

# **TUGAS KOMPUTASI UBIQUITOUS DAN PERVASIF**

## **"Lab OwnCloud "**



Disusun oleh :

CHOSMAS MARZUKI      09021182025003

**Dosen Pengampu :**

HUDA UBAYA, M.T.

ADI HERMANSYAH, S.KOM., M.T.

**PROGRAM STUDI TEKNIK INFORMATIKA**

**FAKULTAS ILMU KOMPUTER**

**UNIVERSITAS SRIWIJAYA**

**TAHUN 2023**

Mata kuliah : Komputasi Ubiquitos dan Perpasiv

Kelas : Teknik Informatika

Semester : 6 (Enam)

Fakultas Ilmu Komputer, Universitas Sriwijaya.

**Lab-1:** Implementasi dan pemanfaatan infrastruktur perangkat keras menggunakan ownCloud pada Sistem operasi linux Ubuntu 18.04 server

**Tujuan :**

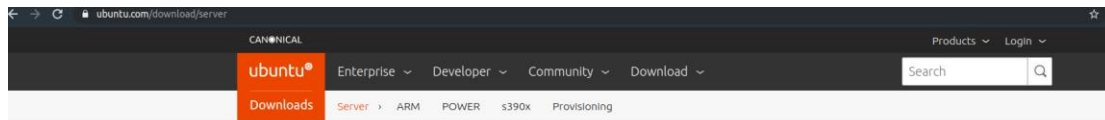
- Mahasiswa bisa mengimplementasikan sistem operasi berbasis web interface, pemanfaatan storage berbasis cloud.

**Perkenalan.**

Owncloud adalah sebuah platform file sharing yang bersifat *open-source* dan berbagai gabungan atau kolaborasi yang dapat menyimpan, manage *personal content* kita, seperti dokumen dan gambar pada lokasi yang terpusat. Implementasi dari ownCloud merupakan hal yang serupa pada aplikasi dropbox, dengan fitur online storage yang dapat kita *create* sesuai dengan resource pada server atau komputer kita.

**Langkah 1 - Instalasi Ubuntu Server.**

Pertama kali, kita harus mendownload file .iso linux ubuntu server pada link berikut <https://ubuntu.com/download/server>



## Download Ubuntu Server

### Ubuntu Server 18.04.3 LTS

The long-term support version of Ubuntu Server, including the Queens release of OpenStack and support guaranteed until April 2023 — 64-bit only.

This release uses our new installer, Subiquity. If you need support for options not implemented in Subiquity, such as encrypted filesystem support, the traditional installer can be found on the [alternative downloads page](#).

[Ubuntu Server 18.04 LTS release notes](#)

[Download](#)

For other versions of Ubuntu including torrents, the network installer, a list of local mirrors, and past releases [see our alternative downloads](#).

Lakukan instalasi di komputer yang tersedia, ataupun jalankan menggunakan software virtualisasi seperti virtualbox (<https://www.virtualbox.org/wiki/Downloads>) ataupun opsional menggunakan VM-ware player (<https://www.vmware.com/go/downloadworkstationplayer>). Untuk tutorial tata cara proses instalasi ubuntu server pada aplikasi virtualisasi akan dilewatkan.

\*Catatan: pastikan alamat IP pada virtualbox terpasang dan dalam network yang sama.

## Langkah 2 - Installasi ownCloud

Paket ownCloud server pada dasarnya tidak tersedia pada repositori dari sistem linux ubuntu tersebut, maka perlu kita unduh release key menggunakan curl command dan import menggunakan apt-key add, seperti pada command di bawah:

### Install CURL

```
chosmas@ubuntu:~$ sudo sed -i -e 's/us.archive.ubuntu.com/archive.ubuntu.com\n/etc/apt/sources.list\nchosmas@ubuntu:~$
```

```
chomas@ubuntu:~$ sudo apt-get install curl
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libcurl4
The following NEW packages will be installed:
  curl libcurl4
0 upgraded, 2 newly installed, 0 to remove and 2 not upgraded.
Need to get 397 kB of archives.
After this operation, 1,127 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://security.ubuntu.com/ubuntu focal-security/main amd64 libcurl4 amd64 7.68.0-1ubuntu2.18 [236 kB]
Get:2 http://security.ubuntu.com/ubuntu focal-security/main amd64 curl amd64 7.68.0-1ubuntu2.18 [161 kB]
Fetched 397 kB in 3s (126 kB/s)
Selecting previously unselected package libcurl4:amd64.
(Reading database ... 159448 files and directories currently installed.)
Preparing to unpack .../libcurl4_7.68.0-1ubuntu2.18_amd64.deb ...
Unpacking libcurl4:amd64 (7.68.0-1ubuntu2.18) ...
Selecting previously unselected package curl.
Preparing to unpack .../curl_7.68.0-1ubuntu2.18_amd64.deb ...
Unpacking curl (7.68.0-1ubuntu2.18) ...
Setting up libcurl4:amd64 (7.68.0-1ubuntu2.18) ...
Setting up curl (7.68.0-1ubuntu2.18) ...
```

```
chomas@ubuntu:~$ apt-cache search curl | grep -i curl
curl - command line tool for transferring data with URL syntax
libcurl3-gnutls - easy-to-use client-side URL transfer library (GnuTLS flavour)
libcurl3-nss - easy-to-use client-side URL transfer library (NSS flavour)
libcurl4 - easy-to-use client-side URL transfer library (OpenSSL flavour)
libcurl4-doc - documentation for libcurl
libcurl4-gnutls-dev - development files and documentation for libcurl (GnuTLS flavour)
libcurl4-nss-dev - development files and documentation for libcurl (NSS flavour)
libcurl4-openssl-dev - development files and documentation for libcurl (OpenSSL flavour)
php7.4-curl - CURL module for PHP
librust-git2+curl-dev - Bindings to libgit2 for interoperating with git repositories - feature "curl"
librust-libgit2-sys+curl-dev - Native bindings to the libgit2 library - feature "curl"
librust-libgit2-sys+curl-sys-dev - Native bindings to the libgit2 library - feature "curl-sys"
chomas@ubuntu:~$
```

```
chomas@ubuntu:~$ sudo apt-get install curl libcurl3 libcurl3-dev php5-curl
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'libcurl4-openssl-dev' instead of 'libcurl3-dev'
Package libcurl3 is not available, but is referred to by another package.
This may mean that the package is missing, has been obsoleted, or
is only available from another source
However the following packages replace it:
  libcurl4:i386 libcurl4

E: Package 'libcurl3' has no installation candidate
E: Unable to locate package php5-curl
chomas@ubuntu:~$
```

```
$ curl
https://download.owncloud.org/download/repositories/10.0/
Ubuntu_18.04/Release.key | sudo apt-key add -
```

```
chomas@ubuntu:~$ curl https://download.owncloud.org/download/repositories/10.0
/Uubuntu_18.04/Release.key | sudo apt-key add -
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
  0     0     0      0     0      0      0      0  --:--:-- --:--:-- --:--:--    0g
pg: can't open '-': No such file or directory
100  17 100   17     0     0    14     0  0:00:01  0:00:01 --:--:--   14
(23) Failed writing body
chomas@ubuntu:~$
```

File 'Release.key' berisikan sebuah PGP (Pretty Good Privacy publik key seperti apt, yang akan digunakan untuk men-verifikasi ownCloud package sebagai aplikasi authentic.

Untuk tambahan silahkan tambahkan owncloud.list pada source.list.d pada direktori apt.

```
$ echo 'deb
http://download.owncloud.org/download/repositories/10.0/U
buntu_18.04/ /' | sudo tee
/etc/apt/sources.list.d/owncloud.list
```

```
chomas@ubuntu:~$ echo 'deb http://download.owncloud.org/download/repositories
/10.0/Uubuntu_18.04/ /' | sudo tee /etc/apt/sources.list.d/owncloud.list
'deb http://download.owncloud.org/download/repositories/10.0/Uubuntu_18.04/ /'
chomas@ubuntu:~$
```

Kemudian lakukan update, instalasi beberapa paket - paket pendukung seperti php

```
$ sudo apt update
```

```
chomas@ubuntu:~$ sudo apt-get update
[sudo] password for chomas:
Hit:1 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:2 http://us.archive.ubuntu.com/ubuntu focal InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:4 http://us.archive.ubuntu.com/ubuntu focal-backports InRelease
Reading package lists... Done
```

```
$ sudo apt install php-bz2 php-curl php-gd php-imagick
php-intl php-mbstring php-xml php-zip owncloud-files
```

```
chosmas@ubuntu:~$ sudo apt install php-bz2 php-curl php-gd php-imagick php-intl php-mbstring php-xml php-zip owncloud-files
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package owncloud-files
chosmas@ubuntu:~$
```

### Langkah 3 - konfigurasi MySQL database

Login ke database sql server menggunakan command line sebagai berikut:

```
$ sudo mysql
```

```
chosmas@ubuntu:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 14
Server version: 8.0.32-0ubuntu0.20.04.2 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

mysql>
```

Lakukan konfigurasi untuk password MySQL pada akun root:mysql

```
$ mysql -u root -p
```

```
root@ubuntu:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 44
Server version: 10.3.38-MariaDB-0ubuntu0.20.04.1 Ubuntu 20.04

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

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

mysql>
```

Kemudian, buatlah database untuk ownCloud:

```
$ mysql> CREATE DATABASE owncloud;
```

```
MariaDB [(none)]> CREATE DATABASE owncloud;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]>
```

```
$ mysql> GRANT ALL ON owncloud.* to 'owncloud'@'localhost'  
IDENTIFIED BY 'owncloud_database_password';
```

```
MariaDB [(none)]> GRANT ALL ON owncloud.* TO 'owncloud_user'@'localhost' I  
DENTIFIED BY 'mypassword';  
Query OK, 0 rows affected (0.001 sec)  
  
MariaDB [(none)]>
```

\*Catatan: ganti owncloud\_database\_password dengan password database.

```
$ mysql> FLUSH PRIVILEGES;
```

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

```
$ mysql> exit
```

```
MariaDB [(none)]> EXIT  
Bye  
root@ubuntu:~#
```

#### Langkah 4 - konfigurasi ownCloud

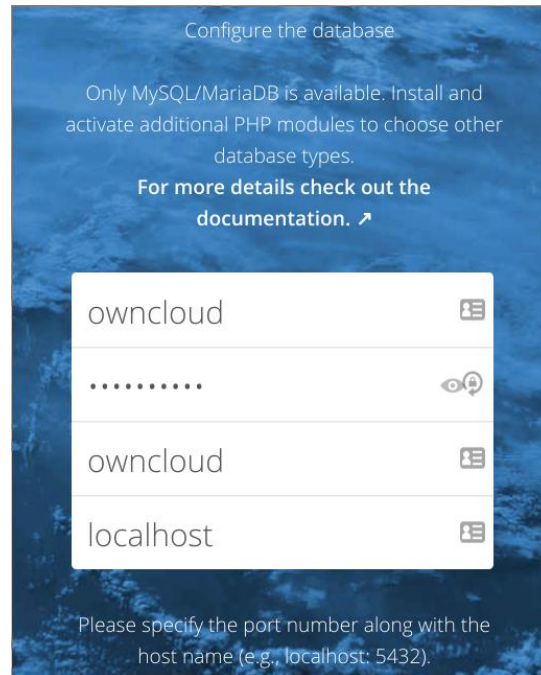
Untuk melakukan akses pada ownCloud web interface, bukalah browser anda, dan akses [http://alamat\\_ip\\_server](http://alamat_ip_server)

Kita akan melihat konfigurasi ownCloud pada browser, buatlah akun anda, dan password:





Selanjutnya lewati, konfigurasi **Data folder** kemudian lanjutkan ke konfigurasi database.



Configure the database

Only MySQL/MariaDB is available. Install and activate additional PHP modules to choose other database types.

For more details check out the [documentation](#).

owncloud

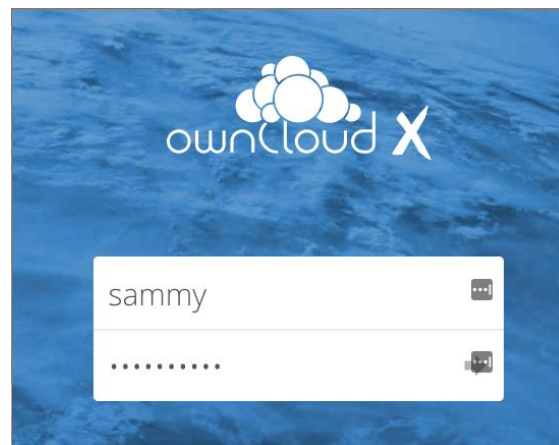
.....

owncloud

localhost

Please specify the port number along with the host name (e.g., localhost: 5432).

Kemudian klik **Finish** untuk menyelesaikan tahapan konfigurasi ownCloud. Lakukan login menggunakan akses akun dan password yang kita buat sebelumnya.



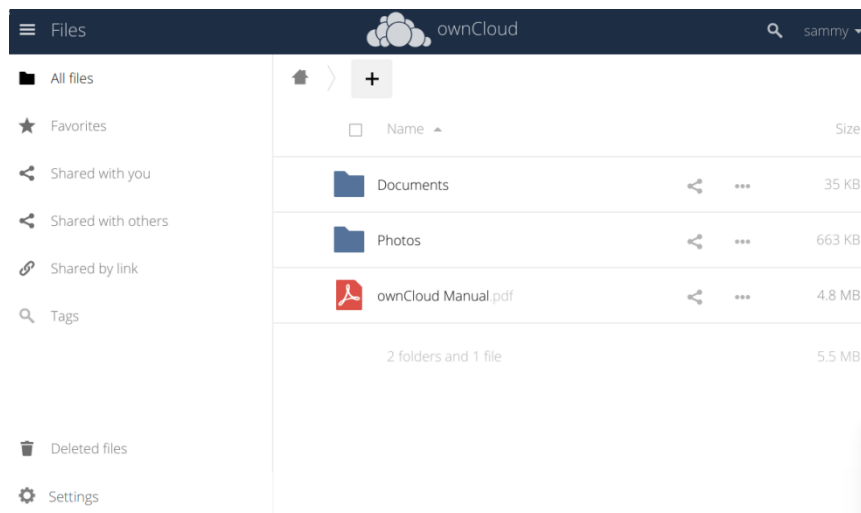
ownCloud X

sammy

.....

Setelah itu kita akan ditampilkan, tampilan dari ownCloud tersebut.





**Note:** ulangi langkah - langkah di atas, kemudian jelaskan fitur - fitur yang ada owncloud tersebut, beserta pemanfaatannya.

