

Laporan Pemrosesan Paralel

Instalasi Apache2 Dalam Ubuntu Server dan Kelola Server menggunakan SSH dan Aplikasi Putty



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Langkah 1: Instal Apache

Buka terminal di sistem Ubuntu Anda. Terminal adalah antarmuka teks ke komputer Anda, yang akan Anda gunakan untuk menjalankan semua perintah.

Pertama, perbarui daftar paket perangkat lunak Anda. `nanda@nanda:~$ sudo`

pembaruan apt-get

```
nanda@nanda:~$ sudo apt-get update
[sudo] password for nanda:
Hit:1 http://id.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://id.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://id.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:4 http://id.archive.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,104 kB]
Get:6 http://id.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [240 kB]
Get:7 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [16.1 kB]
Get:8 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [995 kB]
Get:9 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [22.0 kB]
Get:10 http://id.archive.ubuntu.com/ubuntu jammy-security/main amd64 Packages [896 kB]
Get:11 http://id.archive.ubuntu.com/ubuntu jammy-security/main Translation-en [180 kB]
Get:12 http://id.archive.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.4 kB]
Get:13 http://id.archive.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [793 kB]
Get:14 http://id.archive.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.7 kB]
```

Langkah selanjutnya dalam menyiapkan tumpukan LAMP adalah menginstal dan mengkonfigurasi Apache2, server web. Jalankan perintah di bawah ini untuk menginstal

Apache 2 di Ubuntu 20.04. `nanda@nanda:~$ sudo apt install apache2`

```
nanda@nanda:~$ systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2023-10-27 06:55:38 UTC; 9min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 760 (apache2)
    Tasks: 6 (limit: 2221)
   Memory: 27.4M
      CPU: 2.139s
   CGroup: /system.slice/apache2.service
           └─760 /usr/sbin/apache2 -k start
             809 /usr/sbin/apache2 -k start
             817 /usr/sbin/apache2 -k start
             822 /usr/sbin/apache2 -k start
             824 /usr/sbin/apache2 -k start
             825 /usr/sbin/apache2 -k start

Oct 27 06:55:26 nanda systemd[1]: Starting The Apache HTTP Server...
Oct 27 06:55:37 nanda apachectl[708]: AH00112: Warning: DocumentRoot [/var/www/wordpress] does not >
Oct 27 06:55:37 nanda apachectl[708]: AH00558: apache2: Could not reliably determine the server's f>
Oct 27 06:55:38 nanda systemd[1]: Started The Apache HTTP Server.
```

Apache2 harus diizinkan untuk memulai pada waktu boot sistem dan memulai layanan untuk memverifikasi statusnya juga.

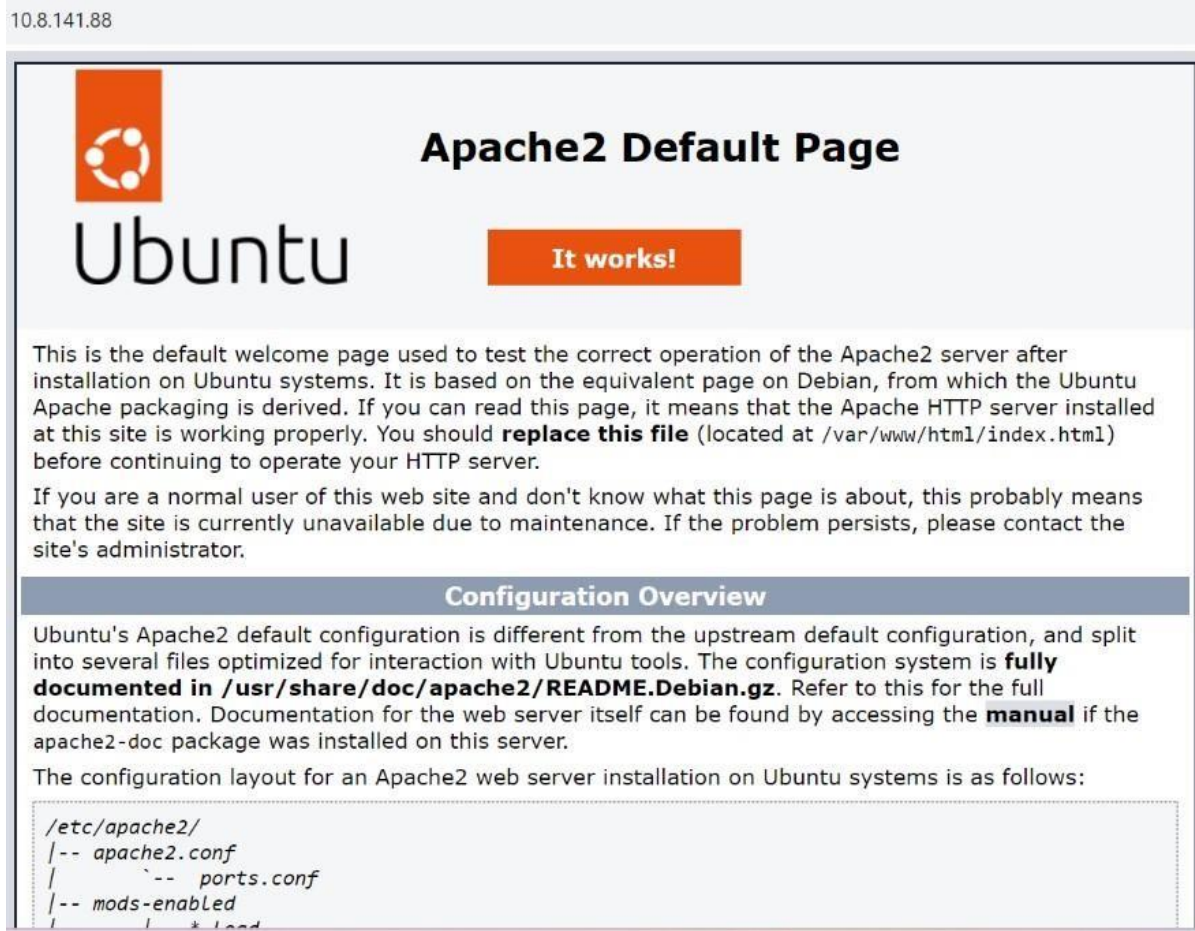
nanda@nanda:~\$ sudo systemctl aktifkan apache2

nanda@nanda:~\$ sudo systemctl status apache2

```
nanda@nanda:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.52-1ubuntu4.6).
0 upgraded, 0 newly installed, 0 to remove and 41 not upgraded.
nanda@nanda:~$
```

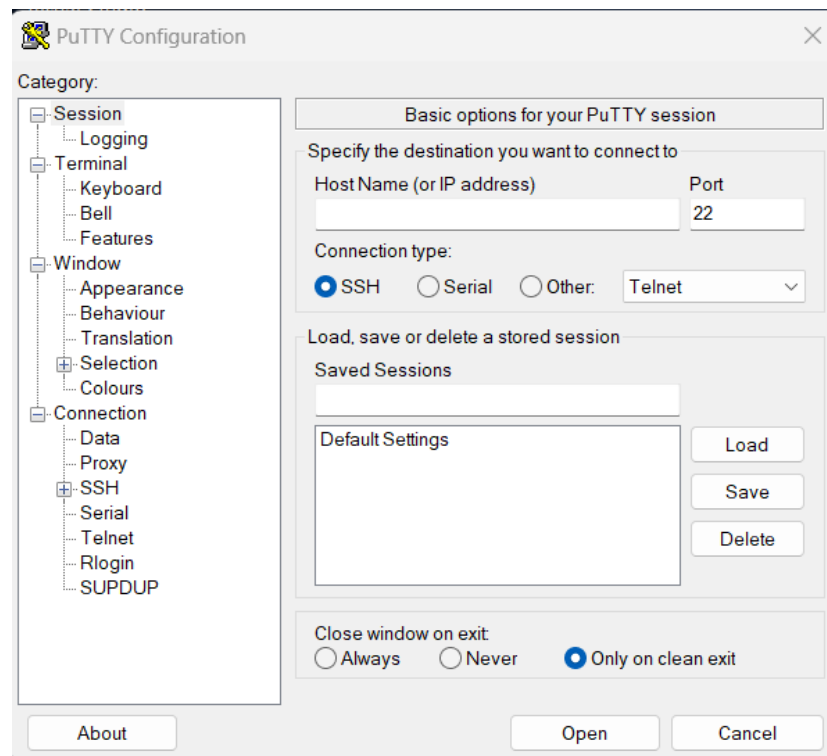
Buka browser web Anda, dan ketik localhost di kotak alamat untuk memverifikasi bahwa server **Apache** telah dimulai.

Jika server web Apache2 berjalan, maka akan menampilkan halaman indeks default Apache2.

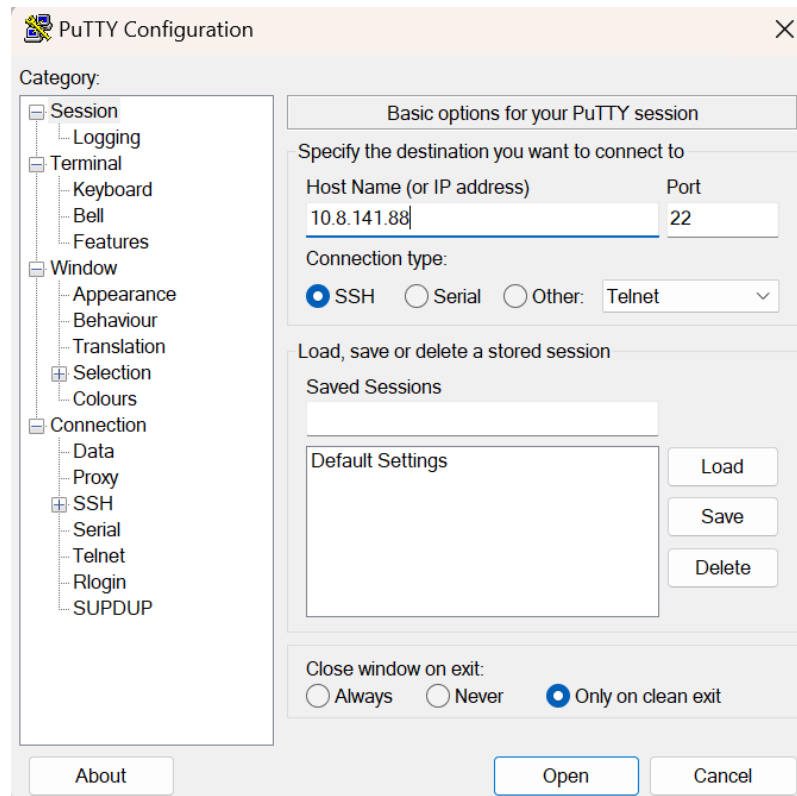


Langkah 2: Cara menghubungkan server ke putty melalui alamat IP

Pastikan ubuntu server dalam keadaan “online”. Install putty dari internet dan lanjutkan hingga tampilan awal putty.



Ketik pada terminal ubuntu server “ip addr” untuk mengetahui IP dari ubuntu server. IP tadi ketik kembali dalam tabel “Host Name (or IP address) ”.



Klik “Open” dan masukkan username beserta password dari ubuntu servernya sendiri.



Jika berhasil, akan tampil pesan yang sama saat login ke ubuntu server.

Langkah 3: Instal MySQL

Setelah Apache dijalankan, sekarang saatnya menginstal MySQL. Jalankan perintah berikut di terminal untuk melakukan ini: `nanda@nanda:~$ sudo apt install mysql-server`

```
nanda@nanda:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.52-1ubuntu4.6).
0 upgraded, 0 newly installed, 0 to remove and 41 not upgraded.
nanda@nanda:~$ hostname -I
10.8.141.88
nanda@nanda:~$ sudo apt install mysql-server
[sudo] password for nanda:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
mysql-server is already the newest version (8.0.34-0ubuntu0.22.04.1).
0 upgraded, 0 newly installed, 0 to remove and 41 not upgraded.
nanda@nanda:~$ _
```

Sangat disarankan agar Anda menjalankan program keamanan setelah server database diinstal untuk menghapus pengaturan default yang tidak aman dan melindungi database Anda.

nanda@nanda:~\$ sudo mysql_secure_installation

```
nanda@nanda:~$ sudo mysql_secure_installation
[sudo] password for nanda:

Securing the MySQL server deployment.

Connecting to MySQL using a blank password.
The 'validate_password' component is installed on the server.
The subsequent steps will run with the existing configuration
of the component.

Skipping password set for root as authentication with auth_socket is used by default.
If you would like to use password authentication instead, this can be done with
the "ALTER USER" command.
See https://dev.mysql.com/doc/refman/8.0/en/alter-user.html#alter-user-password-management for more information.

By default, a MySQL installation has an anonymous user,
allowing anyone to log into MySQL without having to have
a user account created for them. This is intended only for
testing, and to make the installation go a bit smoother.
You should remove them before moving into a production
environment.
```

Anda akan diminta untuk menginstal plugin **validasi_password** . Jadi, ketik Y/Ya, lalu tekan **Enter** dan terakhir pilih kekuatan kata sandi default.

Untuk menjawab pertanyaan yang tersisa, tekan Y dan tekan tombol **ENTER** untuk setiap pertanyaan.


```

Normally, root should only be allowed to connect from
'localhost'. This ensures that someone cannot guess at
the root password from the network.

Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y
Success.

By default, MySQL comes with a database named 'test' that
anyone can access. This is also intended only for testing,
and should be removed before moving into a production
environment.

Remove test database and access to it? (Press y|Y for Yes, any other key for No)
: y
- Dropping test database...
Success.

- Removing privileges on test database...
Success.

Reloading the privilege tables will ensure that all changes
made so far will take effect immediately.

Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y
Success.

All done!
nanda@nanda:~$ █

```

Perintah ini juga akan memungkinkan MySQL untuk memulai saat boot.

```
nanda@nanda:~$ sudo systemctl aktifkan mysql
```

```
nanda@nanda:~$ sudo systemctl status mysql
```

Langkah 4: Instal PHP

Pengaturan tumpukan LAMP kami diakhiri dengan PHP. WordPress adalah CMS berbasis PHP. Kami membutuhkan PHP untuk memproses konten dinamis di situs WordPress kami.

Ubuntu 20.04 defaultnya adalah PHP 7.4. Kita memerlukan modul tambahan untuk memungkinkan PHP berkomunikasi dengan instance Apache dan MySQL. Perintah berikut akan menginstal PHP bersama dengan modul MySQL dan Apache:

```

nanda@nanda:~$ sudo apt install php libapache2-mod-php php-mysql
nanda@nanda:~$ sudo apt install php libapavhe2-mod-php php-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package libapavhe2-mod-php
nanda@nanda:~$ █

```

WordPress dan banyak plugin menggunakan ekstensi PHP, yang perlu Anda instal secara manual.

```
nanda@nanda:~$ sudo apt install php-curl php-gd php-mbstring php-xml php-xmlrpc
```

php-soap php-intl php-zip

```
nanda@nanda:~$ sudo apt install php-curl php-gd php-mbstring php-xml php-xmldr php-soap php-intl php-zip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3 libjpeg-turbo8 libjpeg8 libonig5 libtiff5 libwebp7 libxmlrpc-epi0 libxpm4
  libzip4 php8.1-curl php8.1-gd php8.1-intl php8.1-mbstring php8.1-soap php8.1-xml php8.1-xmldr php8.1-zip
Suggested packages:
  libgd-tools
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3 libjpeg-turbo8 libjpeg8 libonig5 libtiff5 libwebp7 libxmlrpc-epi0 libxpm4
  libzip4 php-curl php-gd php-intl php-mbstring php-soap php-xml php-xmldr php-zip php8.1-curl php8.1-gd php8.1-intl php8.1-mbstring php8.1-soap
  php8.1-xml php8.1-xmldr php8.1-zip
0 upgraded, 30 newly installed, 0 to remove and 30 not upgraded.
Need to get 3,260 kB of archives.
After this operation, 9,853 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

Perintah berikut akan memverifikasi bahwa PHP 7.4 telah berhasil diinstal:

nanda@nanda:~\$ php -v

```
nanda@nanda:~$ php -v
PHP 8.1.2-1ubuntu2.14 (cli) (built: Aug 18 2023 11:41:11) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.2-1ubuntu2.14, Copyright (c), by Zend Technologies
nanda@nanda:~$
```

Setelah PHP diinstal dan ekstensi apa pun yang diperlukan telah diinstal, Apache harus direstart untuk memuat ekstensi baru.

nanda@nanda:~\$ sudo systemctl restart apache2