

PROGRES 2 PROYEK
“MEMBANGUN WEB SERVER BERBASIS
LINUX (APACHE/NGINX+SSL)”

Disusun untuk memenuhi tugas mata kuliah Sistem Operasi

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Disusun Oleh :

Kelompok 5

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Target : Mengubah HTTP menjadi HTTPS (Gembok).

```
christinesimbolon@christinesimbolon-VirtualBox:~$ sudo a2enmod ssl
[sudo] password for christinesimbolon:
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create self-signed certificates.
To activate the new configuration, you need to run:
    systemctl restart apache2

christinesimbolon@christinesimbolon-VirtualBox:~$ sudo systemctl restart apache2
```

[illegible]

3. Setting Domain Lokal (Hosts File): Karena ini domain palsu (lokal), komputer kamu harus dikasih tahu.

- Di Windows (Laptop yang buat buka browser): Buka Notepad as Administrator -> Buka file C:\Windows\System32\drivers\etc\hosts.
- Tambahkan baris paling bawah: 10.199.243.218 kelompok5.local (Ganti IP sesuai IP servermu).

```
# Copyright (c) 1993-2009 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
# 102.54.94.97 rhino.acme.com # source server
# 38.25.63.10 x.acme.com # x client host
#
# localhost name resolution is handled within DNS itself.
# 127.0.0.1 localhost
# ::1 localhost
10.199.243.210 kelompok5.local
```

4. Update Konfigurasi Apache untuk HTTPS:

```
christinesimbolon@christinesimbolon-VirtualBox:~$ sudo nano /etc/apache2/sites-available/kelompok5.conf
```

Tambahkan blok baru di bawah blok <VirtualHost *:80>...</VirtualHost> tadi:

```
GNU nano 7.2 /etc/apache2/sites-available/kelompok5.conf
<VirtualHost *:80>
    ServerAdmin admin@localhost
    ServerName kelompok5.local

    Redirect permanent / https://kelompok5.local/

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>

<VirtualHost *:443>
    ServerName kelompok5.local
    DocumentRoot /var/www/kelompok5

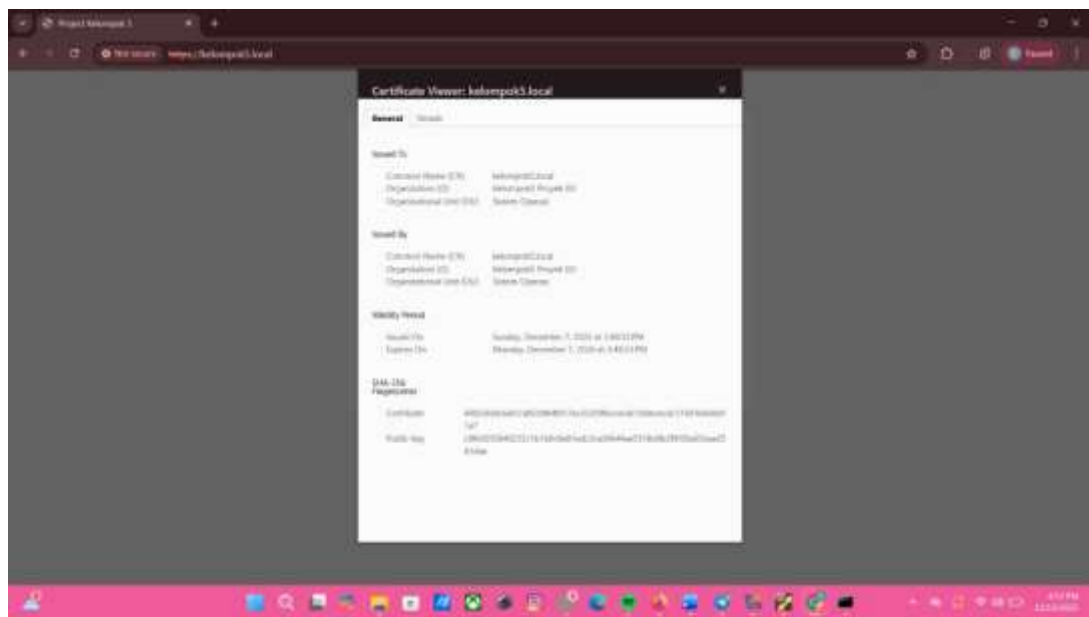
    SSLEngine on
    SSLCertificateFile /etc/ssl/certs/apache-selfsigned.crt
    SSLCertificateKeyFile /etc/ssl/private/apache-selfsigned.key
</VirtualHost>
```

5. Restart Apache:

```
christinesimbolon@christinesimbolon-VirtualBox:~$ sudo systemctl reload apache2
```

6. Coba Akses:

Buka <https://kelompok1.local>. Catatan: Karena pakai Self-Signed, browser akan bilang "Not Secure" atau "Warning". Itu wajar! Klik Advanced -> Proceed to... Itu artinya HTTPS sudah jalan.



Dokumentasi Bukti Kerja :



