

LAMPIRAN

Lampiran 1. Hasil Pengujian *Response Time & Throughput*

Web Server	Skenario	Beban Request	Jmeter		HTTPerf	
			Response	Throughput	Response	Throughput
Nginx	Wordpress	5000	6 ms	17,5 kb/s	5,7 ms	18,9 kb/s
		10000	7 ms	33,6 kb/s	6,2 ms	37,9 kb/s
		20000	9 ms	61,7 kb/s	8,1 ms	56,8 kb/s
	Web Statis	5000	5 ms	22,8 kb/s	4,5 ms	19,5 kb/s
		10000	7 ms	55,4 kb/s	5,5 ms	39 kb/s
		20000	9 ms	99,8 kb/s	7,3 ms	58,4 kb/s
	Gambar	5000	4 ms	27,9 kb/s	4,3 ms	19,3 kb/s
		10000	7 ms	66,8 kb/s	6,2 ms	38,7 kb/s
		20000	11 ms	117,5 kb/s	8 ms	58 kb/s
	Video	5000	7 ms	33,7 kb/s	5,6 ms	19,3 kb/s
		10000	9 ms	48,3 kb/s	8,4 ms	38,6 kb/s
		20000	11 ms	97,9 kb/s	9,8 ms	57,5 kb/s
Apache	Wordpress	5000	9 ms	19,5 kb/s	7,7 ms	27,6 kb/s
		10000	11 ms	57,9 kb/s	9,5 ms	55,3 kb/s
		20000	12 ms	79,4 kb/s	10,2 ms	82,9 kb/s
	Web Statis	5000	8 ms	27,1 kb/s	6,2 ms	28,2 kb/s
		10000	10 ms	70,3 kb/s	8,7 ms	56,4 kb/s
		20000	12 ms	131,6 kb/s	9,1 ms	84,5 kb/s
	Gambar	5000	8 ms	38,8 kb/s	6,6 ms	28 kb/s
		10000	11 ms	68,6 kb/s	9,3 ms	56,1 kb/s
		20000	13 ms	127,7 kb/s	11,2 ms	84,1 kb/s
	Video	5000	9 ms	39,3 kb/s	6,7 ms	28 kb/s
		10000	12 ms	53,4 kb/s	9,5 ms	56 kb/s
		20000	14 ms	117,2 kb/s	12,8 ms	83,9 kb/s
LIGHTTPD	Wordpress	5000	7 ms	21 kb/s	6,3 ms	29 kb/s
		10000	8 ms	68,3 kb/s	7,4 ms	57,9 kb/s
		20000	11 ms	97,4 kb/s	9,2 ms	88,6 kb/s
	Web Statis	5000	6 ms	38,5 kb/s	5,4 ms	29,5 kb/s
		10000	9 ms	76,9 kb/s	6,8 ms	59 kb/s
		20000	10 ms	140,9 kb/s	8,4 ms	88,5 kb/s
	Gambar	5000	7 ms	39 kb/s	5,9 ms	29,4 kb/s
		10000	9 ms	84,6 kb/s	7,7 ms	58,7 kb/s
		20000	12 ms	151,7 kb/s	9,3 ms	88 kb/s
	Video	5000	8 ms	41 kb/s	6,2 ms	29,3 kb/s
		10000	11 ms	62,8 kb/s	9 ms	58,6 kb/s
		20000	12 ms	137,5 kb/s	11,3 ms	87,9 kb/s

Lampiran 2. Konfigurasi Web Server

a. NGINX config

```
user www-data;
worker_processes auto;
pid /run/nginx.pid;
include /etc/nginx/modules-enabled/*.conf;

events {
    worker_connections 20000;
    multi_accept on;
}

http {
    sendfile on;
    #tcp_nopush on;
    #tcp_nodelay on;

    #number of requests client can make over keep-alive - for testing
    environment#
        keepalive_requests 100000;
        server_tokens off;
        include /etc/nginx/mime.types;
        default_type application/octet-stream;

        ssl_protocols TLSv1 TLSv1.1 TLSv1.2; # Dropping SSLv3,
ref:POODLE
        ssl_prefer_server_ciphers on;

        access_log /var/log/nginx/access.log;
        error_log /var/log/nginx/error.log;

        gzip on;

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

b. APACHE config

```

DefaultRuntimeDir ${APACHE_RUN_DIR}
PidFile ${APACHE_PID_FILE}
KeepAlive On
# MaxKeepAliveRequests: The maximum number of requests to allow
# We recommend you leave this number high, for maximum
performance.
#
MaxRequestWorkers 20000
MaxKeepAliveRequests 100000

User ${APACHE_RUN_USER}
Group ${APACHE_RUN_GROUP}
HostnameLookups Off
ErrorLog ${APACHE_LOG_DIR}/error.log
LogLevel warn
IncludeOptional mods-enabled/*.load
IncludeOptional mods-enabled/*.conf
Include ports.conf
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Require all denied
</Directory>
<Directory /usr/share>
    AllowOverride None
    Require all granted
</Directory>
<Directory /var/www/>
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>
AccessFileName .htaccess
<FilesMatch "^\.ht">
    Require all denied
</FilesMatch>
LogFormat "%v:%p %h %l %u %t \"%r\" %>s %O \"%{Referer}i\" \"%{User-Agent}i\"" vhost_combined
LogFormat "%h %l %u %t \"%r\" %>s %O \"%{Referer}i\" \"%{User-Agent}i\"" combined
LogFormat "%h %l %u %t \"%r\" %>s %O" common
LogFormat "%{Referer}i -> %U" referer
LogFormat "%{User-agent}i" agent
IncludeOptional conf-enabled/*.conf
IncludeOptional sites-enabled/*.conf

```

c. LIGHTTPD config

```
server.modules = (
    "mod_access",
    "mod_alias",
    "mod_compress",
    "mod_redirect",
)
server.document-root      = "/var/www/html"
server.upload-dirs        = ( "/var/cache/lighttpd/uploads" )
server.errorlog           = "/var/log/lighttpd/error.log"
server.pid-file           = "/var/run/lighttpd.pid"
server.username           = "www-data"
server.groupname          = "www-data"
server.port               = 80

##Performance options
server.max-worker        = 20000
server.max-keep-alive-requests = 100000

index-file.names          = ( "index.php", "index.html",
    "index.lighttpd.html" )
url.access-deny           = ( "~", ".inc" )
static-file.exclude-extensions = ( ".php", ".pl", ".fcgi" )

compress.cache-dir       = "/var/cache/lighttpd/compress/"
compress.filetype        = ( "application/javascript",
    "text/css", "text/html", "text/plain" )

# default listening port for IPv6 falls back to the IPv4 port
## Use ipv6 if available
#include_shell "/usr/share/lighttpd/use-ipv6.pl " + server.port
include_shell "/usr/share/lighttpd/create-mime.assign.pl"
include_shell "/usr/share/lighttpd/include-conf-enabled.pl"
```