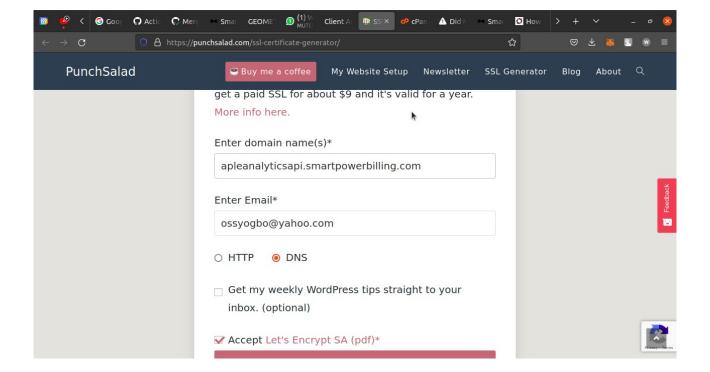
SSL Generation Documentation

SSL Generation URL: https://punchsalad.com/ssl-certificate-generator/ Cpanel for SmartPowerBilling: https://smartweb.com.ng/web/clientarea.php

Open up the ssl generation website provided above, and filling in all required infomation

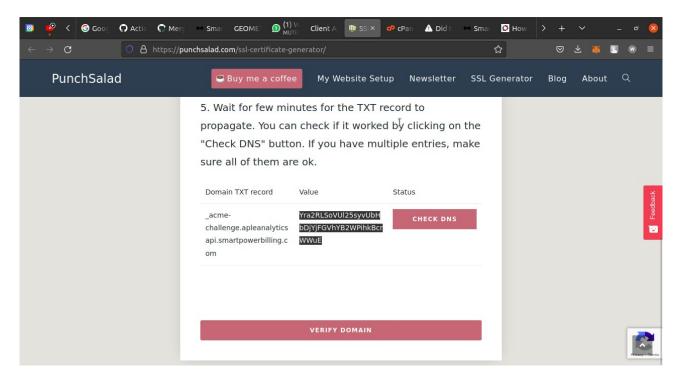
- domain name
- email
- Type (DNS)

then accept the conditions conditions and proceed to the next stage

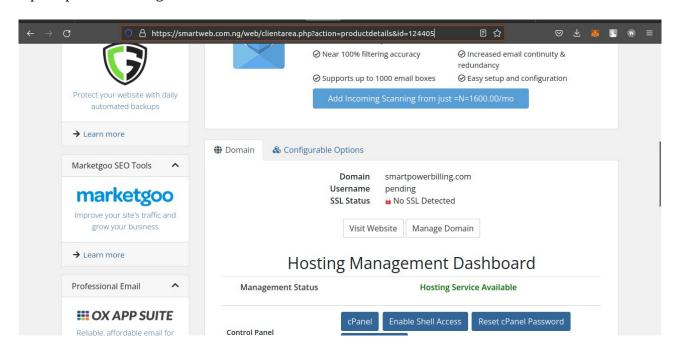


After submission, the page below is loaded next with some infomation to perfom on the cpanel for the host of "Smart Powe billing".

Copy the value below, "Domain namt txt reocrd" and "Value"

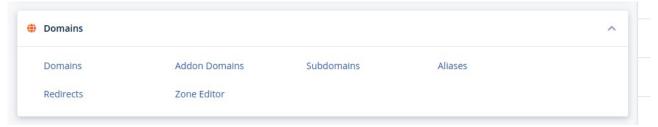


Step 3
Open up smart web ng,

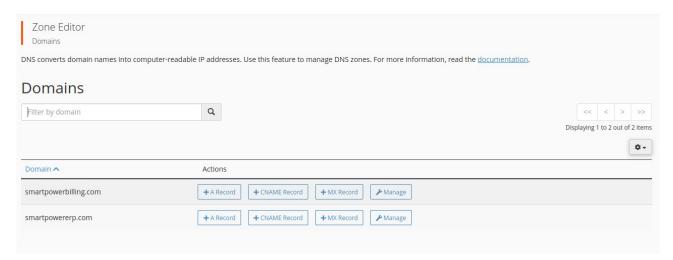


and locate the management dashboard for "smart power billing" and click on "cpanel" which should auto log you into the cpanel.

In the cpanel, locate "Domains", underneath the submenus for domain, locate "Zone editor" and click on that.



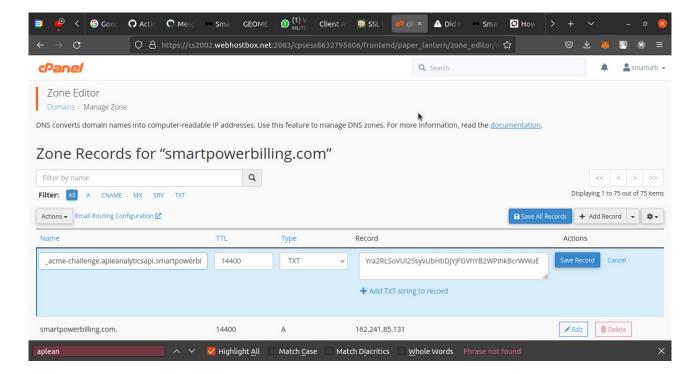
- Next click on "smart power billing" in the page shown and click on "manage"



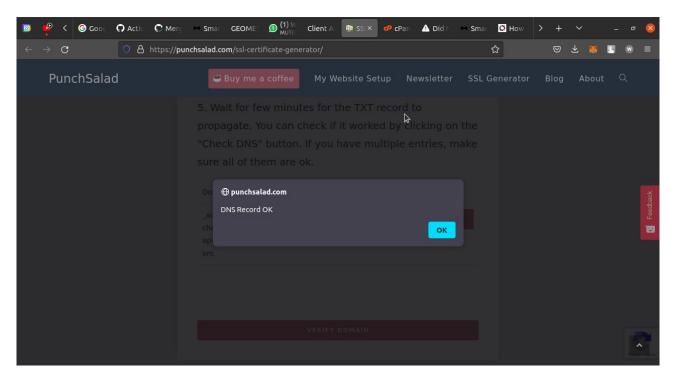
click on "Add Record", which would provide a couple of text fields for value to be inputted from the step above.

- In the name field enter the "domain name txt record" from the step above,
- leave the TTL field as it is,
- In the type field, select "Txt",
- in the record field enter the "Value" from the step above

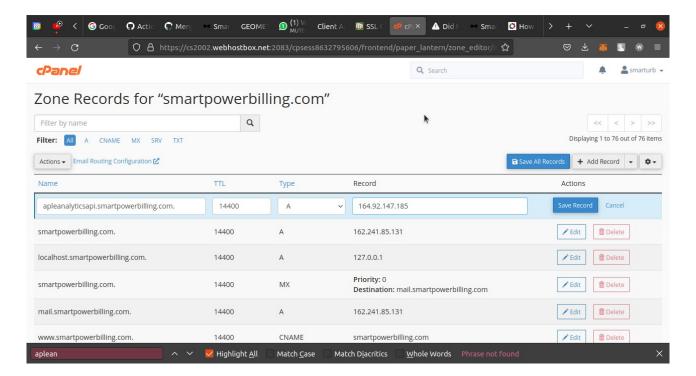
then save the record



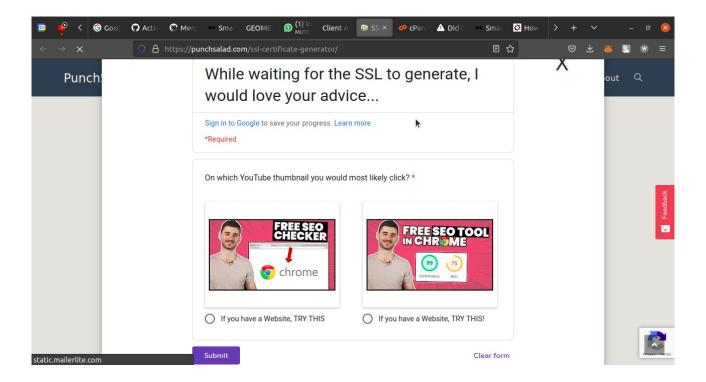
Step 4 Return to the SSL generated site, two steps above, and proceed to click on the "Check DNS" button which should return to your the image below.



Head over to the cpanel to create a record by clicking on the "Add Record" button; the record should contain the neccesary information for the required subdomain e.g apleportal.smartpowerbilling.com and the IP of the server.

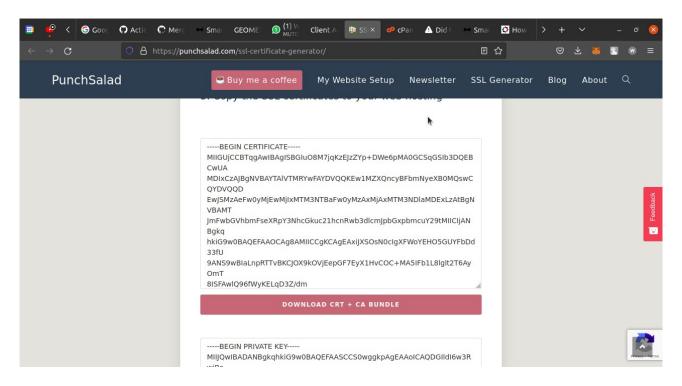


Click on submit and wait for the generation of the required certs to be completed, it takes a short time. You can close the popup to view the generated items.

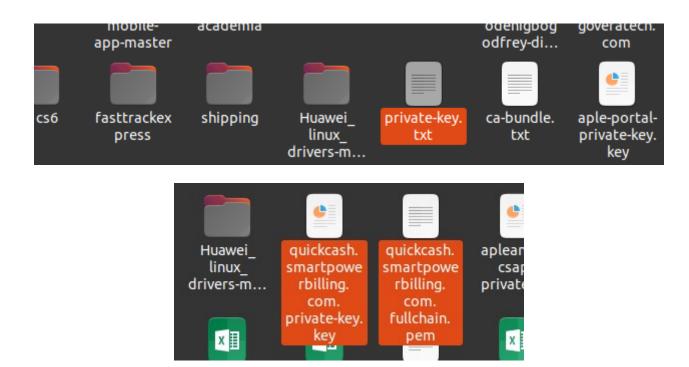


Step 7

Save both generated files

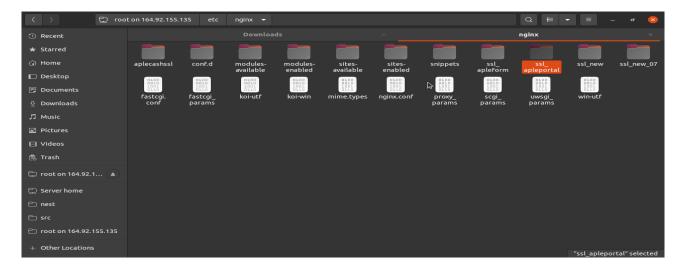


renaming the CRT + CA text bundle file to something like "aple-portal.fullchain.pem" and renaming the private key text file to something like "aple-portal.private-key.key"

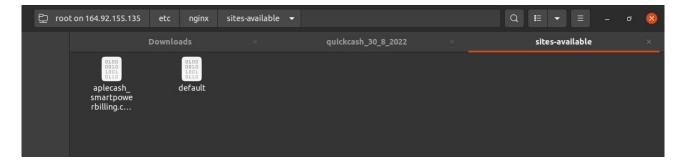


Login into the server where the application reside, via FTP or SSH, however FTP access would be adviced as its easier to navigate with.

Locate the folder: "/etc /nginx/", pick any folder, however, "SSL_NEW" is should be used as company standard, and upload the download, renamed "pem" and "key" files.



Locate the configuration (conf) file in the folder "/etc/nginx/sites-available"



open the file up to add the necessary records for the new domain name.

```
24 }
25
26 upstream quickcashview{
27 | server 127.0.0.1:8080;
28 }
29
```

```
upstream quickcashview{
server 127.0.0.1:8080;
}
```

where 127.0.0.1 reffers to localhost and port 8080 is where the application runs.

After the last step, copy the text below and paste, as it provides for dept configuration for the item created in the step above.

server {

listen [:] 443;

listen 443 ssl :

listen [::]:443 ssl http2 ;

server name quickcash.smartpowerbilling.com;

proxy_read_timeout 720s;

proxy connect timeout 720s;

proxy_send_timeout 720s;

proxy ssl verify on;

add header Strict-Transport-Security "max-age=63072000; includeSubDomains; preload";

add header X-Frame-Options DENY;

add header X-Content-Type-Options nosn;

ssl certificate

/etc/nginx/ssl_new/quickcash_30_8_2022/quickcash.smartpowerbilling.com.fullchain.pem;

ssl certificate key

/etc/nginx/ssl new/quickcash 30 8 2022/quickcash.smartpowerbilling.com.private-key.key;

ssl protocols TLSv1.2;

SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES256-GCM-SHA384:DHE-RSA-

AES128-GCM-SHA256:DHE-DSS-AES128-GCM-SHA256:kEDH+AESGCM:ECDHE-RSA-

AES128-SHA256:ECDHE-ECDSA-AES128-SHA256:ECDHE-RSA-AES128-SHA:ECDHE-ECDSA-

AES128-SHA:ECDHE-RSA-AES256-SHA384:ECDHE-ECDSA-AES256-SHA384:ECDHE-RSA-

AES256-SHA:ECDHE-ECDSA-AES256-SHA:DHE-RSA-AES128-SHA256:DHE-RSA-AES128-

SHA:DHE-DSS-AES128-SHA256:DHE-RSA-AES256-SHA256:DHE-DSS-AES256-SHA:DHE-RSA-

AES256-SHA:!aNULL:!eNULL:!EXPORT:!DES:!RC4:!3DES:!MD5:!PSK';

ssl prefer server ciphers on;

ssl verify client on;

access log /var/log/nginx/ssl.access.log;

error log/var/log/nginx/ssl.error.log;

Handle longpoll requests

location /longpolling {

proxy pass http://odoochat;

l

location / {

proxy redirect off;

proxy set header Host \$host;

proxy set header X-Forwarded-Host \$host;

proxy set header X-Forwarded-Server \$host;

```
proxy_set_header X-Real-IP $remote_addr;
proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
proxy_set_header X-Forwarded-Proto $scheme;
proxy_redirect off;
proxy_pass http://quickcashview;
# root /var/www;
}
```

- Modify the following from the text above to point the location of the "pem" and "key" files to the correct newely generated files.

```
14
15 ssl_certificate /etc/nginx/ssl_new/puickcash_30_8_2022/quickcash.smartpowerbilling.com.fullchain.pem;
16 ssl_certificate_key /etc/nginx/ssl_new/quickcash_30_8_2022/quickcash.smartpowerbilling.com.private-key.key;
17
18
```

- Next is to modify the server_name variable to point to the correct domain name, in this instance, "quickcash.smartpowerbilling.com"

```
# listen [:] 443;
listen 443 ssl;
| listen [::]:443 ssl http2 ;
server_name quickcash.smartpowerbilling.com;
proxy_read_timeout 720s;
```

- Next is to modified modify the proxy_pass variable to point to the name of the service created in step 2 above.

```
# }
location / {
    proxy_redirect off;
    proxy_set_header Host $host;
    proxy_set_header X-Forwarded-Host $host;
    proxy_set_header X-Forwarded-Server $host;
    proxy_set_header X-Real-IP $remote_addr;
    proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_Proxy_set_header X-Forwarded-Proto $scheme;
    proxy_redirect off;
    proxy_pass http://quickcashview;
# root /var/www;
}
```

Restart the nginx server using "systemctl restart nginx.service"