

STEPS TO DEPLOY FIR MANAGEMENT SYSTEM PROJECT

Open the terminal in ubuntu OS and enter the following commands in the order as they are mentioned:

Note-Install the prerequisites required for Hyperledger Blockchain by using the following link if not installed already.

<https://medium.freecodecamp.org/how-to-build-a-blockchain-network-using-hyperledger-fabric-and-composer-e06644ff801d>

(Follow this link till “3. Installing a local Hyperledger Fabric runtime”).

Go inside the fir-management-network directory and run the following commands.

1. `composer archive create --sourceType dir --sourceName .`
2. `composer network install --archiveFile fir-management-network@0.0.1.bna --card PeerAdmin@hlfv1`
3. `composer network start --networkName fir-management-network --networkVersion 0.0.1 --networkAdmin admin --networkAdminEnrollSecret adminpw --card PeerAdmin@hlfv1 --file fir-management-admin.card`
4. `composer card import --file fir-management-admin.card`

This will setup the fir-management-network on hyperledger blockchain.Keep running hyperledger composer.

Now click on “connect now”.

- In test tab, create three participants called as “VictimId”(Victim participant), “police2”(Police Department participant) and Forensic(Forensic Department Participant).
- Now using admin go to “ID registry->Issue New ID” and create three cards called as “Victim”, “Police” and “Forensic”.
- Export these network cards using the following command.

```
composer card export -c admin@fir-management-network -f admin-plus-cert.card
```

```
composer card export -c VictimId@fir-management-network -f victim-plus-cert.card
```

```
composer card export -c police2@fir-management-network -f police2-plus-cert.card
```

```
composer card export -c Forensic@fir-management-network -f forensic-plus-cert.card
```

STEPS TO SETUP MULTI USER AUTHENTICATION

We have used GitHub OAUTH2 authentication to enable multi user mode. Kindly follow the below link to setup:

<https://hyperledger.github.io/composer/v0.19/integrating/enabling-rest-authentication>

- Run the rest server by running the following command.

```
composer-rest-server -c admin@fir-management-network -m true
```

- Open the rest server in a browser by entering the following URL

<http://localhost:3000/auth/github/callback>

In the rest server add all the exported network cards using the api called as “/wallet/import”

FRONT END OF OUR SYSTEM

The front end of our project is written in HTML, CSS and JAVASCRIPT. We have created two pages called as “home.html” and “police.html” for which the corresponding JavaScript files are “w4.js” and “w5.js” respectively. CSS file is present in “w4.css” which is used for both the files.

The JavaScript files need to be changed for connecting the front end to our hyperledger blockchain. The steps are as follows:

1. Get the ip of your system and store it somewhere.
2. Get the token from “Access Token” in rest server and store it somewhere.
3. Open w4.js and w5.js files and wherever applicable change the token id and ip.
4. Open the “home.html” page and “police.html” and follow the demo video we have uploaded. The link for the video is as follows:

https://youtu.be/GC3nKFuBY_c