# Server and Workflow Documentation

## 1. Server Access

\*\*Linux Terminal Login:\*\*

```  
ssh PMO@10.10.11.242  
Password: PMO@1234  
```

\*\*MySQL Login (Workbench or Terminal):\*\*

- Database: `RME\_DH`  
 - User: `gamal`  
 - Password: `password123Y$`

- Newly Created User:  
 - Username: `Omar2`  
 - Password: `Omar\_54321`

## 2. Basic Linux Commands

- List directory: `ls`

- Read text file: `cat <filename>`

- Edit text file: `nano <filename>`

- Remove files or directories:   
 ```bash  
 sudo rm -r <filename/directory>  
 ```

## 3. File Transfer

\*\*Upload Script (Windows to Linux):\*\*

```  
pscp -pw PMO@1234 D:\test.csv PMO@10.10.11.242:/home/PMO/airflow/dags  
```

\*\*Download Script (Linux to Windows):\*\*

```  
pscp -r -pw PMO@1234 PMO@10.10.11.242:/home/PMO/airflow/dags D:  
```

\*\*Remove Cache Files:\*\*

```  
sudo rm -r \_\_pycache\_\_  
```

## 4. Airflow Management

\*\*Access Airflow:\*\*

- URL: `http://10.10.11.242:8080/home`  
- User: `mohamedgamal`  
- Password: `gamal123`

\*\*Restart Airflow:\*\*

```  
cd airflow  
source venv/bin/activate  
airflow db init  
airflow webserver -D  
airflow scheduler -D  
```

\*\*Kill Existing Webserver Process:\*\*

```  
ps aux | grep "airflow webserver"  
kill -9 <PID>  
```

## 5. Spark Management

\*\*Restart Spark:\*\*

```  
cd /opt/spark/sbin  
sudo bash start-master.sh -i 10.10.11.242 --webui-port 8080  
sudo bash start-worker.sh spark://10.10.11.242:7077  
sudo jps  
```

\*\*Spark Ports:\*\*

- Master: `7077`  
- UI: `8081`

## 6. MySQL Management

\*\*Enter MySQL from Linux Terminal:\*\*

```  
mysql -u omar2 -p  
Enter password: Omar\_54321  
```

\*\*Check MySQL Storage:\*\*

```  
df -h /var/lib/mysql  
```

## 7. Python & Pip

\*\*Python Version:\*\*

```  
python3.10 -m pip --version  
```

\*\*Install Packages with Pip:\*\*

```  
pip install apache-airflow --trusted-host pypi.org --trusted-host files.pythonhosted.org  
```

## 8. Miscellaneous

\*\*Generate SSH Key:\*\*

```  
ssh-keygen -t ed25519  
cat $env:USERPROFILE\.ssh\id\_ed25519.pub  
```

\*\*Monitor Running Processes:\*\*

```  
htop  
```

\*\*OracleDB Connection:\*\*

```  
cd ~/Downloads/oracle/instantclient\_21\_16  
export LD\_LIBRARY\_PATH=~/Downloads/oracle/instantclient\_21\_16:$LD\_LIBRARY\_PATH  
export PATH=~/Downloads/oracle/instantclient\_21\_16:$PATH  
sqlplus RMEDWH/DWHRME@'//10.0.11.59:1521/RMEDB'  
```

## 9. Useful Links

- [Crontab Guru](https://crontab.guru/) - Schedule cron jobs.

- [Airflow Email Notifications Guide](https://chatgpt.com/share/67445981-0518-8007-937d-422cc1b02d97)

- [Run Airflow on Docker](https://youtu.be/aTaytcxy2Ck?feature=shared)

- [Apache Spark Installation](https://youtu.be/GxJTxz1EQwY?feature=shared)