**Hyperledger Installation On Distributed Setup**

Install Go,docker,curl,node.js,npm and docker-compose

**1.Docker Installation:**

1. sudo apt-get update

2. sudo curl -sSL https://get.docker.com/ | sh

**----optional docker compose ,npm,node.js------**

**Docker compose installation**

**1. sudo apt update**

**2. sudo apt install docker-compose**

**2. For node.js and npm please follow these stepwise**

**1. sudo bash -c "cat >/etc/apt/sources.list.d/nodesource.list" <<EOL  
deb https://deb.nodesource.com/node\_6.x xenial main  
deb-src https://deb.nodesource.com/node\_6.x xenial main  
EOL**

**2. curl -s https://deb.nodesource.com/gpgkey/nodesource.gpg.key | sudo apt-key add –**

**3. $ sudo apt update**

**4. $ sudo apt install nodejs**

**5. $ sudo apt install npm**

**3. Go installation**

1. **sudo curl -O**<https://storage.googleapis.com/golang/go1.9.2.linux-amd64.tar.gz>
2. **sudo tar -xvf go1.9.2.linux-amd64.tar.gz**
3. **$ sudo mv go /usr/local**
4. **$ echo 'export PATH=$PATH:/usr/local/go/bin' >> ~/.profile**
5. **$ source ~/.profile**

**4. Hyperledger Installation**

!! **Prerequisites** :

1. hostname of nodes has to be notified and edit it in the docker-stack-template.yml

Ex :----Node.hostname== node\_name

2. Subnet range and gateway IP from IS team

**Installation**

1. Install binaries curl **-**sSL https:**//**goo**.**gl**/**6wtTN5 **|** bash **-**s 1.0**.**4
2. **export PATH=$PWD/bin:$PATH**
3. **git clone**[**https://github.com/hyperledger/fabric-samples.git**](https://github.com/hyperledger/fabric-samples.git)
4. **docker stop `docker ps -qa`**
5. **docker rm `docker ps -qa`**
6. **docker rmi –f `docker images -q`**
7. **cd fabric-samples/first-network**
8. **Replace the script.sh byfn.sh in the manager node with the file I have sent ‘script.sh’ ‘byfn.sh’**
9. **Upload the docker-stack-template.yml file**
10. **docker swarm init –advertise-addr <ipaddress of manager >**
11. **Go to node 2 and join the swarm using the token generated .**
12. **docker network create –attachable –-driver overlay –-subnet<ip address/mask> --gateway<first ip address of subnet> byfn**

**!!!!----IMP ----ask the IS team to assign a subnet as the byfn can conflict with other subnet if not specified in the command--!!**

1. **./byfn –m generate**
2. **Copy the crpto-config and channel artifacts folder into another node and make sure it has the same folder structure as of node 1**
3. **Replace the script.sh in the manager node with the file I have sent ‘script.sh’**
4. **./byfn –m up**
5. **Now u can go into cli container and run the script file ‘script.sh’.**