Deployment Guide on CMP

This document is for deploying CMP in various deployment environments. Please refer to the list below for specific deployment.

Version History

Version Code	Description	Owner
1.0.0	Initial documentation with only 1 installation instruction	Frans Siswanto

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Other Information

Name	Description	Repository
cmp	Contains backend code for the cmp.	https://github.com/nexmo-se/cmp
cmp-frontend	Contains frontend code for the cmp, and it builds using ReactJS	https://github.com/nexmo-se/cmp-frontend

There are several deployment environments that you can choose.

- Linux (Ubuntu 20.04)

1. Linux (Ubuntu 20.04) Deployment

This document is for Linux (Ubuntu 20.04) Deployment. There are several step by step guides that you need to follow.

The guide is separated into different headings. For example 1.1 is for step number 1. You can go to the repo for requirements.

1.1. Installing MySQL 5

Please refer to this document for instruction on how to install MySQL 5 on Ubuntu 20.04 (Installing MySQL 5 on Ubuntu 20.04)

1.2. Installing NodeJS 14

We will use nvm to install NodeJS. This will make sure that you do not need sudo to install any packages. To get started, run the following command on your terminal

```
curl -o-
https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.0/install.sh |
bash
```

Running either of the above commands downloads a script and runs it. The script clones the nvm repository to ~/.nvm, and attempts to add the source lines from the snippet below to the correct profile file (~/.bash_profile, ~/.zshrc, ~/.profile, or ~/.bashrc).

Run the following command to start using nvm without restarting your terminal

```
export NVM_DIR="$HOME/.nvm"
[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh"  # This loads nvm
[ -s "$NVM_DIR/bash_completion" ] && \. "$NVM_DIR/bash_completion"
# This loads nvm bash_completion
```

After the installation is complete. You need to install NodeJS 14.x. The below command will install NodeJS 14 and set it as default

```
nvm install 14
```

1.3. Installing Yarn

After installing NodeJS 14, you need to install yarn package manager. We use yarn because of its simplicity. However, if you prefer to use npm, please change the command to npm and skip the yarn installation process.

npm install --global yarn

After the installation is complete, you can test if yarn is up and running by doing

```
$ yarn --version
1.22.17
```

As of this documentation written, the latest yarn version is 1.22.17

1.4. Installing PM2

We will use pm2 as process manager. This will make managing the process easier.

```
npm install --global pm2
```

Upon completion of the installation. You can check using below command

```
pm2 --version
```

1.5. Clone the Backend

The backend repository is listed in the header of this document. You can refer to the repository URL because this command might be outdated.

```
git clone https://github.com/nexmo-se/cmp.git
```

After cloning, make sure you navigate to the folder, because we will focus on that folder now.

```
cd cmp
```

Inside the folder, you need to install all dependencies first before doing anything. Run the following command

```
sudo apt-get install build-essential
yarn install
```

1.6. Setting Up Environment Variables

Still in the cmp folder. If you logged out, please navigate back to the cmp folder. You need to set up environment variables. Please copy the example, and make a modification as necessary.

```
cp .env.example .env
```

After that, you should find several default values. Change the default values if necessary, if not, there are some values you need to change. Please note that below variables are the required changes. It will not represent every environment variable.

Variable Name	Description	Example
HOST	Your host in full address	http://localhost
PORT	Your port that is accessible from inside	8080
ACCESS_HOST	Your host in full address	https://localhost
ACCESS_PORT	Your port that is accessible from outside	8080
CSV_INSERT_MODE	Letting backend to insert directly csv or using sql statement	sql
CSV_UPLOAD_PATH	Location where the uploaded files will be temporary placed	/home/ubuntu/cmp/csvs/upload
CSV_ARCHIVE_PATH	Location where uploaded files will be archived	/home/ubuntu/cmp/csvs/archive
CSV_DATALOAD_PATH	Location where uploaded file will be placed. This is for CSV_INSERT_MODE is csv	/home/ubuntu/cmp/csvs/dataload
REPORT_FILE_PATH	Location where to upload the report file	/home/ubuntu/cmp/csvs/report
DATABASE_NAME	Your database name	cmp
DATABASE_USERNAME	Your database username	cmp
DATABASE_PASSWORD	Your database password	cmp
DATABASE_USE_SSL	Determine if you want to use ssl or not	false

To edit, please use your preferred editor. For this example, you will use nano. We assume you already have a good knowledge of using nano

```
nano .env
```

1.7. Initialising Database

The database needs to be initialised for the backend. Run the following command

```
yarn migrate
```

After successful migration, you need to seed the database with initial value

```
yarn seed
```

1.8. Start Backend Services

There are several backend services that you need to start. However, before that you need to initialise some folder needed by the backend service

```
mkdir -p /home/ubuntu/cmp/csvs/report
mkdir -p /home/ubuntu/cmp/csvs/upload
mkdir -p /home/ubuntu/cmp/csvs/archive
mkdir -p /home/ubuntu/cmp/csvs/dataload
```

Please make sure that all the paths are the same you set in the environment variables.

Next, you will start the backed services with pm2

```
pm2 start --name picker "yarn devPicker"
pm2 start --name blast "yarn devBlast"
pm2 start --name report "yarn devReport"
pm2 start --name web "yarn devWeb"
```

It will start 4 processes for the backend. You can check the process by running

```
pm2 ls
```

1.9. Clone the Frontend

In this section, you will spin up the frontend service. You will clone and set up environment variables for the frontend service.

Note: Make sure you are on /home/ubuntu. You are not supposed to clone the repository inside cmp folder

```
git clone https://github.com/nexmo-se/cmp-frontend.git
```

After that, navigate to the frontend directory

```
cd cmp-frontend
```

1.10. Installing Dependencies

To install dependencies is quite straight forward. You just need to run the following

```
yarn install
```

We assume that you are inside cmp-frontend folder

1.11. Setting Up Environment Variables

You can copy existing examples and modify the environment variables.

```
cp .env.example .env
```

Next, you can modify the .env file using your favorite text editor. In this example we are using nano

Variable Name	Description	Example
REACT_APP_BASE_API_URL	Your api location. This url should not end with / sign	http://localhost:8080

To start using nano, you can do the following

```
nano .env
```

1.12. Start Frontend Service

Before starting the service, you need to build the package using the following command

```
yarn build
```

After that you can use pm2

```
pm2 start --name frontend "yarn start:prod"
```

After that, you can access your frontend in `http://<ip_address>:5000` with sysadmin as username and password123 as default password