

# Mjlsi Deployment Guide

Ubuntu 20.04 Server

## Application information

<b>Application Name</b> Mjlsi
<b>Backend</b> Laravel 10 and .NET 6.0
<b>Frontend</b> Angular 15
<b>Database</b> MySQL 8
<b>NodeJS</b> v 18.16.0
<b>Npm</b> v 9.5.1

# Install Apache

## 1. Install Apache on ubuntu

Follow the following steps to install Apache2 on your server, and make sure that there no other server is installed on the port 80:

- sudo apt update
- sudo apt install apache2
- sudo a2enmod rewrite
- sudo a2enmod headers
- sudo a2enmod proxy
- sudo a2enmod proxy\_http
- sudo a2enmod proxy\_html
- sudo systemctl restart apache2

<https://www.digitalocean.com/community/tutorials/how-to-install-the-apache-web-server-on-ubuntu-20-04>

[https://www.digitalocean.com/community/tutorials/how-to-rewrite-urls-with-mod\\_rewrite-for-apache-on-ubuntu-20-04](https://www.digitalocean.com/community/tutorials/how-to-rewrite-urls-with-mod_rewrite-for-apache-on-ubuntu-20-04)

## 2. Install MySQL on Ubuntu

- sudo apt update
- sudo apt install mysql-server
- sudo systemctl start mysql.service
- sudo mysql
- ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql\_native\_password BY 'BoL97TsOMYwacmoD@';
- exit

<https://www.digitalocean.com/community/tutorials/how-to-install-mysql-on-ubuntu-20-04>

### 3. Install PHP and Composer

```
- sudo apt install software-properties-common
- sudo add-apt-repository ppa:ondrej/php
- sudo apt update
- sudo apt install php8.1
- php -v : should be PHP 8.1.xx
- sudo apt-get install -y php8.1-cli php8.1-common php8.1-mysql php8.1-zip php8.1-gd php8.1-mbstring
php8.1-curl php8.1-xml php8.1-bcmath php8.1-redis
- curl -sS https://getcomposer.org/installer -o /tmp/composer-setup.php
- HASH=`curl -sS https://composer.github.io/installer.sig`
- echo $HASH
- php -r "if (hash_file('SHA384', '/tmp/composer-setup.php') === '$HASH') { echo 'Installer verified'; } else {
echo 'Installer corrupt'; unlink('composer-setup.php'); } echo PHP_EOL;"
- sudo php /tmp/composer-setup.php --install-dir=/usr/local/bin --filename=composer
```

<https://www.digitalocean.com/community/tutorials/how-to-install-php-8-1-and-set-up-a-local-development-environment-on-ubuntu-22-04>

### 4. Install phpMyAdmin

```
- sudo apt update
- sudo apt install phpmyadmin php-mbstring php-zip php-gd php-json php-curl
- click with space on apache2(this is very important)
- sudo phpenmod mbstring
- sudo systemctl restart apache2
```

<https://www.digitalocean.com/community/tutorials/how-to-install-and-secure-phpmyadmin-on-ubuntu-20-04>

## 5. Install ImageMagick and GhostScript

- sudo apt install imagemagick imagemagick-doc
- convert -version
- sudo apt install imagemagick php8.1-Imagick
  - **replace policy.xml in /etc/ImageMagick-6/**
- sudo apt-get install ghostscript
- sudo apt install php-imagick

## 6. Install Redis

- sudo apt update
- sudo apt install redis-server
- sudo systemctl status redis

<https://www.digitalocean.com/community/tutorials/how-to-install-and-secure-redis-on-ubuntu-20-04>

## 7. Install NodeJs and NPM

- sudo apt update
- curl -fsSL https://deb.nodesource.com/setup\_18.x | sudo -E bash -
- sudo apt install -y nodejs
- node -v
- curl -qL https://www.npmjs.com/install.sh | sh
- curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.3/install.sh
- curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.3/install.sh | bash
- source ~/.bashrc
- nvm install v18
- sudo npm install -g node-gyp
- sudo apt update && sudo apt install build-essential

<https://www.digitalocean.com/community/tutorials/how-to-install-node-js-on-ubuntu-20-04>

## 8. Install .NET SDK

```
- sudo wget https://packages.microsoft.com/config/ubuntu/20.04/packages-microsoft-prod.deb -O packages-microsoft-prod.deb
- sudo dpkg -i packages-microsoft-prod.deb
- sudo rm packages-microsoft-prod.deb
- sudo apt-get update
- sudo apt-get install -y dotnet-sdk-6.0
- sudo apt-get install -y aspnetcore-runtime-6.0
- sudo dotnet tool install --global dotnet-ef --version 6.0.4
```

<https://learn.microsoft.com/en-us/dotnet/core/install/linux-ubuntu-2004>

## 9. Install laravel-echo-server

```
- npm install -g laravel-echo-server
```

## 10. Install git

```
- sudo apt update
- sudo apt install git
- git --version
```

## 11. Install supervisor

```
- sudo apt update && sudo apt install supervisor
- sudo systemctl status supervisor
```

<https://www.digitalocean.com/community/tutorials/how-to-install-and-manage-supervisor-on-ubuntu-and-debian-vps>

## 12. Install Angular Cli

```
- sudo npm install -g @angular/cli@15
```

## 13. Build Mjlsi Apps

- clone the repo into **mjlsi-git** folder
- modify .env and copy it to the Backend folder
- copy the shell scripts files to your home directory (be.sh , fe.sh , chat.sh , ds-be.sh and ds-fe.sh)
- bash be.sh
- bash fe.sh
- bash chat.sh
- Copy .htaccess to /var/www/html/app
- Copy laravel-echo-server.json to /var/www/html/app/BackEnd
- copy queue-worker.conf , queue-chat-worker.conf , laravel-echo-worker.conf to /etc/supervisor/conf.d
- sudo supervisorctl reread
- sudo supervisorctl update
- sudo systemctl enable supervisor
- sudo systemctl start supervisor

## 14. Build Digital Signature

- Clone the repo into **mjlsi-ds-git** folder
- bash ds-be.sh
- bash ds-fe.sh
- Copy kestrel-mjlsi.service to /etc/systemd/system/
- sudo systemctl start kestrel-mjlsi.service