

Nginx + PHP 8 + PHP-FPM



1. PHP-FPM



(`/etc/php/8.x/fpm/php-fpm.conf`)

```
emergency_restart_threshold = 10
emergency_restart_interval = 1m
process_control_timeout = 10s
```



(`/etc/php/8.x/fpm/pool.d/www.conf`)

```
[www]
user = www-data
group = www-data

; {{{1 - {{{2
pm = dynamic
pm.max_children = 100 ; {{{3 = ({{{4 - {{{5}) / {{{6 PHP{{{7
pm.start_servers = 20 ; {{{8 = CPU{{{9} x 2
pm.min_spare_servers = 10 ; {{{10 ≈ CPU{{{11}
pm.max_spare_servers = 30 ; {{{12 ≈ CPU{{{13} x 2
pm.max_requests = 500 ; {{{14

; {{{15
process.priority = -10

; {{{16
```

```
listen = /run/php/php8.2-fpm.sock
listen.owner = www-data
listen.group = www-data
listen.mode = 0660
```

```
; [] [] [] []
```

```
slowlog = /var/log/php-fpm/slow.log
request_slowlog_timeout = 5s
```

```
; [] [] [] [] [] [] [] []
```

```
request_terminate_timeout = 30s
rlimit_files = 65535
rlimit_core = unlimited
```

2. PHP 8 [] [] [] [] (

/etc/php/8.x/fpm/php.ini)

```
; [] [] [] []
```

```
max_execution_time = 30 ; [] [] [] [] [] [] [] []
memory_limit = 128M ; [] [] [] [] [] [] [] []
upload_max_filesize = 16M
post_max_size = 18M
```

```
; OPcache [] [] (PHP 8 [] [] )
```

```
opcache.enable=1
opcache.memory_consumption=256 ; [] [] [] [] [] [] [] []
opcache.interned_strings_buffer=20
opcache.max_accelerated_files=20000
opcache.revalidate_freq=60 ; [] [] [] [] [] [] [] [] ( [] )
opcache.fast_shutdown=1
opcache.enable_cli=1 ; CLI [] [] [] OPcache
opcache.jit_buffer_size=256M ; PHP 8 JIT [] [] [] [] [] [] [] []
opcache.jit=1235 ; JIT [] [] (4 [] [] )
```

```
; [] [] [] [] [] [] [] []
```

```
disable_functions = exec,passthru,shell_exec,system,proc_open,popen
```

expose_php = Off

3. Nginx

(/etc/nginx/nginx.conf)

```
user www-data;
worker_processes auto;    # CPU
worker_rlimit_nofile 65535; # worker

events {
    worker_connections 4096; # worker
    multi_accept on;        #
    use epoll;              # Linux
}

http {
    sendfile on;
    tcp_nopush on;
    tcp_nodelay on;
    keepalive_timeout 15;
    keepalive_requests 1000;
    types_hash_max_size 2048;
    server_tokens off;

    #
    client_body_buffer_size 16K;
    client_header_buffer_size 1k;
    client_max_body_size 18m;
    large_client_header_buffers 4 16k;

    #
    open_file_cache max=200000 inactive=20s;
    open_file_cache_valid 30s;
    open_file_cache_min_uses 2;
    open_file_cache_errors on;
```

```

# MIME
include /etc/nginx/mime.types;
default_type application/octet-stream;

#
access_log off;          #
error_log /var/log/nginx/error.log crit;

# Gzip
gzip on;
gzip_vary on;
gzip_proxied any;
gzip_comp_level 6;
gzip_types text/plain text/css application/json application/javascript text/xml application/xml
application/xml+rss text/javascript;

#
include /etc/nginx/conf.d/*.conf;
include /etc/nginx/sites-enabled/*;
}

```

PHP

```

server {
    listen 80;
    server_name example.com;
    root /var/www/html;
    index index.php index.html;

    #
    add_header X-Frame-Options "SAMEORIGIN";
    add_header X-Content-Type-Options "nosniff";
    add_header X-XSS-Protection "1; mode=block";
    add_header Referrer-Policy "strict-origin-when-cross-origin";

    #
    location ~* \.(jpg|jpeg|png|gif|ico|css|js|woff2)$ {
        expires 365d;
    }
}

```

```

access_log off;
add_header Cache-Control "public";
}

# PHP
location ~ /\.php$ {
    try_files $uri =404;
    fastcgi_split_path_info ^(.+\.(php|php5|php7|php8|php8.1|php8.2|php8.3|php8.4))(/.+)$;
    fastcgi_pass unix:/run/php/php8.2-fpm.sock;
    fastcgi_index index.php;
    include fastcgi_params;
    fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;

    # FastCGI
    fastcgi_buffer_size 128k;
    fastcgi_buffers 256 16k;
    fastcgi_busy_buffers_size 256k;
    fastcgi_temp_file_write_size 256k;
    fastcgi_read_timeout 60s;
}

#
location ~ /\. {
    deny all;
    access_log off;
    log_not_found off;
}

# PHP
location ~* /uploads/.*\.php$ {
    deny all;
}
}

```

4.

(/etc/sysctl.conf)


```
# PHP-FPM
ps -yIC php-fpm8.2 --sort:rss
```

```
# Nginx
sudo systemctl status nginx
sudo tail -f /var/log/nginx/error.log
```

```
#
htop
iftop -n
iotop -o
```



```
#
sudo apt install apache2-utils siege
```

```
#
ab -n 10000 -c 100 http://example.com/
siege -b -c100 -t60S http://example.com/
```

6.



```
# PHP 8.2/8.3
sudo apt install php8.3-fpm php8.3-opcache

# Nginx
sudo add-apt-repository ppa:nginx/development
sudo apt update
sudo apt install nginx
```

Unix Socket TCP

