**Node API versioning**

Node APIs are now having two versions.

1. **Version - v1**

V1 supports the API’s 5 API’s for integraledger as mentioned below

1. **/registerIdentity**
2. /**identityexists**
3. **/valueexists**
4. **/registerkey**
5. **/keyforowner**
6. **/updateidentity**

**2. Version - v2**

V2 supports the API’s 5 API’s for integraledger as mentioned below

1. **/createDocId**
2. /**createDocCollection**
3. **/docLocater**
4. **/createSignature**
5. **/registerKey**

**Chaincode Versioning**

Chaincode now has two versions **version v1** and **version v2.**

**version - v1**

Chaincode version v1 supports the node API version v1. It divided into two parts as gll & gli.

**Gll** has functions which are called from below API’s

1. /registerIdentity
2. /identityexists
3. /valueexists
4. /updateidentity

**GLI** has functions which are called from below APIs

1. /registerKey
2. keyforowner

**version - v2**

Chaincode version v2 supports the node API version v2. It divided into two parts as gll & gli as well.

**Gll** has functions which are called from below API’s

1. /createDocId
2. /createDocCollection
3. /docLocater

**GLI** has functions which are called from below APIs

1. /registerKey
2. /createSignature

**Using the Network on Local:**

1. Download the Network zip file from the below link:

<https://drive.google.com/file/d/1QWD7jbU2C3tmX_FF4M4gWx6VBgkac7nQ/view?usp=sharing>

2. Extract the zip file.

3. Clone the **chaincode** repository on the same directory where the network is extracted.

**$ git clone https://github.com/IntegraLedger/integra-chaincode.git**

4. Clone the **SDK** repository on the same directory when the network is extracted.

**$ git clone https://github.com/IntegraLedger/integra-node-sdk.git**

5. Open the terminal and change the working directory to the **integra-network** directory.

6. Run the following command to create the network containers:

**$ docker-compose -f docker-compose-cli.yaml up -d**

7. SSH into the ***cli*** container with the following command:

**$ docker exec -it cli bash**

8. To create the channels **(gli, gll)** and join the peers to the channels, run the following command:

**$ sh scripts/channel\_peer.sh**

9. To **install** the chanicode on all peers and **instantiate** the chaincode on the **gll** channel, run the following command:

Enter the version as **v1** or **v2** for chaincode as explained above

**$ sh scripts/install\_chaincode.sh gll v2**

10. To **install** the chanicode on all peers and **instantiate** the chaincode on the **gli** channel, run the following command:

Enter the version as **v1** or **v2** for chaincode as explained above

**$ sh scripts/install\_chaincode.sh gli v2**

**Running Node SDK:**

1. Open a terminal and change the working directory to the **integra-node-sdk** directory.

2. Install all the required packages to run the SDK by using the following command:

**$ npm install**

3. Install the nodemon utility by using the following command:

**$ npm install -g pm2**

4. To start the SDK, run the following command:

**$ PORT=3000 pm2 start bin/www --name=”node-sdk”**

5. Register the Admin by using the following API:

**GET /v2/fabric/register-admin**

Eg. **localhost:3000/v2/fabric/register-admin**

6. Register the user by using the following API:

**GET /v2/fabric/register-user**

Eg. **localhost:3000/v2/fabric/register-user**

**Run Test Case:**

1. Change the current working directory to **app**/**v1/test** or **app**/**v2/test**. **app**/**v1/test** will run test cases for version v1 apis and **app/v2/test** will run test cases for v2 api.

2. Run the following command to install the required packages

**$ npm install**

3. Run the test cases by using the following command:

**$ npm run test**

**Upgrade Chaincode:**

1. Open a terminal and change the working directory to the **integra-chaincode** directory.

2. Make the changes into the chaincode as per requirement.

3. SSH into the ***cli***container by using the following command:

**$ docker exec -it cli bash**

4. Run the following command to **upgrade** the chaincode

a) To upgrade on **gll** channel:

Here v1 and v2 version of chaicode

**$ sh scripts/upgrade\_gll\_chaincode.sh version\_number chaincode\_version**

**For example:** sh scripts/upgrade\_gll\_chaincode.sh 1.6 v1

b) To upgrade on **gli** channel:

Here v1 and v2 version of chaicode

**$ sh scripts/upgrade\_gli\_chaincode.sh version\_number v1 chaincode\_version**

**For example:** sh scripts/upgrade\_gli\_chaincode.sh 1.6 v1

**To View Swagger API docs:**

We have created the endpoints for viewing swagger docs.

<IP:PORT>/<API-VERSION>/docs

**Eg. localhost:3000/v2/docs**