

# Setting And Installing Frappe Bench

Following steps shows the installing and setup for Frappe bench in WSL (Windows Subsystem for Linux).

## 1. Update and Upgrade installing Packages in Linux.

```
itzklp@LAPTOP-RJB11T6:/mnt/d/kalp_azrio/Frappe$ sudo apt update && sudo apt upgrade -y
[sudo] password for itzklp:
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [7244 B]
Get:5 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:9 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:10 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [967 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [238 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [310 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:14 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:15 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:16 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.7 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:18 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 2117 kB in 7s (307 kB/s)
Reading package lists... Done
Building dependency tree... Done
```

## 2. Installing necessary dependencies for setup of Frappe bench like Python3, git, wget etc.

```
itzklp@LAPTOP-RJB11T6:/mnt/d/kalp_azrio/Frappe$ sudo apt install -y build-essential python3 python3-pip python3-dev git curl wget
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.43.0-1ubuntu7.1).
curl is already the newest version (8.5.0-2ubuntu10.6).
wget is already the newest version (1.21.4-1ubuntu4.1).
The following additional packages will be installed:
  bzip2 cpp cpp-13 cpp-13-x86-64-linux-gnu cpp-x86-64-linux-gnu dpkg-dev fakeroot g++ g++-13 g++-13-x86-64-linux-gnu g++-x86-64-linux-
  javascript-common libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libaom3 libasan8 libatomic1 libc-dev-bin
  libexpat1-dev libfakeroot libfile-fcntllock-perl libgcc-13-dev libgd3 libgomp1 libheif-plugin-aomdec libheif-plugin-aomenc libheif-p
  libjs-sphinxdoc libjs-underscore liblsan0 libmpc3 libpython3-dev libpython3-stdlib libpython3.12-dev libquadmath0 libstdc++-13-dev l
  manpages-dev python3-minimal python3-pkg-resources python3-setuptools python3-wheel python3.12 python3.12-dev python3.12-minimal rpd
Suggested packages:
```

### 3. Installing Node.js v16 which is compatible with Frappe:

```
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/Frappe$ curl -fsSL https://deb.nodesource.com/setup_16.x | sudo -E bash -
```

```
=====
```

```
DEPRECATION WARNING
```

```
Node.js 16.x is no longer actively supported!
```

```
You will not receive security or critical stability updates for this version.
```

```
You should migrate to a supported version of Node.js as soon as possible.
```

```
Use the installation script that corresponds to the version of Node.js you
```

```
wish to install. e.g.
```

```
* https://deb.nodesource.com/setup_16.x - Node.js 16 "Gallium" (deprecated)
```

```
* https://deb.nodesource.com/setup_18.x - Node.js 18 "Hydrogen" (Maintenance)
```

```
* https://deb.nodesource.com/setup_19.x - Node.js 19 "Nineteen" (deprecated)
```

```
* https://deb.nodesource.com/setup_20.x - Node.js 20 LTS "Iron" (recommended)
```

```
* https://deb.nodesource.com/setup_21.x - Node.js 21 "Iron" (current)
```

### 4. Installing YARN for Resource Management:

```
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/Frappe$ sudo npm install -g yarn
```

```
added 1 package, and audited 2 packages in 2s
```

```
found 0 vulnerabilities
```

```
npm notice
```

```
npm notice New major version of npm available! 8.19.4 -> 11.0.0
```

```
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.0.0
```

```
npm notice Run npm install -g npm@11.0.0 to update!
```

```
npm notice
```

```
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/Frappe$
```

### 5. Installing Redis which helps in caching and queuing tasks.

```
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/Frappe$ sudo apt install -y redis-server
```

```
Reading package lists... Done
```

```
Building dependency tree... Done
```

```
Reading state information... Done
```

```
The following additional packages will be installed:
```

```
  libjemalloc2 liblzfl1 redis-tools
```

```
Suggested packages:
```

```
  ruby-redis
```

```
The following NEW packages will be installed:
```

```
  libjemalloc2 liblzfl1 redis-server redis-tools
```

```
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
```

```
Need to get 1481 kB of archives.
```

```
After this operation, 7558 kB of additional disk space will be used.
```

```
Get:1 http://archive.ubuntu.com/ubuntu noble/universe amd64 libjemalloc2 amd64 5.3.0-2build1 [256 kB]
```

```
Get:2 http://archive.ubuntu.com/ubuntu noble/universe amd64 liblzfl1 amd64 3.6-4 [7624 B]
```

```
Get:3 http://archive.ubuntu.com/ubuntu noble/universe amd64 redis-tools amd64 5:7.0.15-1build2 [1165 kB]
```

```
Get:4 http://archive.ubuntu.com/ubuntu noble/universe amd64 redis-server amd64 5:7.0.15-1build2 [51.7 kB]
```

```
Fetch: 1481 kB in 3s (453 kB/s)
```

```
Selecting previously unselected package libjemalloc2:amd64.
```

```
(Reading database ... 43557 files and directories currently installed.)
```

```
Preparing to unpack .../libjemalloc2_5.3.0-2build1_amd64.deb
```

## 6. Now We have to install MariaDB which gives support for Database

```
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/frappe$ sudo apt install -y mariadb-server mariadb-client
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  galera-4 libcgi-fast-perl libcgi-pm-perl libclone-perl libconfig-inifiles-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-bin libfcgi-perl
  libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmariadb3 libmysqlclient21 libncurses6 libnuma1 libsnappy1
  liburi-perl liburing2 libwrap0 mariadb-client-core mariadb-common mariadb-plugin-provider-bzip2 mariadb-plugin-provider-lz4 mariadb-plugin-provider-lzma mariadb-plugin-provider-snappy
  mariadb-server-core mysql-common pv socat
Suggested packages:
  libmldbm-perl libnet-daemon-perl libsql-statement-perl libdata-dump-perl libipc-sharedcache-perl libio-compress-brotli-perl libbusiness-isbn-perl libregexp-perl
  libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmariadb3 libmysqlclient21 libncurses6 libnuma1 libsnappy1
  liburi-perl liburing2 libwrap0 mariadb-client mariadb-client-core mariadb-common mariadb-plugin-provider-bzip2 mariadb-plugin-provider-lz4 mariadb-plugin-provider-lzma
  mariadb-plugin-provider-snappy mariadb-server mariadb-server-core mysql-common pv socat
0 upgraded, 41 newly installed, 0 to remove and 0 not upgraded.
Need to get 19.3 MB of archives.
```

## 7. Installing MariaDB and starting MariaDB server.

```
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/Frappe$ sudo service mysql start
itzklp@LAPTOP-RJB1IT6:/mnt/d/kalp_azrio/Frappe$ sudo mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user. If you've just installed MariaDB, and
haven't set the root password yet, you should just press enter here.

Enter current password for root (enter for none):
Warning: World-writable config file '/mnt/d/kalp_azrio/Frappe/.my.cnf.3222' is ignored
OK, successfully used password, moving on...
```



## 8. Creating new User in MariaDB using query.

```
itzklp@LAPTOP-RJB31IT6:/mnt/d/kalp_azrio/Frappe$ sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 37
Server version: 10.11.8-MariaDB-0ubuntu0.24.04.1 Ubuntu 24.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE USER 'frappe'@'localhost' IDENTIFIED BY 'your_password';
GRANT ALL PRIVILEGES ON *.* TO 'frappe'@Query OK, 0 rows affected (0.005 sec)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON *.* TO 'frappe'@'localhost' WITH GRANT OPTION;
FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.002 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
EXIT;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> EXIT;
Bye
```

## 9. Installing wkhtmltopdf to get support for PDF related services.

```
itzklp@LAPTOP-RJB31IT6:/mnt/d/kalp_azrio/Frappe$ sudo apt install -y wkhtmltopdf
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  avahi-daemon geoclue-2.0 glib-networking glib-networking-common glib-networking-services gstreamer1.0-p
  libdouble-conversion3 libdw1t64 libevdev2 libfontenc1 libgstreamer-plugins-base1.0-0 libgstreamer1.0-0
  libmbim-glib4 libmbim-proxy libmbim-utils libmd4c0 libmm-glib0 libmtdev1t64 libnl-3-200 libnl-genl-3-20
  libproxy1v5 libqmi-glib5 libqmi-proxy libqmi-utils libqrtr-glib0 libqt5core5t64 libqt5dbus5t64 libqt5gu
  libqt5quick5 libqt5sensors5 libqt5svg5 libqt5waylandclient5 libqt5waylandcompositor5 libqt5webchannel5
  libusb-1.0-0 libvisual-0.4-0 libvorbis0a libvorbisenc2 libwacom-common libwacom9 libwoff1 libxaw7 libxc
  libxcb-xinput0 libxcb-xkb1 libxfont2 libxkbcommon-x11-0 libxkbfile1 libxmu6 libxslt1.1 libxt6t64 modemm
  usb-modeswitch-data wpasupplicant x11-xkb-utils xfonts-base xfonts-encodings xfonts-utils xnest xserver
Suggested packages:
```

## 10. Installing Python Virtual Environment Tools for setting Virtual environment

```
itzklp@LAPTOP-RJB1IT6:~$ sudo apt install python3-virtualenv
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  python3-distlib python3-filelock python3-wheel-whl
Recommended packages:
  python3-distutils
The following NEW packages will be installed:
  python3-distlib python3-filelock python3-virtualenv python3-wheel-whl
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
Need to get 468 kB of archives.
After this operation, 1677 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

## 11. Installing Frappe Bench in virtual environment

```
itzklp@LAPTOP-RJB1IT6:~$ python3 -m venv ~/frappe-venv
itzklp@LAPTOP-RJB1IT6:~$ source ~/frappe-venv/bin/activate
(frappe-venv) itzklp@LAPTOP-RJB1IT6:~$ pip install --upgrade pip
Requirement already satisfied: pip in ./frappe-venv/lib/python3.12/site-packages (24.0)
Collecting pip
  Using cached pip-24.3.1-py3-none-any.whl.metadata (3.7 kB)
Using cached pip-24.3.1-py3-none-any.whl (1.8 MB)
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 24.0
    Uninstalling pip-24.0:
      Successfully uninstalled pip-24.0
Successfully installed pip-24.3.1
(frappe-venv) itzklp@LAPTOP-RJB1IT6:~$ pip install frappe-bench
Collecting frappe-bench
  Downloading frappe_bench-5.23.0-py3-none-any.whl.metadata (12 kB)
Collecting click>=7.0 (from frappe-bench)
  Downloading click-8.1.8-py3-none-any.whl.metadata (2.3 kB)
Collecting gitpython~3.1.30 (from frappe-bench)
  Downloading GitPython-3.1.44-py3-none-any.whl.metadata (13 kB)
Collecting honcho (from frappe-bench)
  Downloading honcho-2.0.0-py3-none-any.whl.metadata (3.8 kB)
Collecting jinja2~3.1.3 (from frappe-bench)
```

## Following are the Problems encountered and steps how I solve it

- ✚ While Installing Python I encountered error that was clashing with older version of Python so to solve it I first uninstalled the older of Python then tried installing new version which worked.
- ✚ While Creating Python environment I encountered this error

```
itzklp@LAPTOP-RJB11IT6:~$ sudo pip3 install virtualenv
[sudo] password for itzklp:
error: externally-managed-environment

× This environment is externally managed
➤ To install Python packages system-wide, try apt install
  python3-xyz, where xyz is the package you are trying to
  install.

  If you wish to install a non-Debian-packaged Python package,
  create a virtual environment using python3 -m venv path/to/venv.
  Then use path/to/venv/bin/python and path/to/venv/bin/pip. Make
  sure you have python3-full installed.

  If you wish to install a non-Debian packaged Python application,
  it may be easiest to use pipx install xyz, which will manage a
  virtual environment for you. Make sure you have pipx installed.

  See /usr/share/doc/python3.12/README.venv for more information.

note: If you believe this is a mistake, please contact your Python installation or OS di
em-packages.
hint: See PEP 668 for the detailed specification.
```

The error was encountered because using this command we cannot access or update externally managed environment So to solve this error I tried this three command to create new virtual environment in Python and it worked.

- 1) `python3 -m venv ~/frappe-venv`
- 2) `source ~/frappe-venv/bin/activate`
- 3) `pip install virtualenv`