

## Installation Procedure for Ubuntu Linux

1. Install Ubuntu server preferably version 20.04
2. Update the system: **#apt-get update**
3. Install nodeJS: **#apt-get install nodejs**
4. Install the latest mongodb:  
(reference: <https://docs.mongodb.com/manual/tutorial/install-mongodb-on-ubuntu/>)
  - a. **#apt-get install gnupg**
  - b. **#wget -qO - https://www.mongodb.org/static/pgp/server-4.4.asc | sudo apt-key add -**
  - c. **#echo "deb [ arch=amd64,arm64 ] https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/4.4 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-org-4.4.list**
  - d. **#apt-get update**
  - e. **#apt-get install -y mongodb-org**
  - f. **#systemctl start mongod**
  - g. To verify status of mongodb: **#systemctl status mongod**
  - h. configure mongodb to start on reboot: **#systemctl enable mongod**
5. Install libreoffice: **#apt-get install libreoffice**
6. Install PDF Tollkit: **#apt-get install pdftk**
7. Install Poppler Utilities: **#apt-get install poppler-utils**
8. Install Tesseract OCR: **#apt-get install tesseract-ocr**
9. Install Ghost Script: **#apt-get install ghostscript**
10. Create default "drive" folder and its required subdirectories (case sensitive):
  - a. **#mkdir /drive**
  - b. **#mkdir /drive/Archive**
  - c. **#mkdir /drive/incoming**
  - d. **#mkdir /drive/Recoverhere**
  - e. **#mkdir "/drive/Routing Slip"** (put double quote for 2 words)
  - f. **#mkdir /drive/textML**
11. Create folder for the e-Dokumento: **#mkdir /edokyu**
12. Download the latest e-Dokumento from the GitHub:  
**#git clone <https://github.com/nelsonmaligro/e-Dokumento> /edokyu/**
13. Import the default collections for the "docMS" database:

- a. **#mongoimport --host="localhost" --db=docMS --collection=useraccs --drop --file=/edokyu/models/useraccs.json**
- b. **#mongoimport --host="localhost" --db=docMS --collection=activitylogs --drop --file=/edokyu/models/activitylogs.json**
- c. **#mongoimport --host="localhost" --db=docMS --collection=branches --drop --file=/edokyu/models/branches.json**
- d. **#mongoimport --host="localhost" --db=docMS --collection=classes --drop --file=/edokyu/models/classes.json**
- e. **#mongoimport --host="localhost" --db=docMS --collection=commologs --drop --file=/edokyu/models/commologs.json**
- f. **#mongoimport --host="localhost" --db=docMS --collection=monitoraccs --drop --file=/edokyu/models/monitoraccs.json**
- g. **#mongoimport --host="localhost" --db=docMS --collection=pndocs --drop --file=/edokyu/models/pndocs.json**
- h. **#mongoimport --host="localhost" --db=docMS --collection=settings --drop --file=/edokyu/models/settings.json**
- i. **#mongoimport --host="localhost" --db=docMS --collection=tags --drop --file=/edokyu/models/tags.json**
- j. **#mongoimport --host="localhost" --db=docMS --collection=tempmonitoraccs --drop --file=/edokyu/models/tempmonitoraccs.json**

14. Start the e-Dokumento Application:

- a. **#cd /edokyu**
- b. **#node index.js**

15. Congratulations! You can now browse the e-dokumento at :

<https://<ip address>>

## **Post Installation Procedure**

1. To make the e-Dokumento run automatically during reboot:

- a. Install the NPM package manager: **#apt-get install npm**
- b. Install forever module: **#npm install forever -g**
- c. Install nodemon module: **#npm install nodemon -g**
- d. Edit crontab: **#crontab -e**
- e. Add the following 2 lines:

```
@reboot cd /edokyu && /usr/local/bin/forever -c "/usr/local/bin/nodemon --exitcrash" index.js > /dev/null 2>&1
```

```
@reboot cd /edokyu/controllers && /usr/local/bin/forever -c  
"/usr/local/bin/nodemon --exitcrash" folderwatch.js > /dev/null 2>&1
```

- f. Save and reboot
2. In order to enable and use the Intelligent Document Classification through the Machine Learning, we need to install the required python libraries.
  - a. Ensure Python version 3 is installed: **#python --version**
  - b. If not, Install Python3: **#apt-get install python3**
  - c.
  - d. Make Python3 as the default alias for python: **#apt-get install python-is-python3**
  - e. Install Python package manager to use pip command: **#apt-get install python3-pip**
  - f. Install Tensorflow: **#pip3 install tensorflow**
  - g. Install Pandas: **#pip3 install pandas**
  - h. Install Keras core: **#pip3 install keras**
  - i. Install Keras Model: **#pip3 install keras-models**
  - j. **Install sklearn: #pip3 install sklearn**
  - k. **Install PyMongo: #pip3 install pymongo**
  - l. Browse the e-Dokumento using the browser and login as Administrator account
  - m. Click “Advanced”, “Settings” and check the “Enable Machine Learning”, then click save.
3. Configure the User Accounts:
  - a. Login as Administrator and admin@123 for the password
  - b. Go to “View/Edit/Del” User Account
  - c. Edit all accounts to match the following access privileges
    - 1) EXECUTIVE – refers to executive level managers in an organization
    - 2) MANAGER – refers to 1st level managers or immediate supervisor in a department/branch/group
    - 3) STAFF – refers to the staff or subordinate personnel of the manager/supervisor
    - 4) SECRETARY – refers to the staff who receives and release documents for the organization. Commonly referred to receiving section.
    - 5) SysAdmin - refers to the system administrator for the e-dokyu
- 4.