

**LAPORAN SISTEM OPERASI
PROGRES MINGGU 2 (DUA)**

Disusun untuk memenuhi tugas pada Mata Kuliah Sistem Operasi

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**PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS TEKNIK & TEKNOLOGI KEMARITIMAN
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PROGRES MINGGU DUA

1. Instalasi Linux Server

```
firaz@firaz-VirtualBox: $ sudo apt update && sudo apt upgrade -y
[sudo] password for firaz:
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
171 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following package was automatically installed and is no longer required:
 liblblkv19
Use 'sudo apt autoremove' to remove it.
The following NEW packages will be installed:
 liblblkv20 linux-headers-6.14.0-36-generic linux-hwe-6.14-headers-6.14.8-36
 linux-hwe-6.14-tools-6.14.8-36 linux-image-6.14.0-36-generic
 linux-modules-6.14.0-36-generic linux-modules-extra-6.14.0-36-generic
 linux-tools-6.14.0-36-generic
The following packages will be upgraded:
 bind9-dnsutils bind9-host bind9-libs bluez bluez-cups bluez-obexd cloud-init
 coreutils cups cups-bsd cups-client cups-common cups-core-drivers cups-daemon
 cups-filters cups-filters-core-drivers cups-lp-libs cups-ppdc cups-server-common
 dconf-cli dconf-gsettings-backend dconf-service distro-info-data dkpg
 evolution-data-server evolution-data-server-common firmware-sof-signed fwupd gdm3
 ghostscript girl1.2-gdm-1.0 girl1.2-gtk-4.0 girl1.2-javascriptcoregtk-4.1
 girl1.2-javascriptcoregtk-6.0 girl1.2-mm-1.0 girl1.2-webkit-6.0 girl1.2-webkit2-4.1
 gnome-shell-extension-desktop-icons-ng intel-microcode libbluetooth3 libc-bin
 libc-dev-bin libc-devtools libc6 libc6-dbg libc6-dev liblceil-1.2-64t64 liblcups2t64
 lcupsfilters2-common liblcupsfilters2t64 liblcupsimage2t64 liblbdconfi
 liblbackend-1.2-11t64 liblbook-1.2-21t64 liblbook-contacts-1.2-4t64 liblcal-2.8-3
 libedata-book-1.2-27t64 libedata-cal-2.0-2t64 libedataserver-1.2-27t64
 libedataserver1-1.2-4t64 libegl-mesa0 libfwupd2 libgbm1 libgdm1 libgl1-mesa-dri
 libglx-mesa0 libgbm-common libgbm18 libgbm18-common libgbt4-1 libgbt4-4-bin
 libgbt4-4-common libgbt4-4-media-gstreamer libgbtop-2.0-11 libgbtop2-common
 libipa-libcac0t64 libjavascriptrcgetk-4.1-0 libjavascriptrcgetk-6.0-1 liblbdb2
 liblmalcontent-8.0 liblbn0 liblbn-sss liblbnss-system liblbpnj02-7 libpan-modules
 libpan-modules-bin libpan-runtime libpan-sss libpan-systemd libpanj02-7 libpan-modules
 libpoppler-cpp0t64 libpoppler-glib8t64 libpoppler134 libpython3-stdlib
 libpython3.12-minimal libpython3.12-stdlib libpython3.12t64 libssmclient8 libssh-4
 libssst3t64 libssss-certmap0 libssss-idmap0 libssss-nss-idmap0 libssystemd-shared
```

2. Instalasi Nginx

```
firaz@firaz-VirtualBox: ~ $ sudo apt install nginx -y
[sudo] password for firaz:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  liblvm19
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  nginx-common
Suggested packages:
  fcgiwrap nginx-doc
The following NEW packages will be installed:
  nginx nginx-common
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 564 kB of archives.
After this operation, 1,596 kB of additional disk space will be used.
Get:1 http://id.archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx-common all 1.2
4.0-2ubuntu7.5 [43.4 kB]
Get:2 http://id.archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx amd64 1.24.0-
ubuntu7.5 [528 kB]
Fetched 564 kB in 1s (800 kB/s)
Preconfiguring packages ...
Selecting previously unselected package nginx-common.
(Reading database ... 190040 files and directories currently installed.)
Preparing to unpack .../nginx-common_1.24.0-2ubuntu7.5_all.deb ...
Unpacking nginx-common (1.24.0-2ubuntu7.5) ...
Selecting previously unselected package nginx.
Preparing to unpack .../nginx_1.24.0-2ubuntu7.5_amd64.deb ...
Unpacking nginx (1.24.0-2ubuntu7.5) ...
Setting up nginx-common (1.24.0-2ubuntu7.5) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/sy
stems/system/nginx.service.
Setting up nginx (1.24.0-2ubuntu7.5) ...
 * Upgrading binary nginx
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for ufw (0.36.2-6) ...
firaz@firaz-VirtualBox: ~ $
```

3. mengaktifkan dan mengecek status aktif Nginx

```
firaz@firaz-VirtualBox: $ sudo systemctl enable --now nginx
Synchronizing state of nginx.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable nginx

firaz@firaz-VirtualBox: $ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
  Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)
  Active: active (running) since Thu 2025-12-04 12:11:48 WIB; 10min ago
    Docs: man:nginx(8)
   Main PID: 25869 (nginx)
      Tasks: 6 (limit: 8865)
     Memory: 4.4M (peak: 9.8M)
        CPU: 129ms
       CGroup: /system.slice/nginx.service
           ├─25869 "nginx: master process /usr/sbin/nginx -g daemon on; master_process"
           ├─25872 "nginx: worker process"
           ├─25873 "nginx: worker process"
           ├─25874 "nginx: worker process"
           ├─25875 "nginx: worker process"
           └─25876 "nginx: worker process"

Dec 04 12:11:48 firaz-VirtualBox systemd[1]: Starting nginx.service - A high performance...
Dec 04 12:11:48 firaz-VirtualBox systemd[1]: Started nginx.service - A high performance...
lines 1-18/18 (END)
firaz@firaz-VirtualBox: $
```

4. Mengelolah atau menambahkan domain lokal

```
firaz@firaz-VirtualBox: $ sudo nano /etc/hosts
[sudo] password for firaz:
```

Yang dimana setelah berhasil menambahkan domain lokal dan masuk ke domain kita lanjut ke tahapan :

- menambahkan ip virtual box dan juga ip localhost

```
GNU nano 1.4                               /etc/hosts
127.0.0.1 localhost
127.0.1.1 firaz-VirtualBox
127.0.0.1 myweb.local
192.168.56.1 myweb.local

# The following lines are desirable for IPv6 capable hosts
::1      ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

- lakukan konfigurasi pada Nginx

```
firaz@firaz-VirtualBox: $ sudo nano /etc/nginx/sites-available/myweb.local
firaz@firaz-VirtualBox: $ sudo ln -s /etc/nginx/sites-available/myweb.local /etc/nginx/sites-enabled/
ln: failed to create symbolic link '/etc/nginx/sites-enabled/myweb.local': File exists
firaz@firaz-VirtualBox: $ sudo nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
firaz@firaz-VirtualBox: $ sudo systemctl reload nginx

```

5. SSL self-signed

```
firax@firax-VirtualBox: ~$ sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout /etc/ssl/private/myweb.key -out /etc/ssl/certs/myweb.crt
...
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank.
For some fields there will be a default value,
If you enter '.', the field will be left blank.

Country Name (2 letter code) [AU]:ID
State or Province Name (full name) [Some-State]:Kepulauan Riau
Locality Name (eg, city) []:Tanjung Pinang
Organization Name (eg, company) [Internet Widgits Pty Ltd]:UMRAH
Organizational Unit Name (eg, section) []:Kelonpok Wannut
Common Name (e.g. server FQDN or YOUR name) []:myweb.local
Email Address []:wannut@gmail.com
```

DOKUMENTASI KEGIATAN

1. Dokumentasi pengerjaan di hari pertama Tanggal 4 Desember 2025



2. Dokumentasi pengerjaan di hari Kedua Tanggal 5 Desember 2025

