LibreNMS?? - Debian 12

????

- PVE
- LXC
- Debian 12

??nginx mariadb php

```
apt update
```

```
apt install php-mbstring php-cli php-common php-curl php-fpm php-gd php-mbstring php-mysql php-opcache php-readline php-snmp php-xml php-zip acl curl fping git graphviz imagemagick mariadb-client mariadb-server mtr-tiny nginx-full nmap rrdtool snmp snmpd whois unzip python3-pymysql python3-dotenv python3-redis python3-setuptools python3-systemd python3-pip -y
```

?? Composer

```
cd /usr/local/bin

curl -sS https://getcomposer.org/installer | php

mv composer.phar composer
```

?????

```
useradd librenms -d /opt/librenms -M -r -s "$(which bash)"
```

??LibreNMS

```
cd /opt && \
git clone https://github.com/librenms/librenms.git
```

????

```
chown -R librenms:librenms /opt/librenms && \
chmod 771 /opt/librenms && \
setfacl -d -m g::rwx /opt/librenms/rrd /opt/librenms/logs /opt/librenms/bootstrap/cache/
```

```
/opt/librenms/storage/ && \
setfacl -R -m g::rwx /opt/librenms/rrd /opt/librenms/logs /opt/librenms/bootstrap/cache/
/opt/librenms/storage/
```

?? LibreNMS???

```
su librenms
cd /opt/librenms/
./scripts/composer_wrapper.php install --no-dev

exit
pip3 install --user --break-system-packages -r /opt/librenms/requirements.txt
```

??PHP??

```
sed -i "s|^;date.timezone =.*$|date.timezone = Asia/Taipei|" /etc/php/8.2/fpm/php.ini
sed -i "s|^;date.timezone =.*$|date.timezone = Asia/Taipei|" /etc/php/8.2/cli/php.ini

□□□□□□
timedatectl set-timezone Asia/Taipei
```

?? PHP-FPM

```
cp /etc/php/8.2/fpm/pool.d/www.conf /etc/php/8.2/fpm/pool.d/librenms.conf
nano /etc/php/8.2/fpm/pool.d/librenms.conf
```

```
Change [www] to [librenms]:
[librenms]
Change user and group to “librenms”:
user = librenms
group = librenms
Change listen to a unique name:
listen = /run/php-fpm-librenms.sock
```

```
systemctl enable php8.2-fpm
systemctl restart php8.2-fpm
```

??MariaDB

□□ `/etc/mysql/mariadb.conf.d/50-server.cnf`

```
[mysqld]□□□□

innodb_file_per_table=1
lower_case_table_names=0
```

```
systemctl enable mariadb
systemctl restart mariadb
```

MariaDB?????

```
mysql -u root

CREATE DATABASE librenms CHARACTER SET utf8mb4 COLLATE utf8mb4_unicode_ci;
CREATE USER 'librenmsuser'@'localhost' IDENTIFIED BY 'librenmspswd';
GRANT ALL PRIVILEGES ON librenms.* TO 'librenmsuser'@'localhost';
FLUSH PRIVILEGES;
exit
```

??Nginx

□□ `/etc/nginx/conf.d/librenms.conf`

```
server {
    listen 80;
    server_name librenms.example.com;
    root /opt/librenms/html;
    index index.php;

    charset utf-8;
    gzip on;
    gzip_types text/css application/javascript text/javascript application/x-javascript
image/svg+xml text/plain text/xsd text/xsl text/xml image/x-icon;
    location / {
        try_files $uri $uri/ /index.php?$query_string;
    }
    location ~ [^/]\.php(/|$) {
```

```
        fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
        fastcgi_param PATH_INFO $fastcgi_path_info;
        fastcgi_pass unix:/run/php-fpm-librenms.sock;
        fastcgi_split_path_info ^(.+\.php)(/.+)$;
        include fastcgi_params;
    }
    location ~ /\.(?!well-known).* {
        deny all;
    }
}
```

```
rm /etc/nginx/sites-enabled/default
rm /etc/nginx/sites-available/default

systemctl enable nginx
systemctl restart nginx
```

Enable lnms command completion

```
ln -s /opt/librenms/lnms /usr/bin/lnms
cp /opt/librenms/misc/lnms-completion.bash /etc/bash_completion.d/
```

Configure snmpd

```
cp /opt/librenms/snmpd.conf.example /etc/snmp/snmpd.conf

curl -o /usr/bin/distro https://raw.githubusercontent.com/librenms/librenms-
agent/master/snmp/distro
chmod +x /usr/bin/distro
systemctl enable snmpd
systemctl restart snmpd
```

????

```
cp /opt/librenms/dist/librenms.cron /etc/cron.d/librenms
```

??????

```
cp /opt/librenms/dist/librenms-scheduler.service /opt/librenms/dist/librenms-scheduler.timer /etc/systemd/system/

systemctl enable librenms-scheduler.timer
systemctl start librenms-scheduler.timer
```

Copy logrotate config

```
cp /opt/librenms/misc/librenms.logrotate /etc/logrotate.d/librenms
```

□□□ `http://ip`□□□□□□□□□□□□

```
cd /opt/librenms

su librenms

./validate.php
```

??PHP8.5

Debian 12□□□□□□□ PHP8.2□□□□□□ PPA □□□□□ PHP

```
apt update

apt-get -y install lsb-release ca-certificates curl apt-transport-https

curl -sSLo /tmp/debsuryorg-archive-keyring.deb https://packages.sury.org/debsuryorg-archive-keyring.deb

dpkg -i /tmp/debsuryorg-archive-keyring.deb

sh -c 'echo "deb [signed-by=/usr/share/keyrings/deb.sury.org-php.gpg] https://packages.sury.org/php/ $(lsb_release -sc) main" > /etc/apt/sources.list.d/php.list'

apt update
```

□□□□ PHP 8.2□□□□□□□□ PHP 8.5 □□□ php8.5-opcache □□□□□□□□ php8.5-common □□□□□□□□□□

```
apt install -y $(dpkg -l | grep php8.2- | grep -v 'opcache' | awk '{print $2}' | sed 's/php8.2/php8.5/g')
```

□□□□□□ CLI □□□ 8.5□□□ 8.5□□□□ 1

```
update-alternatives --config php
```

```
root@librenms:~# update-alternatives --config php
There is 1 choice for the alternative php (providing /usr/bin/php).

  Selection    Path             Priority   Status
------------------------------------------------------------
  0            /usr/bin/php8.5   85        auto mode
* 1            /usr/bin/php8.5   85        manual mode
```

□□□□

```
root@librenms:~# php -v
PHP 8.5.12 (cli) (built: Oct 21 2026 08:08:59) (NTS)
Copyright (c) The PHP Group
Built by Debian
Zend Engine v4.5.12, Copyright (c) Zend Technologies
    with Zend OPcache v8.5.12, Copyright (c), by Zend Technologies
```

□□□□

```
sed -i "s|^;date.timezone =.*$|date.timezone = Asia/Taipei|" /etc/php/8.5/fpm/php.ini
sed -i "s|^;date.timezone =.*$|date.timezone = Asia/Taipei|" /etc/php/8.5/cli/php.ini

□□□□□□
timedatectl set-timezone Asia/Taipei
```

□□ PHP-FPM

```
cp /etc/php/8.5/fpm/pool.d/www.conf /etc/php/8.5/fpm/pool.d/librenms.conf
nano /etc/php/8.5/fpm/pool.d/librenms.conf
```

```
Change [www] to [librenms]:
[librenms]
Change user and group to “librenms”:
user = librenms
group = librenms
```

```
Change listen to a unique name:
listen = /run/php-fpm-librenms.sock
```

```
systemctl enable php8.5-fpm
systemctl restart php8.5-fpm

systemctl restart nginx
```

□□ PHP□ 8.5

LibreNMS 是個以 PHP/MySQL 為基底的自動探索網路監控系統

版本	26.11.0-dev.149+b787b2e9d3 - Thu Nov 05 2026 12:46:55 GMT+0800
資料庫綱要	2026_10_31_000000_split_device_types_config (430)
Web 伺服器	nginx/1.22.1
PHP	8.5.12
Python	3.11.2
資料庫	MariaDB 10.11.14-MariaDB-0+deb12u2

□□□□□□□

```
apt purge php8.2 php8.2-*

apt autoremove --purge
```

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