User Study Documentation for Blockchain Enabler Platform

This user study documentation is provided for better understanding of the project and works as guide to navigate and work around the project.

Github link for the project: https://github.com/DataManagementLab/thesis-blockchainManager

Follow the readme for the project to install the dependencies and project in your system.
After the installation has been successfully done, go through these tasks in order to run and evaluate the project.

Task1: Setting up 2 Organization network locally

For creating a network with 2 orgs, Organisation needs to be invited by other organisation(owning the network) in order to join its network

To setup follow the instructions below.

- Initialise and create two Orgs CompanyA and CompanyB
- Add CompanyB to the network created by CompanyA
- CompanyB joins the companyA network

Clone the project and navigate to the folder location

go run main.go init CompanyA --local

go run main.go init CompanyB --local

go run main.go create -u CompanyA

go run main.go create -u CompanyB

go run main.go add -u CompanyA -z $HOME/.enabler/platform/CompanyB/CompanyB_network1/enabler/CompanyBOrg1_Invite.zip

go run main.go join -u CompanyB -z $HOME/.enabler/platform/CompanyA/CompanyA_network1/enabler/CompanyAOrg1_accept_transfer.zip

Task 2 : Setting up 3 Organization network locally

- Initialize and create another organization CompanyC
- Add CompanyC to the network created by CompanyA
- CompanyC joins the network

NOTE: The last Organization to endorse needs to update it to the network using —update flag in sign.

go run main.go init CompanyC --local

go run main.go create -u CompanyC

go run main.go add -u CompanyA -z ~/.enabler/platform/CompanyC/CompanyC_network1/enabler/CompanyCOrg1_Invite.zip

go run main.go sign -u CompanyB --update -z ~/.enabler/platform/CompanyA/CompanyA_network1/enabler/CompanyCOrg1_sign_transfer.zip

go run main.go join -u CompanyC -z ~/.enabler/platform/CompanyA/CompanyA_network1/enabler/CompanyAOrg1_accept_transfer.zip

Task 3: Self setup

- To the above 3 Organization setup add another organisation CompanyD.
- CompanyD sends the invite file to CompanyA and CompanyA adds CompanyD to its network.
- Sign the transfer file by CompanyB and CompanyC and then update it on to the network.
- Next join the network by CompanyD

Task 4 : Setting up 2 Organization network Remotely (Optional)

- Initialise and create organisations CompanyX and CompanyY on these different machines which are part of the cluster.
- Add CompanyY to the network created by CompanyX
- CompanyY joins the companyA network

On System1

go run main.go init CompanyX

go run main.go create -u CompanyX

On system2

go run main.go init CompanyX

go run main.go create -u CompanyX

Send the invite.zip file from CompanyY to CompanyX and then on System1

go run main.go add -u CompanyX -z <path_to_/CompanyYOrg1_Invite.zip>

Next send the accept.zip from CompanyX to CompanyY and then on System2

go run main.go join -u CompanyY -z <path_to_/CompanyXOrg1_accept_transfer.zip>

Kindly refer to this survey once you are done with each of the tasks.

https://s.surveyplanet.com/hfw8mrwt