

Comparación entre servidores web en Android



- Palapa Web Server.



- KWS.



- KSWEB.

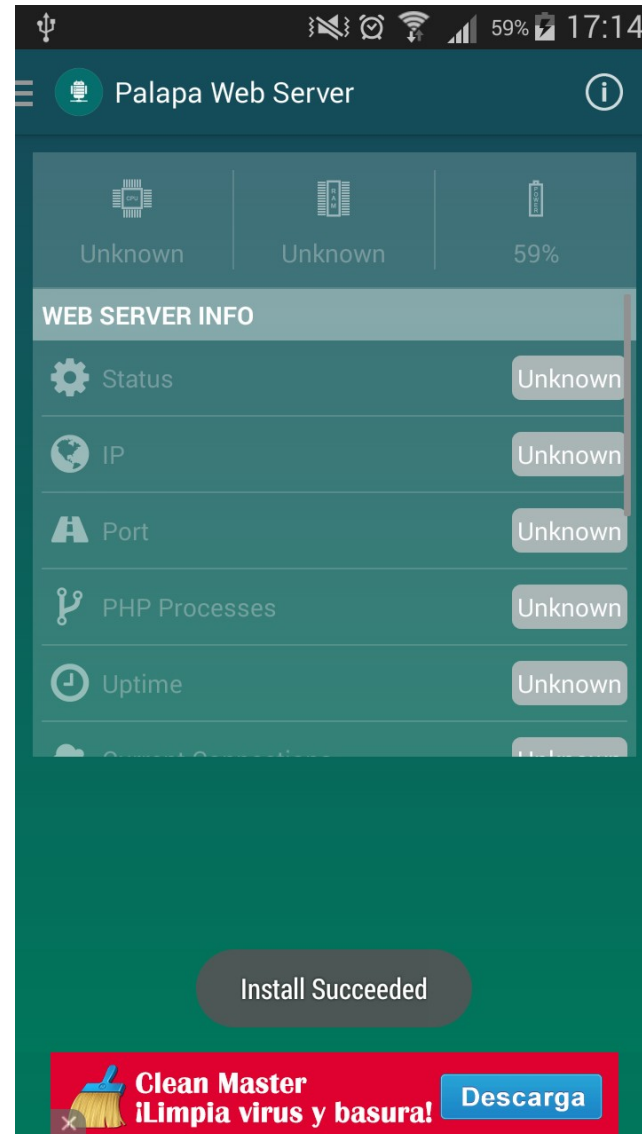
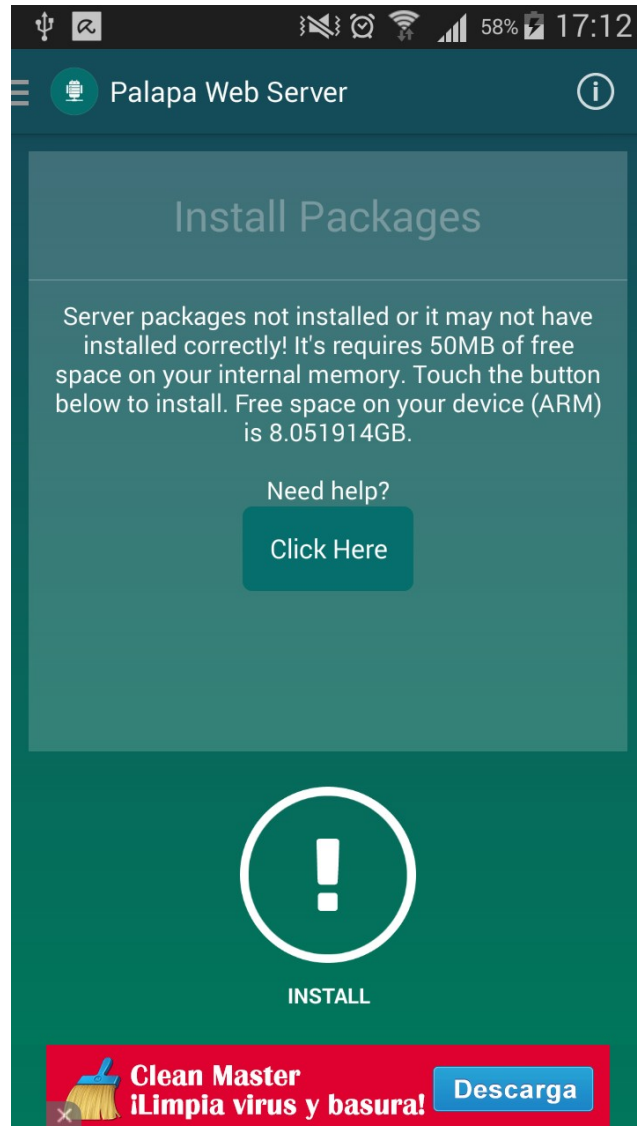


- José Antonio Larrubia García.

- Javier Quero Ruiz.

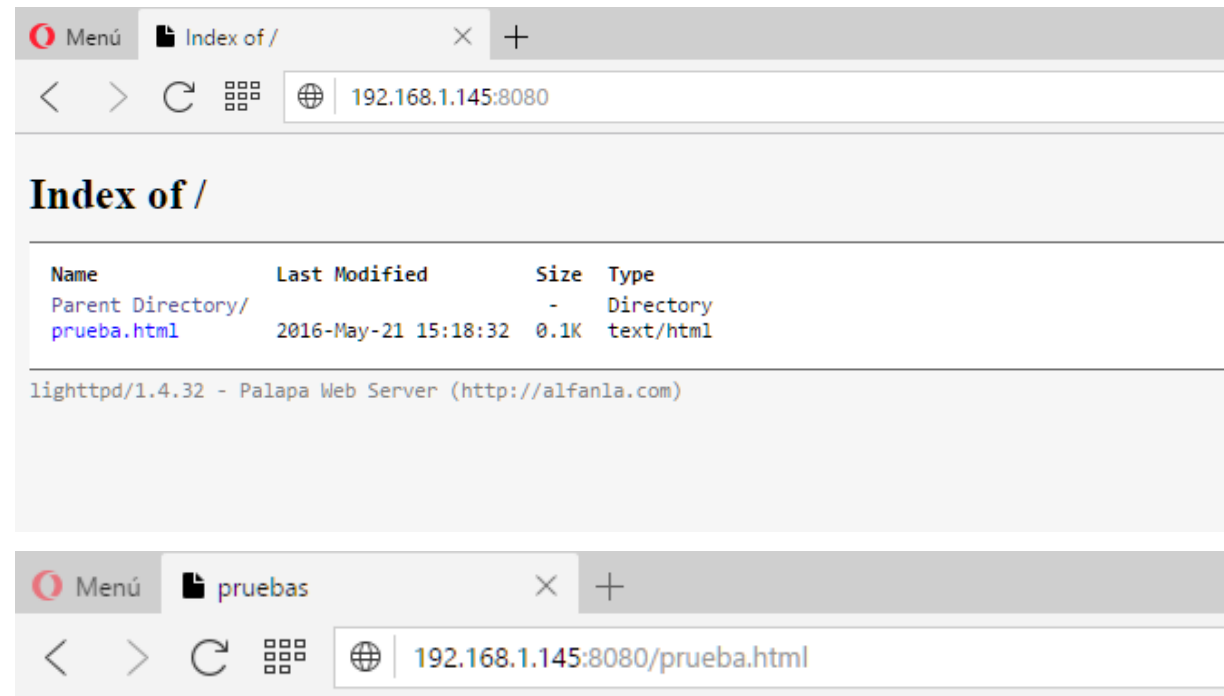
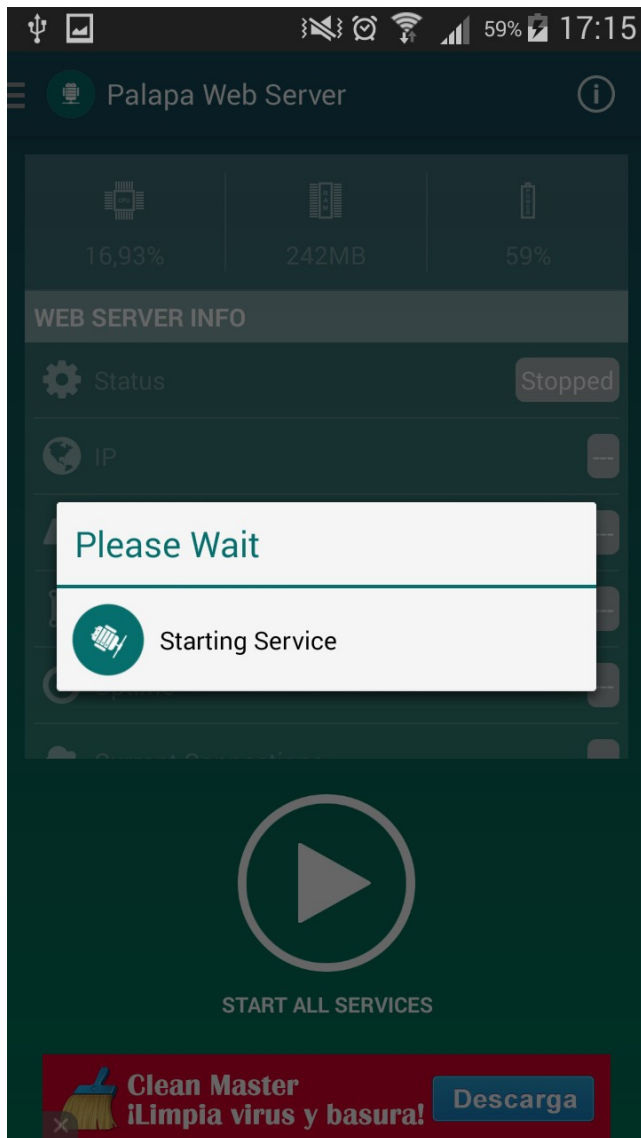
1. Palapa Web Server

1.1 Instalación



1. Palapa Web Server

1.2 Muestra de funcionamiento

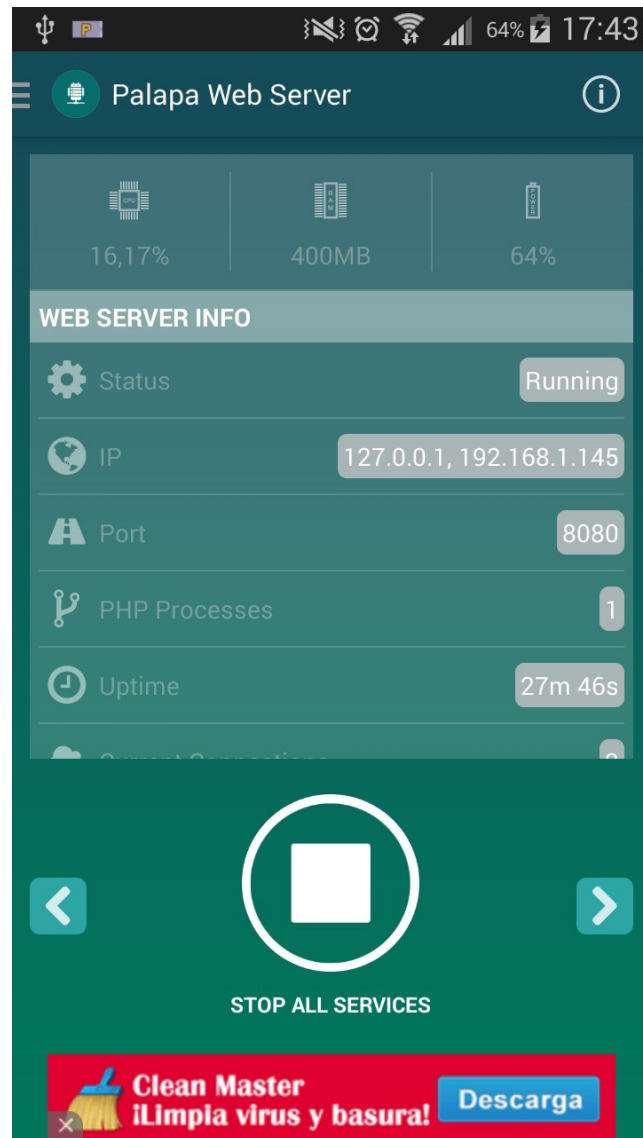


archivo para realizar la prueba

```
<html>
<head>
<title>pruebas</title>
</head>
<body>
archivo para realizar la prueba
</body>
</html>
```

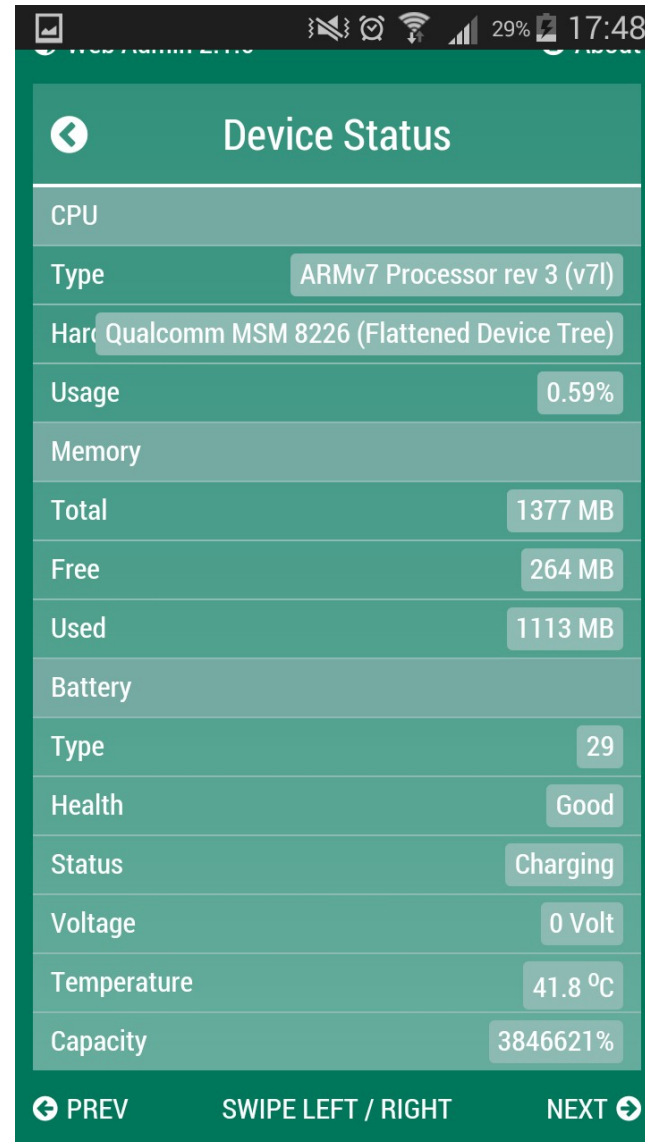
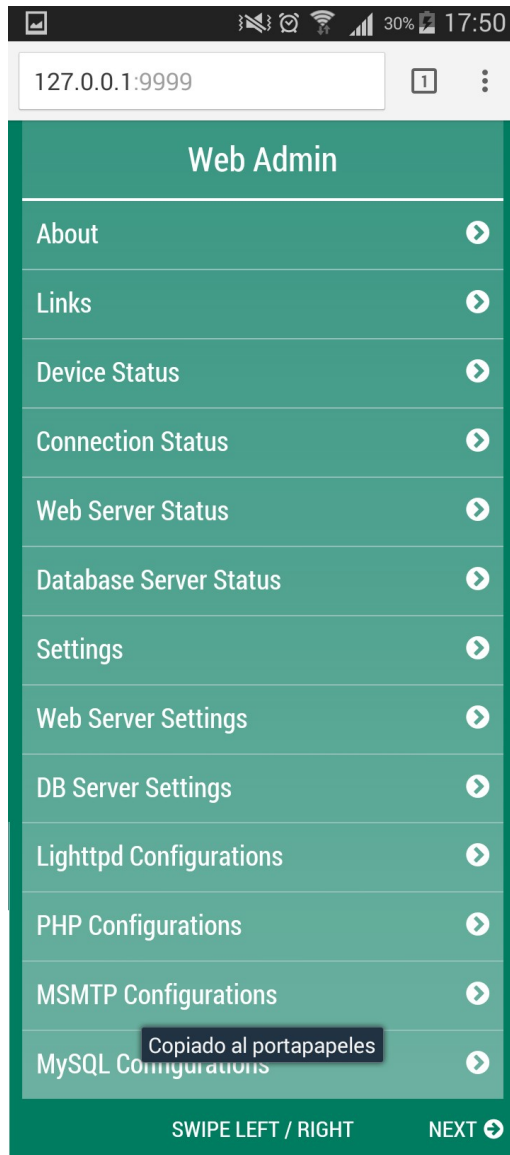
1. Palapa Web Server

1.3. Servicios y Consumo



1. Palapa Web Server

1.4 Servicios del webadmin



1. Palapa Web Server

1.4 Servicios del webadmin



127.0.0.1:9999

Web Admin 2.1.0 About

Connection Status

Mobile	
Received	0 Bytes
Received Packets	0
Transmitted	0 Bytes
Transmitted Packets	0
Wifi	
Received	218 MB
Received Packets	487K
Transmitted	29 MB
Transmitted Packets	283K

PREV SWIPE LEFT / RIGHT NEXT

Web Server Status

Server	
Status	Running
IP	192.168.1.103, 127.0.0.1
Port	8080
PHP Processes	1
Host	127.0.0.1:9999
Started at	2016-05-27 15:43:02
Uptime	6 min 17 s
Loaded Modules	28 Modules
Current Connections	5
5s Sliding Average Connections	
Requests	0 req/s
Traffic	0.00 byte/s
Average Connections	
Requests	0 req/s
Traffic	1.19 kbyte/s
Total Connections	
Requests	0 req/s
Traffic	0.00 byte/s

1. Palapa Web Server

1.5 Benchmark



- 5 ejecuciones de Apache Benchmark.

```
Simbolo del sistema
Microsoft Windows [Versión 10.0.10586]
(c) 2015 Microsoft Corporation. Todos los derechos reservados.

C:\Users\josea\Desktop\apache\apache\bin>ab -n 1000 -c 5 http://192.168.1.145:8080/prueba.html
This is ApacheBench, Version 2.3 <$Revision: 655654 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 192.168.1.145 (be patient)
Completed 100 requests
Completed 200 requests
Completed 300 requests
Completed 400 requests
Completed 500 requests
Completed 600 requests
Completed 700 requests
Completed 800 requests
Completed 900 requests
Completed 1000 requests
Finished 1000 requests

Server Software:      lighttpd/1.4.32
Server Hostname:      192.168.1.145
Server Port:          8080

Document Path:        /prueba.html
Document Length:      106 bytes

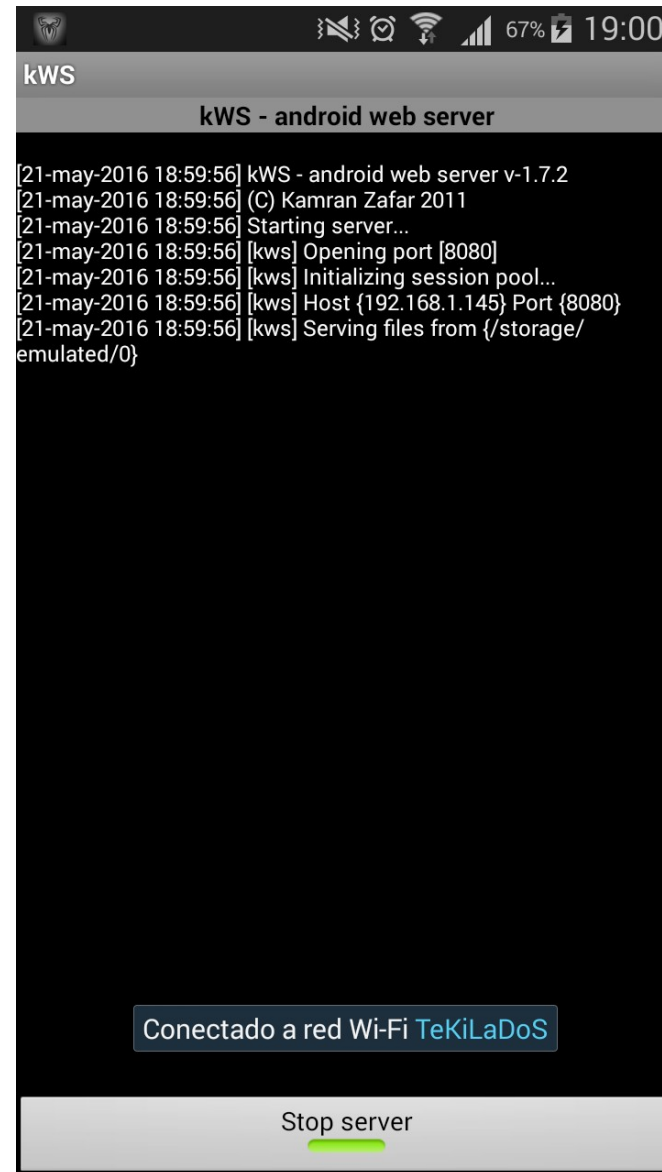
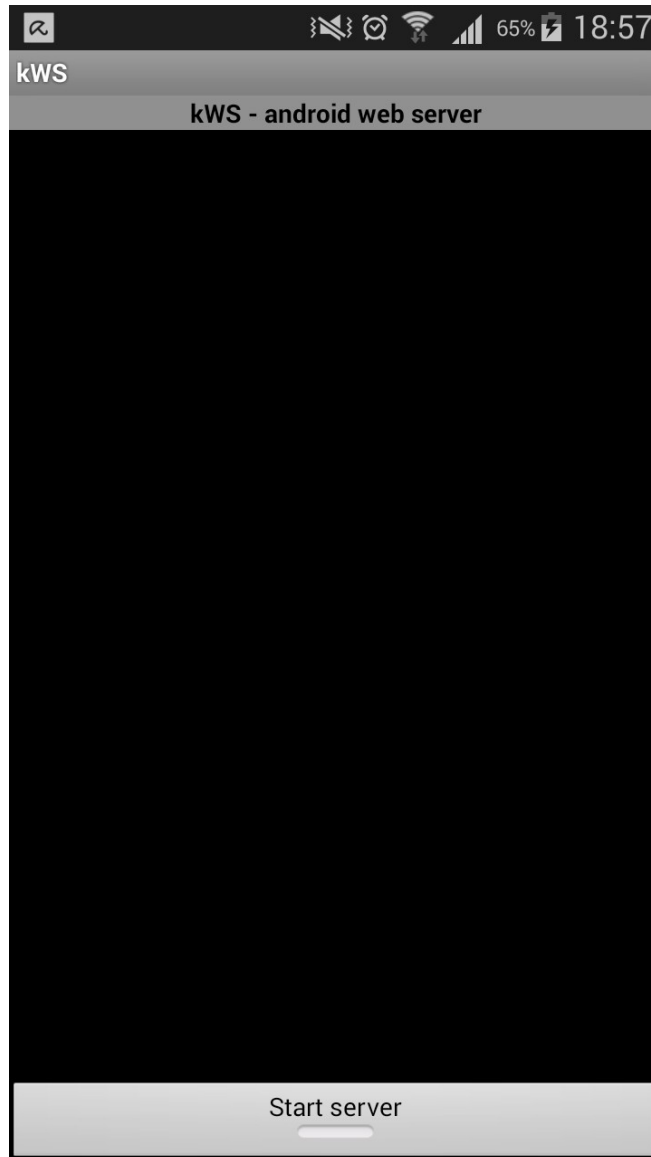
Concurrency Level:    5
Time taken for tests:  8.845 seconds
Complete requests:    1000
Failed requests:       0
Write errors:         0
Total transferred:    454000 bytes
HTML transferred:     106000 bytes
Requests per second:  113.05 [#/sec] (mean)
Time per request:     44.227 [ms] (mean)
Time per request:     8.845 [ms] (mean, across all concurrent requests)
Transfer rate:        50.12 [Kbytes/sec] received

Connection Times (ms)
              min    mean[+/-sd] median    max
Connect:        3      8  12.2      7    343
Processing:     5     34  18.9     30    155
Waiting:        4     27  17.9     24    150
Total:         11     43  23.8     38    368

Percentage of the requests served within a certain time (ms)
 50%    38
 66%    43
 75%    46
 80%    49
 90%    69
 95%    88
 98%   111
 99%   129
100%   368 (longest request)
```


2. Kws

2.1 Primera ejecución



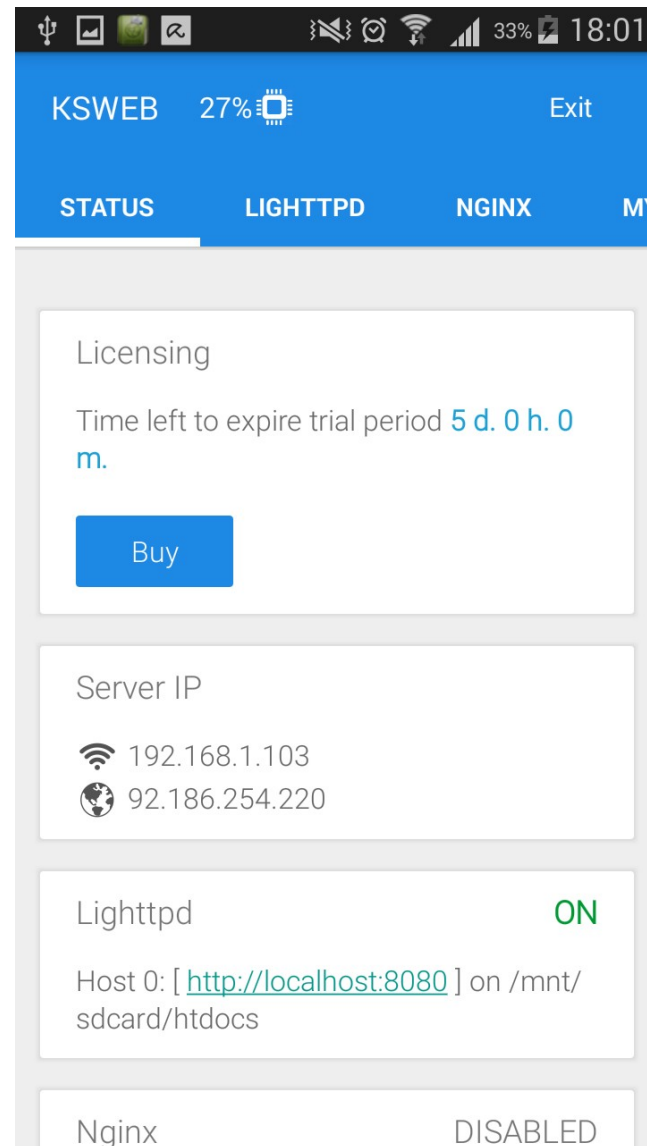
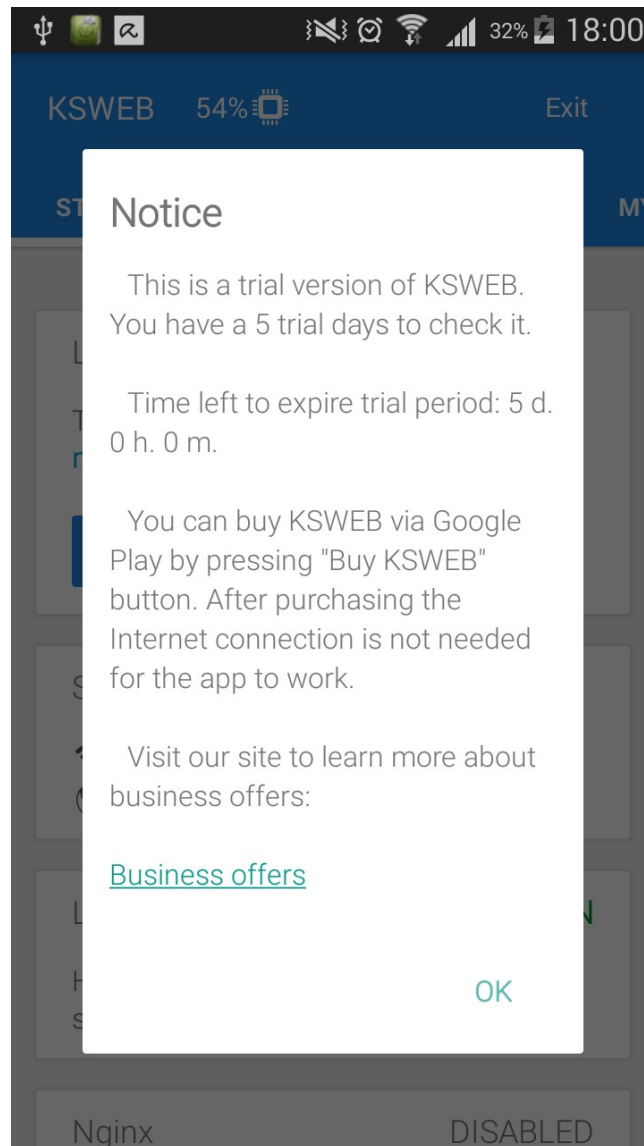
2. Kws

2.2 Consumo



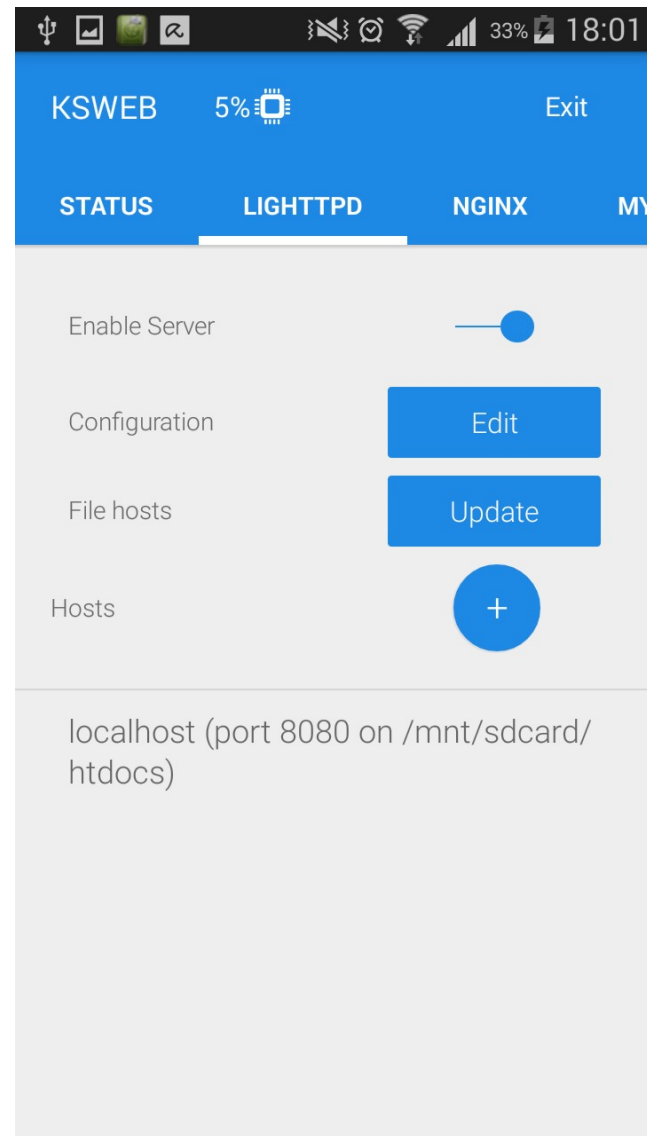
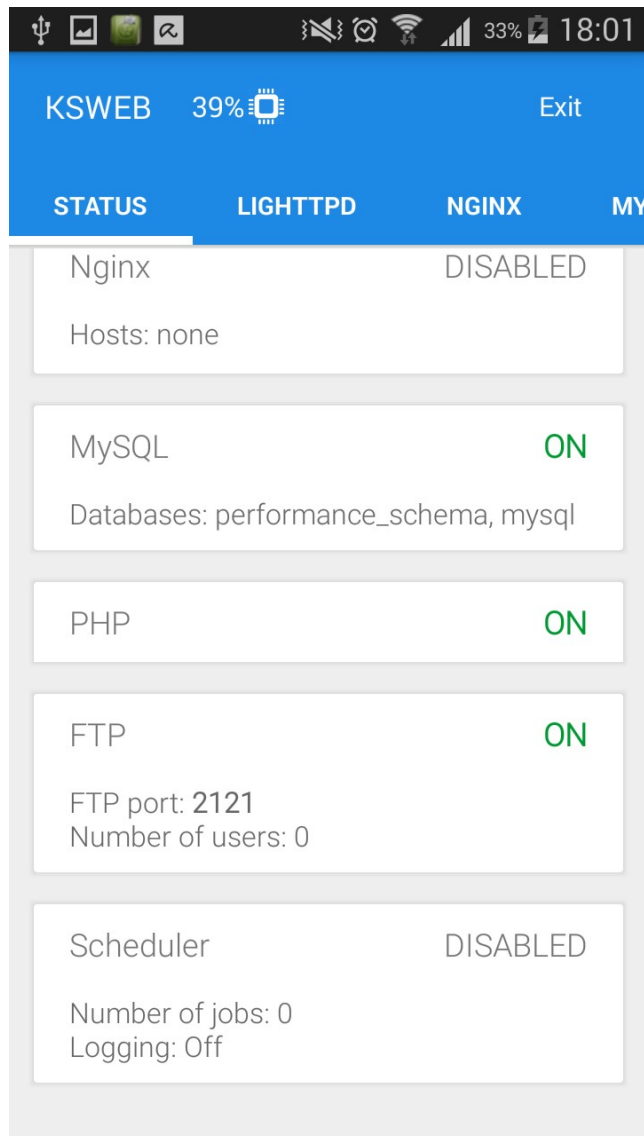
3. KSWEB

3.1 Primera ejecución



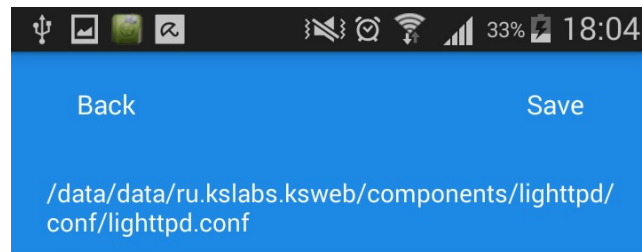
3. KSWEB

3.2 Muestra de servicios



3. KSWEB

3.3 Configuración y consumo



```
## !!!WARNING!!!
## Be careful changing this configuration file!
## Some changes may result in incorrect function of the
program.
## Always make backups of configuration files before any
changes.
## -----

#####
#For the proper functioning of KSWEB keep this settings
at the top of this file

#begin_docroot (do not remove this label!)
server.document-root = "/mnt/sdcard/htdocs"
#end_docroot (do not remove this label!)

#begin_port (do not remove this label!)
server.port = 8080
#end_port (do not remove this label!)

#begin_hosts (do not remove this label!)
#end_hosts (do not remove this label!)
#####

server.errorlog = "/mnt/sdcard/ksweb/log/lighttpd/
lighttpd.log"
#dir-listing.activate = "disable"

index-file.names = ("index.php", "index.html")
```



4. Comparaciones

Palapa	Time taken per tests (s)	Failed requests	Requests per second
1	8.845	0	113.05
2	8.147	0	122.74
3	8.655	0	115.54
4	8.571	0	116.67
5	8.197	0	122
Media	8.483	0	188

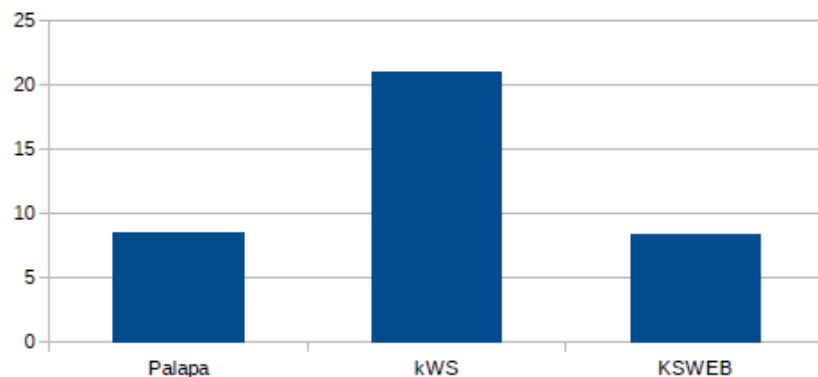
kWS	Time taken per tests (s)	Failed requests	Requests per second
1	20.309	0	49.24
2	20.391	0	49.04
3	19.803	0	50.5
4	21.251	0	47.06
5	23.193	0	43.12
Media	20.9894	0	47.792

KSWEB	Time taken per tests (s)	Failed requests	Requests per second
1	7.628	0	131.1
2	7.779	0	128.56
3	8.989	0	111.24
4	9.3	0	107.52
5	8.286	0	120.73
Media	8.3958	0	119.83

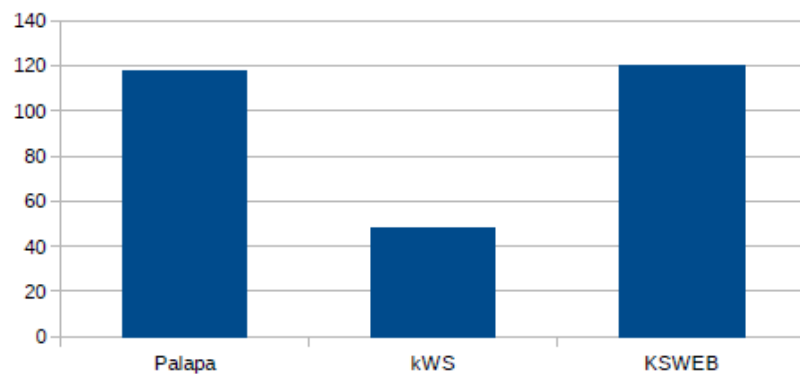
MEDIAS	Time taken per tests (s)	Failed requests	Requests per second	Consumo CPU
Palapa	8,483	0	118	16,10%
kWS	20,9894	0	47,792	70,00%
KSWEB	8,3958	0	119,83	17,00%

4. Comparaciones

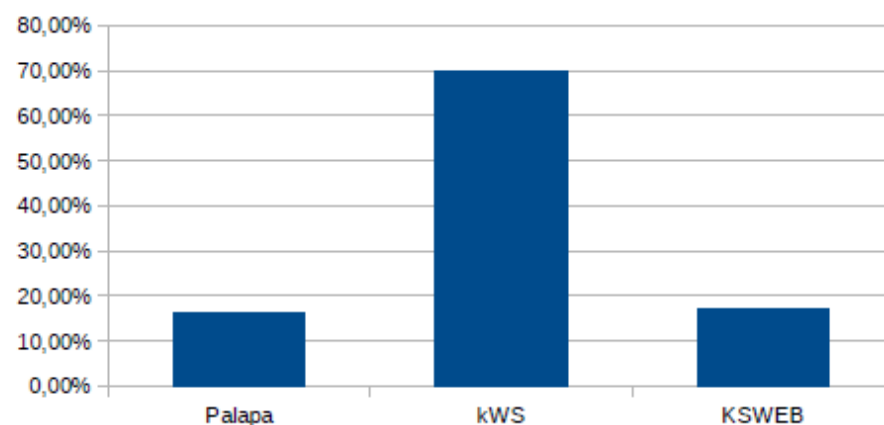
Time taken for tests (s)



Requests per second



Consumo CPU



MEDIAS	Time taken per tests (s)	Failed requests	Requests per second	Consumo CPU
Palapa	8,483	0	118	16,10%
kWS	20,9894	0	47,792	70,00%
KSWEB	8,3958	0	119,83	17,00%

5. Conclusiones

- Hay gran variedad de aplicaciones web para android en google play.
- Palapa y kWS son gratuitas, KSWEB de pago.
- Basándonos en el consumo de CPU la mejor es Palapa.
- Si nos basamos en las pruebas de ab la mejor es KSWEB.
- El rendimiento de kWS queda muy por detrás de las otras dos y comparándolo con Palapa deja mucho que desear.