**Creating a server**

**1.**Creating a server with the required system resources like memory,cpu , internal storage and required OS(ubuntu18.04)

2.Install the xrdp with the below commands.

i) sudo apt install tasksel.

ii) sudo tasksel install ubuntu-mate-desktop.

iii) sudo apt install xrdp

iv) sudo reboot.

3.Install the java with below commands.

i) sudo apt-get -y install openjdk-8-jdk.

Or

Sudo apt-get -y install openjdk-11-jdk

4.Install apache2 for hosting dist with below commands.

i) sudo apt install apache2

5)Install postgresql database with below commands.

i)sudo apt-get install wget ca-certificates

ii)sudo add-apt-repository 'deb http://apt.postgresql.org/pub/repos/apt/ xenial-pgdg main'

iii)wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -

iv)sudo apt-get update

v)sudo apt-get install postgresql-10

vi)sudo systemctl start postgresql

vii)sudo systemctl status postgresql

viii)sudo su – postgres

ix)psql

x)\password postgres

xi) set the password as oded@12 for postgres user

6)install pgadmin4 with below commands.

i) to remove old pgadmin4 -> sudo apt autoremove pgadmin4

ii)curl https://www.pgadmin.org/static/packages\_pgadmin\_org.pub | sudo apt-key add

iii)sudo sh -c 'echo "deb https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/$(lsb\_release -cs) pgadmin4 main" > /etc/apt/sources.list.d/pgadmin4.list && apt update'

iv) sudo apt install pgadmin4.

7) create a postgres database with names MFFTest,audit(for mffjars) and ariadne (for solitxjars) with role ariadne(password aswindia) either using CLI or by connecting to pgadmin4.

8)Crosscheck weather the same databases are there in application.yml file of jar files and create a profiling for the new server in all the jars.

9)create default-ssl.conf file in /etc/apache2/sites-enabled by using the below command.

sudo a2ensite default-ssl

10)configure the default-ssl.conf file according the domain names of that particular server and ssl certificates.

11)enable ssl by using the below command.

sudo a2enmod ssl

12)upload the ssl certificates by following the below steps.

i.Get the Certificates from provider as .Zip(Mff and Solitx) format

ii.Extracts the files

iii.Rename

mobilefirstfinance.crt.pem to mff.crt

mobilefirstfinance.key.pem to mff.key

mobilefirstfinance.ca.crt.pem to mff-ca.crt

solitx.io.crt.pem to tps.crt

solitx.io.key.pem to tps.key

iv. Place these certificates in production server

v. Replace old certificates configuration with new certififcates in apache2

-> open /etc/apache2/sites-available/default-ssl.conf

- >Change below configuration

SSLCertificateKeyFile /root/Downloads/New\_Certificates/mobilefirstfinance/mff.key

SSLCertificateFile /root/Downloads/New\_Certificates/mobilefirstfinance/mff.crt

SSLCertificateChainFile /root/Downloads/New\_Certificates/mobilefirstfinance/mff-ca.crt

->Restart apache2

sudo service apache2 restart

vi. Generate .p12 file from certificate files using below commands

openssl pkcs12 -export -in mff.crt -inkey mff.key -name \*.mobilefirstfinance.com -out mff.p12

openssl pkcs12 -in mff.p12 -clcerts -nokeys -out test\_mff.crt

sudo keytool -importcert -keystore /usr/lib/jvm/java-8-openjdk-amd64/jre/lib/security/cacerts - storepass changeit -file test\_mff.crt -alias alias

sudo service apache2 restart

openssl pkcs12 -export -in tps.crt -inkey tps.key -name \*.solitx.io -out tps.p12

openssl pkcs12 -in tps.p12 -clcerts -nokeys -out test\_tps.crt

sudo keytool -importcert -keystore /usr/lib/jvm/java-8-openjdk-amd64/jre/lib/security/cacerts -storepass changeit -file test\_tps.crt -alias alias

-> for java 9+

sudo keytool -importcert -keystore -cacerts -storepass changeit -file test\_tps.crt -alias sandbox.solitx.io

sudo service apache2 restart

note : while generating .p12 it will ask password , remember that password we have to same in application.yml or application.properties in zull jar

7.Add new .p12 file to the following jars and reboot the server and also add the keys to the server:

Mffjars: zull,thirdparty jars like docusign(aws)and cronjob,client-userdetails,MFF-root configuration jars

Mff related Keys:

docusign keys: /opt/docusign

Solitx jars: zull,login,smartcontract

Solitx related keys:

metaco keys: /root/Desktop/metaco\_keys

chainservicekeys: /opt/solitx/

8.sudo reboot now