenshot (81).png

Step 15: To install angular universal for server side rendering (Not required , It required only for first time setup angular universal)

* sudo ng add @nguniversal/express-engine
* sudo npm install domino
* sudo npm install localstorage-polyfill

Step 16 : To take build in the server : **sudo ng build --configuration production && ng run sap-world:server**



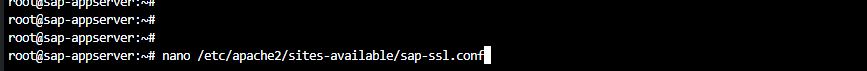
Step 17 : To install forever package to start or stop server **: sudo npm i –g forever**

Step 18 : After taking build , start the frontend server for first time : **forever start ./dist/sap-world/server/main.js** (It will run on port - 4000)

Step 19: To install packages in root user path

* sudo a2enmod proxy
* sudo a2enmod proxy\_http
* sudo a2enmod proxy\_balancer
* sudo a2enmod lbmethod\_byrequests

Step 20 : To open to config file path : **nano /etc/apache2/sites-available/sap-ssl.conf**



Step 21 : To add the below code and save it

ProxyPreserveHost On

<Proxy \*>

Order deny,allow

Allow from all

</Proxy>

ProxyPass / http://localhost:4000/ connectiontimeout=1 retry=5 Keepalive=On

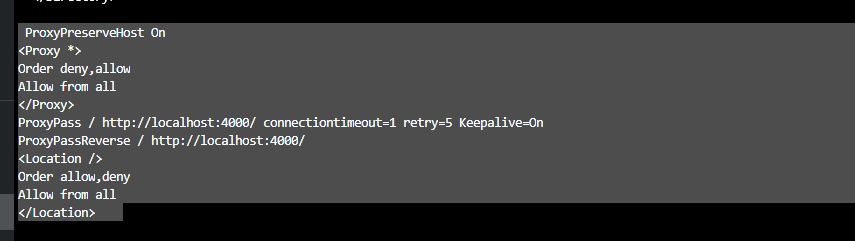
ProxyPassReverse / http://localhost:4000/

<Location />

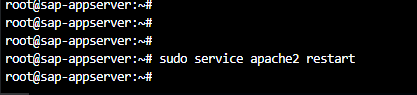
Order allow,deny

Allow from all

</Location>



Step 22 : To restart the apache server: **sudo service apache2 restart**



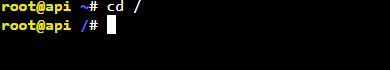
Step 23 : To check the site is working or not : **https://sapworld.io/**

**SAP Middleware**

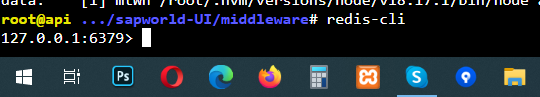
Step 1: Type ssh 172.168.1.203

C:\Users\Admin\Pictures\Screenshots\Screenshot (13).png

Step 2: Navigate to the root path cmd : **cd /**

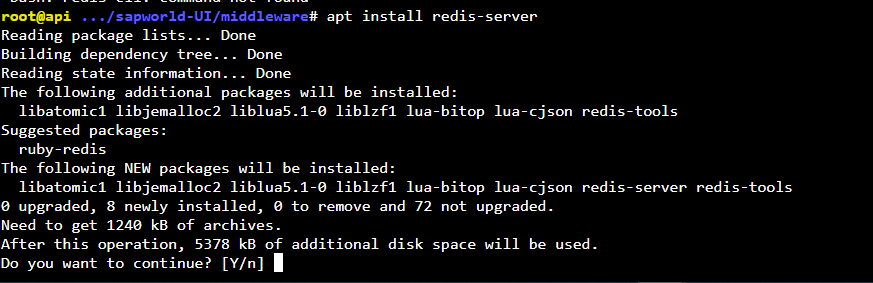
****

Step 3:Need to check redis-server is installed in this server or not (because for middleware need to run under redis-server) :  **redis-cli**



(Note if the redis-server already installed you able to see the hostname:port of like above image have) if redis-server not installed in your server follow the bellow steps(Step 4)

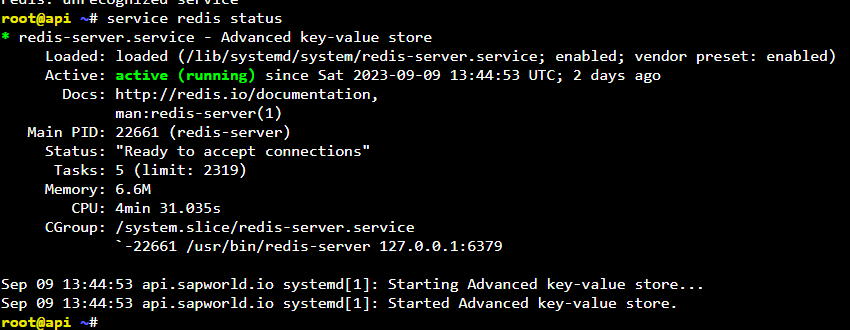
Step 4:Go to root path of your server and cmd : **sudo apt install redis-server**



Click :Y and enter this will install the redis-server in you production-server

Step 5:To check the redis status cmd: **service redis status**

**(Note:In bellow you able to see the redis-server running host name and port as well (127.0.0.1:6379))**



Step 6 : To change the directory to middleware path **: cd /var/www/production/sapworld-UI/middleware**C:\Users\Admin\Pictures\Screenshots\Screenshot (75).png

Step 7 : To change the App url in the middleware environmental file (.env) and commit the code

* PRODUCTION\_SERVICE\_API\_URL = <http://apiurl:1339>
* PRODUCTION\_PORT = 5003

Step 8 : To install forever package to start or stop server : **sudo npm i -g forever** (not required if install already)

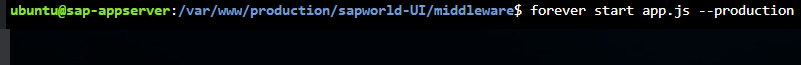
C:\Users\Admin\Pictures\Screenshots\Screenshot (93).png

Step 9 : To install all dependencies installed in middleware : **sudo npm install --force**C:\Users\Admin\Pictures\Screenshots\Screenshot (94).png

Step 10: After commiting, pull the code from the repository : **sudo git pull origin master**

C:\Users\Admin\Pictures\Screenshots\Screenshot (95).png

Step 11 : After pull the code , to start the server : **forever start app.js –production** (It will run on port 5003)



**SAP API**

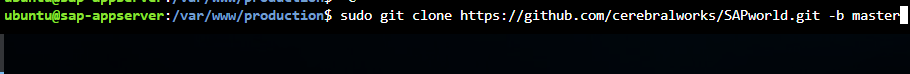
Step 1: Type ssh 172.168.1.203

C:\Users\Admin\Pictures\Screenshots\Screenshot (13).png

Step 2: To change the directory to production path : **cd /var/www/production**

C:\Users\Admin\Pictures\Screenshots\Screenshot (38).png

Step 3 : To clone the API files from the repository**: sudo git clone https://github.com/cerebralworks/SAPworld.git -b master**



Steps 4 : After cloning API file , move to API folder : **cd SAPworld/API**

C:\Users\Admin\Pictures\Screenshots\Screenshot (40).png

Step 5 : To install the sails : **sudo npm install –g sails**

C:\Users\Admin\Pictures\Screenshots\Screenshot (40).png

Step 6 : To install all dependencies installed in API **: sudo npm install –force**

C:\Users\Admin\Pictures\Screenshots\Screenshot (41).png

Step 7 : To change configuration details in the environmental file (.env) and commit the code

#To change config details

* service\_port=1339
* appurl=https://sapworld.io ( Application url)
* webapp=http://api.sapworld.io:5005 ( Api url)

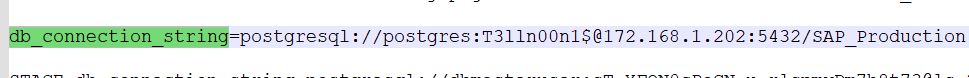
#To change the database configuration

Hostname : 172.168.1.202

Username : postgres

Database name : SAP\_Production

Password : T311n00n1$



Step 8 : After commiting , pull the code from the repository : **sudo git pull origin master**

C:\Users\Admin\Pictures\Screenshots\Screenshot (43).png

Step 9: After installing dependencies , to run the project to check whether the error occurs or not : **sudo npm start**

C:\Users\Admin\Pictures\Screenshots\Screenshot (45).png

Step 10: After pull the code , then start the server : **forever start app.js –production** (It will run on port 1339)

C:\Users\Admin\Pictures\Screenshots\Screenshot (44).png

**SAP Database Migration (Not required)**

Step 1 : To comment or remove the NODE\_ENV variable in the environmental file(.env) . (Note: Production environment does not support migration)

C:\Users\Admin\Pictures\Screenshots\Screenshot (98).png

Step 2: To change the migration safe to migration drop in the config/models.js



Step 3 : To commit the changes in repository and pull the code :sudo git pull origin master

C:\Users\Admin\Pictures\Screenshots\Screenshot (43).png

Step 4: Lift the sails for database migration : sails lift

C:\Users\Admin\Pictures\Screenshots\Screenshot (2).png

Step 5 : After sails lift , undo the step 1 and step 2 and commit the changes

Step 6 : To pull the code : sudo git pull origin masterC:\Users\Admin\Pictures\Screenshots\Screenshot (43).png

Step 7 : To restart the server : forever restartall

C:\Users\Admin\Pictures\Screenshots\Screenshot (3).png

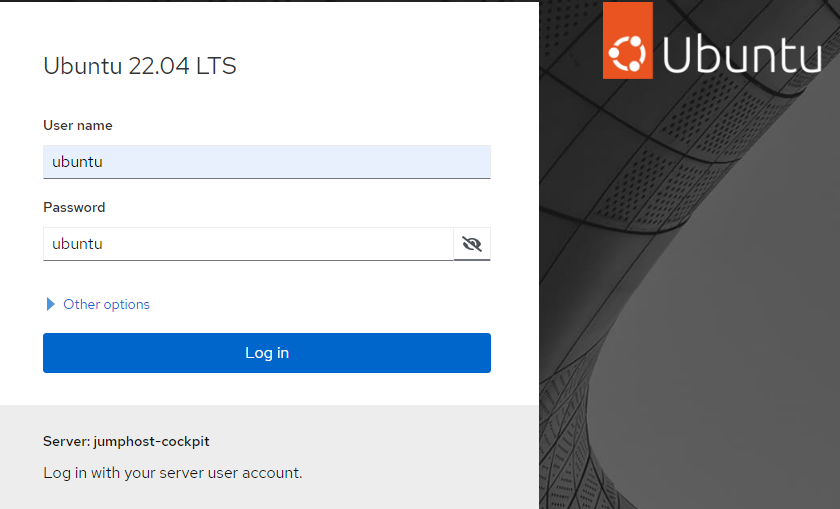
Step 8: To check mail send is working or not, if we face error (**Error: Invalid login: 535 Authentication failed**), then To get updated mail credentials from the client side(Username and App password)

**SAP Admin**

Step 1: Login the Cockpit terminal with

Username: ubuntu

Password : ubuntu



Step 2: Type ssh 172.168.1.201

C:\Users\Admin\Pictures\Screenshots\Screenshot (21).png

Step 3 : To change the directory : **cd /var/www**

C:\Users\Admin\Pictures\Screenshots\Screenshot (14).png

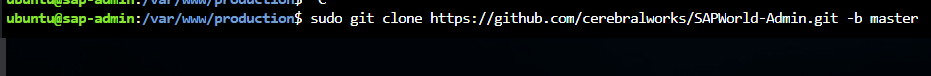
Step 4 : To create the new folder **: sudo mkdir production**

C:\Users\Admin\Pictures\Screenshots\Screenshot (15).png

Step 5 : To change the directory to production **: cd production**

C:\Users\Admin\Pictures\Screenshots\Screenshot (16).png

Step 6 : To clone the Admin code from the repository : **sudo git clone** [**https://github.com/cerebralworks/SAPWorld-Admin.git**](https://github.com/cerebralworks/SAPWorld-Admin.git) **-b master**



Step 7 : To change the directory : **cd SAPWorld-Admin**

C:\Users\Admin\Pictures\Screenshots\Screenshot (18).png

Step 8 : To install the node js **: sudo apt install –g nodejs (If install not required)**

**C:\Users\Admin\Pictures\Screenshots\Screenshot (17).png**

Step 9 : To install angular : **sudo npm install –g @angular/cli (If install not required)**

C:\Users\Admin\Pictures\Screenshots\Screenshot (18).png

Step 10 : To install all the packages in our project : **sudo npm install –force**

C:\Users\Admin\Pictures\Screenshots\Screenshot (19).png

Step 11: To check all the packages install without any error : **sudo npm start**

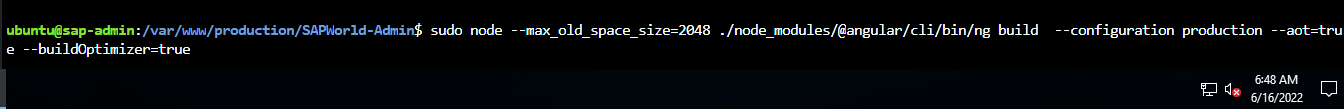
C:\Users\Admin\Pictures\Screenshots\Screenshot (21).png  
Step 12 : To change the environment variable in **src/environments/environment.prod.ts** file and commit in repository

**serverUrl:'https://apiurl:5003' Api url**

**apiPath:'https:// apiurl:5003' Api url**

**app\_url:** **'https://sapworld.io/' App url**

Step 13 : After commiting , pull the code from the repository : **sudo git pull origin master**

Step 14 : To take build in the server **: sudo node --max\_old\_space\_size=2048 ./node\_modules/@angular/cli/bin/ng build --configuration production --aot=true** 

Step 15 : After taking build , To move the build files to domain path **: cp -R dist/\* /var/www/admin\_sapworld/**

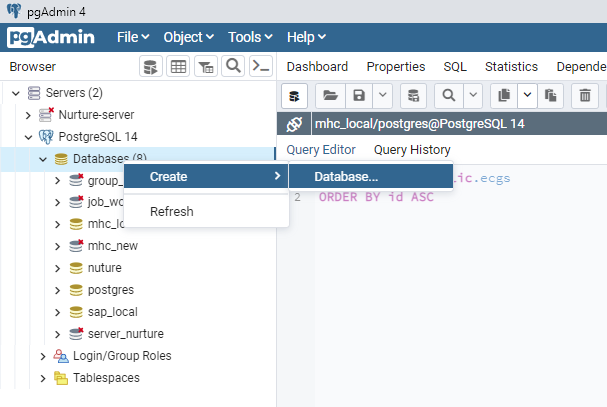
C:\Users\Admin\Pictures\Screenshots\Screenshot (23).png

Step 16: To check the site is working or not : [**https://admin.sapworld.io/**](https://admin.sapworld.io/)

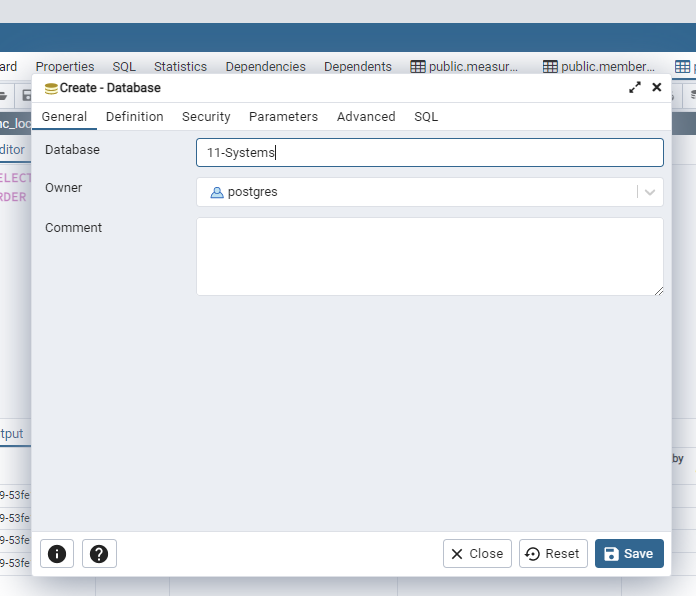
**Import Database in PgAadmin**

Step 1 : In local we use postgre 14 version make sure to use same version in the server

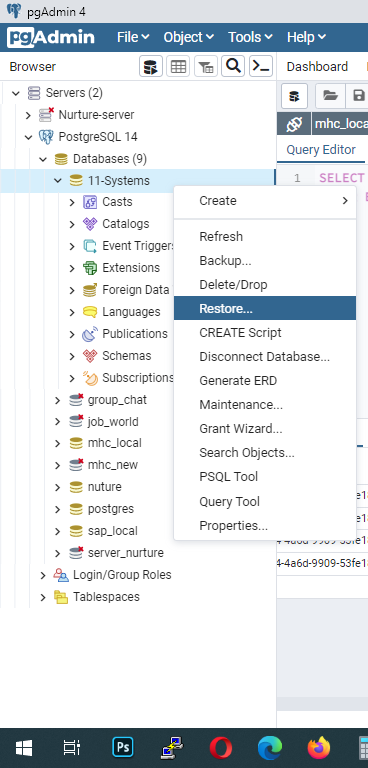
Step 2 :In pgAdmin Select you Database and click right side mouse button and select create opction and Database (pgAdminDB->Create->Database)



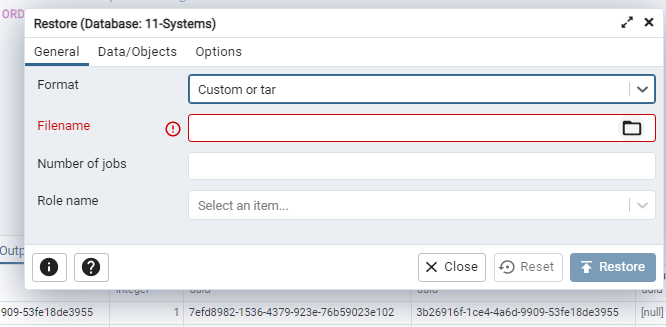
Step 3 :In the Create-Database popup enter your database name for your project and click the save button

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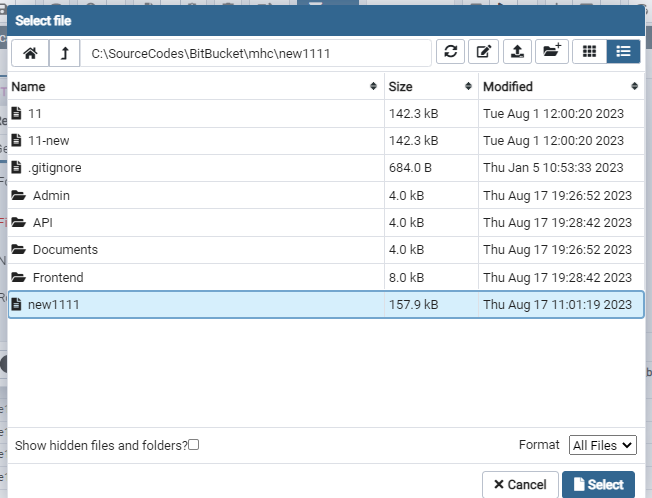
Step 4 :(Import local DB)After successfully create new database select the new database and click the right click Restore… option

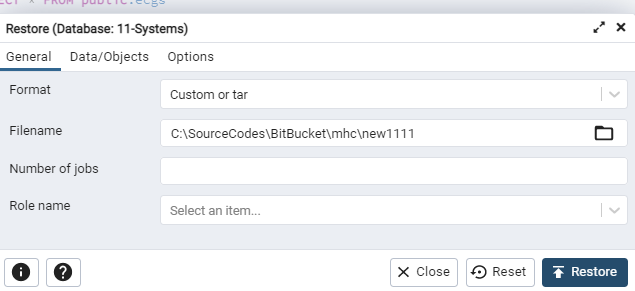


Step 5 :In the Restore Database popup in the file name section click the folder icon placed on the right side this will open to select our local db

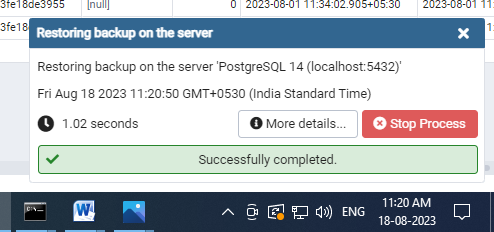


Step 6 :after select db click the select button you will see the selected db path in the Filename input field





Step 7 :after our selected db path showing in the field click the Restore button and once the db import successfully you will see import successful popup on the screen right side



Step 8 :Once db successfully import check the tables to open like (Schemas->public->Tables) will list the imported tables name