**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/)

* 1. **#apt-get install gnupg**
  2. **#wget -qO - https://www.mongodb.org/static/pgp/server-4.4.asc | sudo apt-key add -**
  3. **#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**
  4. **#apt-get update**
  5. **#apt-get install -y mongodb-org**
  6. **#systemctl start mongod**
  7. To verify status of mongodb: **#systemctl status mongod**
  8. configure mongodb to start on reboot: **#systemctl enable mongod**

1. Install libreoffice: **#apt-get install libreoffice**
2. Install PDF Tollkit: **#apt-get install pdftk**
3. Install Poppler Utilities: **#apt-get install poppler-utils**
4. Install Tesseract OCR: **#apt-get install tesseract-ocr**
5. Install Ghost Script: **#apt-get install ghostscript**
6. Create default “drive” folder and its required subdirectories (case sensitive):
   1. **#mkdir /drive**
   2. **#mkdir /drive/Archive**
   3. **#mkdir /drive/incoming**
   4. **#mkdir /drive/Recoverhere**
   5. **#mkdir “/drive/Routing Slip”** (put double quote for 2 words)
   6. **#mkdir /drive/textML**
7. Create folder for the e-Dokyumento: **#mkdir /edokyu**
8. Download the latest e-Dokyumento from the GitHub:

**#git clone** [**https://github.com/nelsonmaligro/e-Dokyumento**](https://github.com/nelsonmaligro/e-Dokyumento) **/edokyu/**

1. Import the default collections for the “docMS” database:
   1. **#mongoimport --host=”localhost” --db=docMS --collection=useraccs --drop --file=/edokyu/models/useraccs.json**
   2. **#mongoimport --host=”localhost” --db=docMS --collection=activitylogs --drop --file=/edokyu/models/activitylogs.json**
   3. **#mongoimport --host=”localhost” --db=docMS --collection=branches --drop --file=/edokyu/models/branches.json**
   4. **#mongoimport --host=”localhost” --db=docMS --collection=classes --drop --file=/edokyu/models/classes.json**
   5. **#mongoimport --host=”localhost” --db=docMS --collection=commologs --drop --file=/edokyu/models/commologs.json**
   6. **#mongoimport --host=”localhost” --db=docMS --collection=monitoraccs --drop --file=/edokyu/models/monitoraccs.json**
   7. **#mongoimport --host=”localhost” --db=docMS --collection=pndocs --drop --file=/edokyu/models/pndocs.json**
   8. **#mongoimport --host=”localhost” --db=docMS --collection=settings --drop --file=/edokyu/models/settings.json**
   9. **#mongoimport --host=”localhost” --db=docMS --collection=tags --drop --file=/edokyu/models/tags.json**
   10. **#mongoimport --host=”localhost” --db=docMS --collection=tempmonitoraccs --drop --file=/edokyu/models/tempmonitoraccs.json**
2. Start the e-Dokyumento Application:
   1. **#cd /edokyu**
   2. **#node index.js**
3. Congratulations! You can now browse the e-dokyumento at :

https://<ip address>

**Post Installation Procedure**

1. To make the e-Dokyumento run automatically during reboot:
   1. Install the NPM package manager: **#apt-get install npm**
   2. Install forever module: **#npm install forever –g**
   3. Install nodemon module: **#npm install nodemon -g**
   4. Edit crontab: **#crontab –e**
   5. 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**

* 1. Save and reboot

1. In order to enable and use the Intelligent Document Classification through the Machine Learning, we need to install the required python libraries.
   1. Ensure Python version 3 is installed: **#python --version**
   2. If not, Install Python3: **#apt-get install python3**
   3. Make Python3 as the default alias for python: **#apt-get install python-is-python3**
   4. Install Python package manager to use pip command: **#apt-get install python3-pip**
   5. Install Tensorflow: **#pip3 install tensorflow**
   6. Install Pandas: **#pip3 install pandas**
   7. Install Keras core: **#pip3 install keras**
   8. Install Keras Model: **#pip3 install keras-models**
   9. **Install sklearn: #pip3 install sklearn**
   10. **Install PyMongo: #pip3 install pymongo**
   11. Browse the e-Dokyumento using the browser and login as Administrator account
   12. Click “Advanced”,“Settings” and check the “Enable Machine Learning”, then click save.
2. Configure the User Accounts:
   1. Login as Administrator and admin@123 for the password
   2. Go to “View/Edit/Del” User Account
   3. 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