

MSDF SDCOE Ed-Fi Transcript Prototype: Linux Deployment Guide

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Contents

1. Machine minimum specifications	2
2. Deployment Steps	2
2.0. Adding a new SSH key to your GitHub account	2
2.2. Install ganache-cli and @rsksmart/ethr-did-utils	3
2.3. Install build essential package for some npm packages to run	3
2.4. Install yarn globally	3
2.5. Run ganache-cli and deploy the smart contract	3
2.6. Add .env files in every sub folders	3
2.7. Database	3

1. Machine minimum specifications

RAM: 2GB

Hard Drive: 15GB

Operating System: Ubuntu 20.04

Other Dependencies:

node v14.15.1

npm 6.14.8

pm2 4.5.0

nginx 1.18.0

2. Deployment Steps

2.0. Adding a new SSH key to your GitHub account

Follow the instructions in the documentation given below.

[Adding SSH Key](#)

Clone the repository and move the project in /opt/sdcoe directory

```
$ git clone git@github.com:leapfrogtechnology/sdcoe-transcript.git
```

```
$ sudo mv sdcoe-transcript/ /opt/sdcoe-transcript
```

2.1. Install curl and Node.JS with the following commands

```
$ sudo apt install curl
```

```
$ curl -sL https://deb.nodesource.com/setup_14.x -o nodesource_setup.sh
```

```
$ sudo bash nodesource_setup.sh
```

```
$ sudo
```

Check if node and npm are installed and running

```
$ node -v
```

```
$ npm -v
```

2.2. Install ganache-cli and @rsksmart/ethr-did-utils

```
$ yarn global add ganache-cli
```

```
$ git clone git@github.com:rsksmart/ethr-did-utils.git
```

2.3. Install build essential package for some npm packages to run

```
$ sudo apt install build-essential
```

2.4. Install yarn globally

```
$ sudo npm i -g yarn
```

2.5. Run ganache-cli and deploy the smart contract

a. Install ganache-cli

```
$ nohup ganache-cli -p 8545 -m SDCOE-project >  
/var/logs/sdcoe/sdcoe-ganache-cli.log &
```

b. Deploy ethr-did-registry smart contract

```
$ cd ethr-did-utils  
$ PORT=8545 yarn deploy-registry
```

2.6. Add .env files in every sub folders

See example .env files, or reference .env files in Windows deployment guide for more information.

2.7. Database

a. Install postgres

```
$ sudo apt update  
$ sudo apt install postgresql postgresql-contrib
```

- b. Create new user and set credentials

```
$ sudo -su postgres
$ psql postgres
$ \password
```

Note: The above commands is used to set password for default user postgres

- c. Create a database named SDCOE on PostgreSQL terminal

```
$ CREATE DATABASE SDCOE;
```

- d. Populate the .env files with necessary credentials.

```
$ cp /opt/sdcoe/transcript-api/.env.example
/opt/sdcoe/transcript-api/.env
```

```
$ nano .env
```

Then edit the fields

- e. Make migration and add seed data

```
$ yarn migrate
$ yarn seed
```

2.8. Start PM2 service

Note: this step might not be required (almost sure. It's not required :D)

Start pm2 on startup

```
$ sudo env PATH=$PATH:/usr/bin /usr/lib/node_modules/pm2/bin/pm2 startup
systemd -u {username} --hp /home/{username}
```

```
$ pm2 save
```

Start pm2 service for current user

```
$ sudo systemctl start pm2-{username}
```

2.9. Install nginx

```
$ sudo apt update
```

```
$ sudo apt install nginx
```

```
$ sudo ufw allow 'Nginx HTTP'
```

```
$ sudo ufw enable
```