Tutorial Instalasi SLiMS 9 Bulian di Ubuntu

Persiapan Awal

Update repository sistem

```
project@hanif:~$ sudo apt update
[sudo] password for project:
Hit:1 http://id.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://id.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

Install Apache, MariaDB, PHP, dan modul pendukung

```
project@hanif:~$ sudo apt install apache2 mariadb-server php libapache2-mod-php php-mysql php-gd php-xml php-mbstring php-curl unzip -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils galera-4 libapache2-mod-php8.3 libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 libcgi-fast-perl
  libcgi-pm-perl libclone-perl libconfig-inifiles-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-bin libfcgi-perl libfcgi0t64 libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblua5.4-0 liblwp-mediatypes-perl libmariadb3 libmysqlclient21
  libsnappy1v5 libtimedate-perl liburi-perl liburing2 mariadb-client mariadb-client-core mariadb-common mariadb-plugin-provider-bzip2 mariadb-plugin-provider-lz4
  mariadb-plugin-provider-lzma mariadb-plugin-provider-lzo mariadb-plugin-provider-snappy mariadb-server-core mysql-common php-common php8.3 php8.3-cli php8.3-common
  php8.3-curl php8.3-gd php8.3-mbstring php8.3-mysql php8.3-opcache php8.3-readline php8.3-xml pv socat ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser php-pear libmldbm-perl libnet-daemon-perl libsql-statement-perl libdata-dump-perl
  libipc-sharedcache-perl libio-compress-brotli-perl libbusiness-isbn-perl libregexp-ipv6-perl libwww-perl mailx mariadb-test doc-base zip
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils galera-4 libapache2-mod-php libapache2-mod-php8.3 libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64
  libcgi-fast-perl libcgi-pm-perl libclone-perl libconfig-inifiles-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-bin libfcgi-perl libfcgi0t64
  libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblua5.4-0 liblwp-mediatypes-perl libmariadb3
  libmysqlclient21 libsnappy1v5 libtimedate-perl liburi-perl liburing2 mariadb-client mariadb-client-core mariadb-common mariadb-plugin-provider-bzip2
  mariadb-plugin-provider-lz4 mariadb-plugin-provider-lzma mariadb-plugin-provider-lzo mariadb-plugin-provider-snappy mariadb-server mariadb-server-core mysql-common
  php php-common php-curl php-gd php-mbstring php-mysql php-xml php8.3 php8.3-cli php8.3-common php8.3-curl php8.3-gd php8.3-mbstring php8.3-mysql php8.3-opcache
  php8.3-readline php8.3-xml pv socat ssl-cert unzip
0 upgraded, 67 newly installed, 0 to remove and 129 not upgraded.
Need to get 27.7 MB of archives.
After this operation, 234 MB of additional disk space will be used.
Get:1 http://id.archive.ubuntu.com/ubuntu noble-updates/main amd64 libapr1t64 amd64 1.7.2-3.1ubuntu0.1 [108 kB]
0% [1 libapr1t64 64.1 kB/108 kB 60%]
```

Setup Database untuk SliMS

Masuk ke MariaDB

Buat database dan user SliMS

```
project@hanif:~$ sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 31
Server version: 10.11.11-MariaDB-0ubuntu0.24.04.2 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 DATABASE slims;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> CREATE USER 'slimsuser'@'localhost' IDENTIFIED BY '123';
Query OK, 0 rows affected (0.100 sec)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON slims.* TO 'slimsuser'@'localhost';
Query OK, 0 rows affected (0.055 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.000 sec)
```

```
MariaDB [(none)]> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| slims              |
| sys                |
+--------------------+
5 rows in set (0.000 sec)

MariaDB [(none)]>
```

Download & Ekstrak SLiMS
Download SLiMS 9 Bulian

```
project@hanif:/var/www/html$ sudo wget https://github.com/slims/slims9_bulian/archive/refs/heads/master.zip
--2025-04-17 06:31:01--  https://github.com/slims/slims9_bulian/archive/refs/heads/master.zip
Resolving github.com (github.com)... 20.205.243.166
Connecting to github.com (github.com)|20.205.243.166|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://codeload.github.com/slims/slims9_bulian/zip/refs/heads/master [following]
--2025-04-17 06:31:04--  https://codeload.github.com/slims/slims9_bulian/zip/refs/heads/master
Resolving codeload.github.com (codeload.github.com)... 20.205.243.165
Connecting to codeload.github.com (codeload.github.com)|20.205.243.165|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [application/zip]
Saving to: 'master.zip'

master.zip                      [              <=>                ]  49.98M  1.00MB/s    in 51s

2025-04-17 06:31:56 (998 KB/s) - 'master.zip' saved [52410807]
```

Ekstrak file ZIP
berfungsi untuk **mengekstrak (membuka)** file ZIP bernama `master.zip` yang biasanya berisi
source code SLiMS yang baru kamu download dari GitHub.

```
project@hanif:/var/www/html$ sudo unzip master.zip
Archive:  master.zip
ce0afea598cf9a81974b3ea5d150534337b7b695
   creating: slims9_bulian-master/
   creating: slims9_bulian-master/.github/
   creating: slims9_bulian-master/.github/ISSUE_TEMPLATE/
  inflating: slims9_bulian-master/.github/ISSUE_TEMPLATE/bug_report.md
  inflating: slims9_bulian-master/.github/ISSUE_TEMPLATE/feature_request.md
  inflating: slims9_bulian-master/.gitignore
  inflating: slims9_bulian-master/.htaccess
  inflating: slims9_bulian-master/LICENSE
  inflating: slims9_bulian-master/README.md
   creating: slims9_bulian-master/admin/
  inflating: slims9_bulian-master/admin/AJAX_check_id.php
  inflating: slims9_bulian-master/admin/AJAX_lookup_handler.php
  inflating: slims9_bulian-master/admin/AJAX_vocabolary_control.php
   creating: slims9_bulian-master/admin/admin_template/
   creating: slims9_bulian-master/admin/admin_template/akasia-dz/
   creating: slims9_bulian-master/admin/admin_template/akasia-dz/assets/
   creating: slims9_bulian-master/admin/admin_template/akasia-dz/assets/css/
  inflating: slims9_bulian-master/admin/admin_template/akasia-dz/assets/css/animate.css
  inflating: slims9_bulian-master/admin/admin_template/akasia-dz/assets/css/animate.min.css
  inflating: slims9_bulian-master/admin/admin_template/akasia-dz/assets/css/bootstrap-theme.css
  inflating: slims9_bulian-master/admin/admin_template/akasia-dz/assets/css/bootstrap-theme.css.map
```
l

Ganti nama folder hasil ekstrak dan Atur Izin Akses Folder
mengganti nama folder dari slims9_bulian-master ke slims,Supaya SLiMS bisa diakses di browser, bisa menyimpan konfigurasi database, dan bisa upload file, maka kita perlu **atur kepemilikan dan hak aksesnya dulu**.

```
project@hanif:/var/www/html$ sudo mv slims9_bulian-master slims
project@hanif:/var/www/html$ cd slims/
project@hanif:/var/www/html/slims$ sudo chown -R www-data:www-data .
project@hanif:/var/www/html/slims$ sudo chmod -R 755 .
project@hanif:/var/www/html/slims$ sudo chmod -R 777 files config
project@hanif:/var/www/html/slims$
```

Konfigurasi Virtual Host

```
project@hanif:/var/www/html/slims$ sudo vim /etc/apache2/sites-available/slims.conf
project@hanif:/var/www/html/slims$ cat /etc/apache2/sites-available/slims.conf
<VirtualHost *:80>
    ServerAdmin webmaster@localhost
    DocumentRoot /var/www/html/slims
    ServerName slims.local

    <Directory /var/www/html/slims>
        Options Indexes FollowSymLinks
        AllowOverride All
        Require all granted
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/slims_error.log
    CustomLog ${APACHE_LOG_DIR}/slims_access.log combined
</VirtualHost>
```

Buat file konfigurasi virtual host SliMS
Aktifkan Konfigurasi Apache
-Aktifkan virtual host SliMS
-Aktifkan modul
-Restart Apache

```
project@hanif:/var/www/html/slims$ sudo a2ensite slims
Enabling site slims.
To activate the new configuration, you need to run:
  systemctl reload apache2
project@hanif:/var/www/html/slims$ sudo a2enmod rewrite
Enabling module rewrite.
To activate the new configuration, you need to run:
  systemctl restart apache2
project@hanif:/var/www/html/slims$ sudo systemctl restart apache2
```

tampilan slims di browser setalah penginstalan
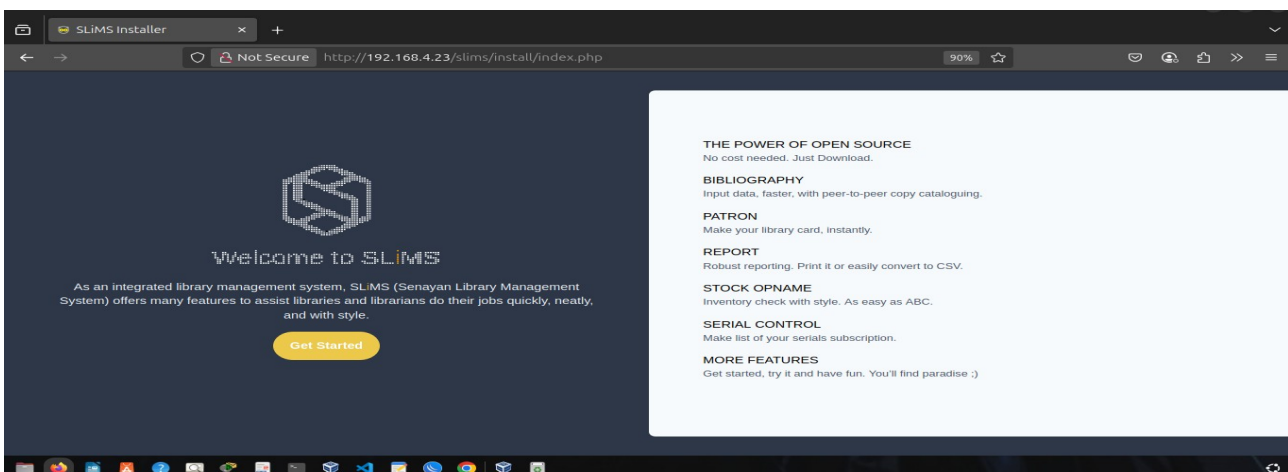
Langkah Selanjutnya: Instalasi menggunakan SliMS instaler

Apabila Anda melakukan klik pada tombol *"Install SLiMS",* **Anda akan dibawa pada langkah pertama (dari dua) dari proses instalasi**

1. **Database Host**: secara baku, isian pada ruas ini tidak perlu diubah. Seperti keterangan yang dicantumkan di samping ruas.

2. **Database Name**: Masukkan nama pangkalan data yang telah dibuat, yang akan digunakan oleh SLiMS.

3. **Database Username**: Merupakan akun yang digunakan untuk mengakses pangkalan data. Secara baku pemasangan, akun yang disediakan oleh MySQL/MariaDB adalah `root`. Status akun `root` merupakan akun tertinggi yang memiliki akses dan hak penuh ke semua pangkalan data. Hati-hati dalam menggunakan akun `root` ini.

Saran:

- Dalam mesin produksi, buat akun terpisah untuk setiap pangkalan data yang dibuat, alih-alih hanya menggunakan akun `root`, yang diberikan hak atau akses hanya ke pangkalan data tertentu. Hal ini dilakukan untuk keamanan.

4. **Database Password**: Masukkan kata sandi akun yang digunakan untuk akun yang digunakan pada ruas **Database Username**.
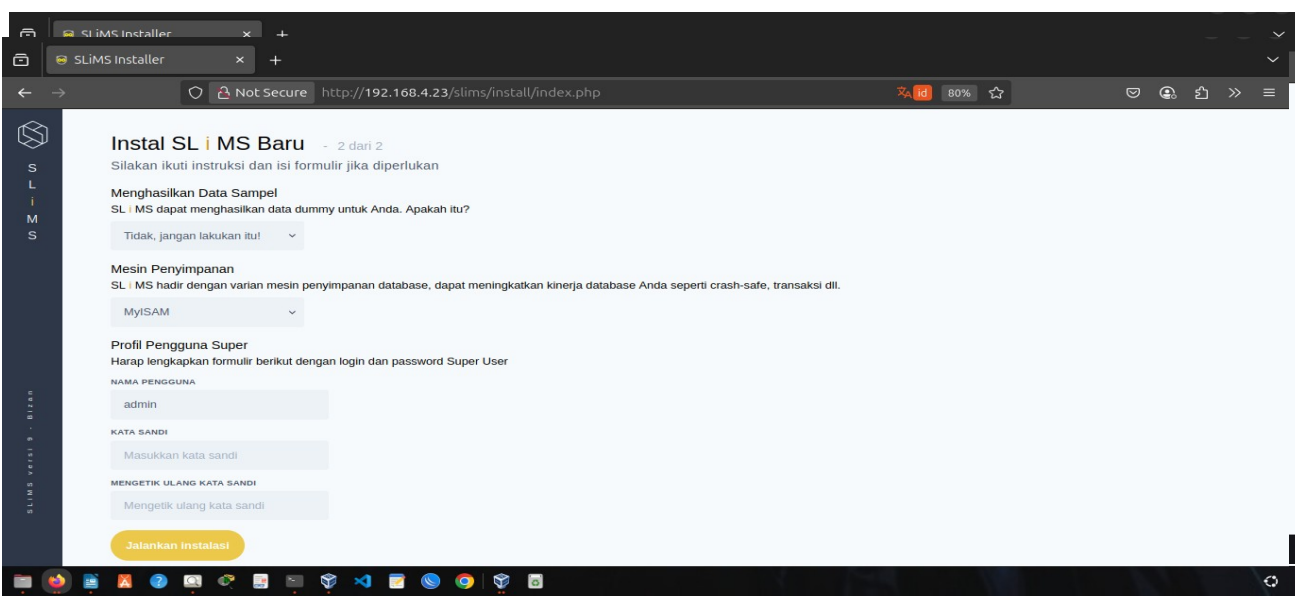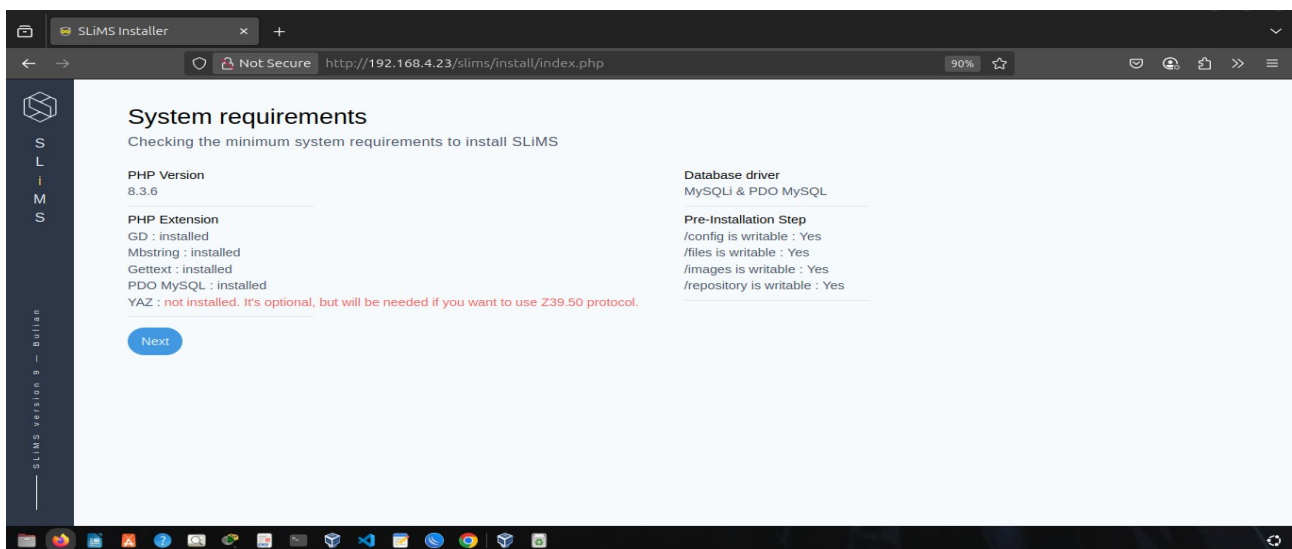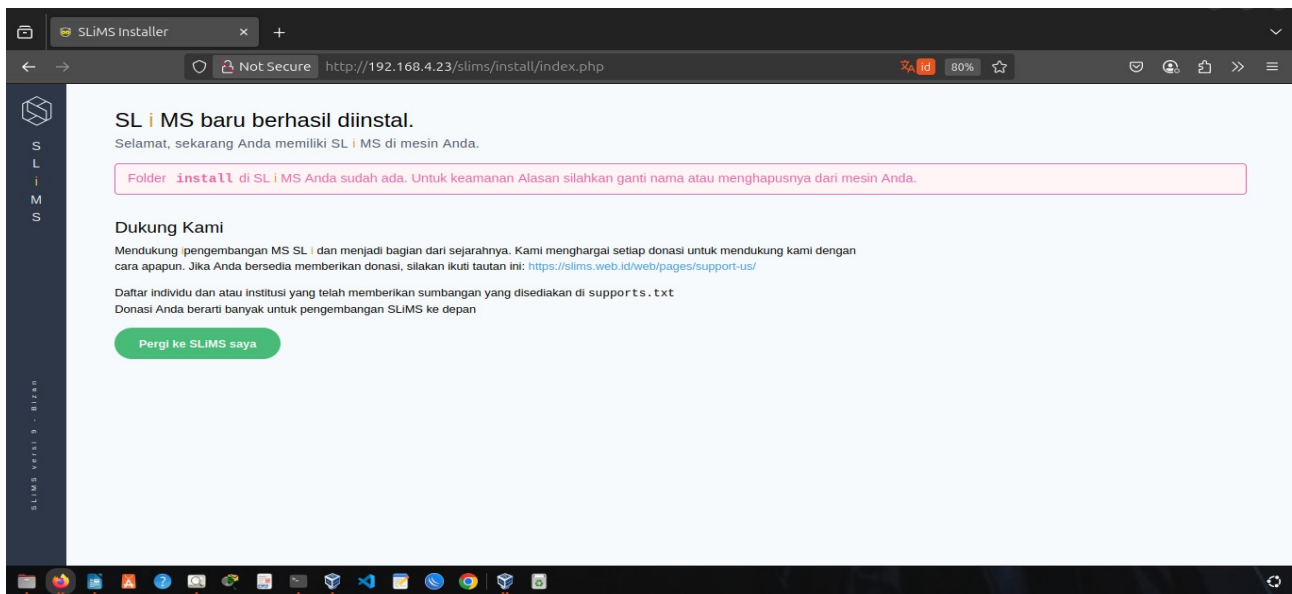
Tampilan awal slims

login untuk admin

tampilan awal dashboard admin