4/8/2022

**preview2.valuelinksoftware.com**

OS Ubuntu 22.04

PHP 8.1

wordpress

mysql (hosted on azure mysql flexible server)

**Start:**

php mysql extension was missing on ubuntu (apache shows error)

apt-get install php-mysql

**#enable ssl connection to mysql (hosted on azure)**

edit wp-config.php

add the following line

define('MYSQL\_CLIENT\_FLAGS', MYSQLI\_CLIENT\_SSL);

**increased max file upload size and max file size (wordpress)**

cd /etc/php/8.1/apache2

cat php.ini

(increase upload\_max\_filesize)

**#Internal pages throwing 404 (not the main page)#**

Add the following in the conf file (sites-available), then enable rewrite module

<Directory /var/www/wordpress>

Options Indexes FollowSymLinks MultiViews

AllowOverride All

Order allow,deny

allow from all

</Directory>

**#Enable rewrite module**

sudo a2enmod rewrite

sudo systemctl restart apache2

sudo apache2ctl -M (check if module is enabled)

https://askubuntu.com/questions/855110/404-not-found-error-on-every-page-other-than-index-html

**#Enable ssl with letsEncrypt**

install certbot

sudo apt install certbot python3-certbot-apache

certbot --apache

(follow the steps)

done

next change the url from http to https in wordpress

login to wp-admin settings>general

**###Secure Header Test###**

To check Headers currently configured

curl --head https://preview2.valuelinksoftware.com

The following link shows how to enable most of the secure headers

https://geekflare.com/http-header-implementation/

site scan for vulnerable headers https://geekflare.com/tools/tests/qqc9bxgk1

**1 - enable Strict-Transport-Security in apache (HSTS)**

enable module

sudo a2enmod headers

systemctl restart apache2

Add relevant Header directive in virtual server configuration

VirtualHost \*:443>

# .....

# ....

Header always set Strict-Transport-Security "max-age=15552000; includeSubDomains"

</VirtualHost>

systemctl restart apache2

done

**2 - disable xframe options**

edit etc/apache2/conf-enabled/security.conf

uncomment Header set X-Frame-Options: "SAMEORIGIN"

https://tecadmin.net/configure-x-frame-options-apache/

**3- X-Content-Type-Options**

sudo a2enmod headers

VirtualHost \*:443>

# .....

# ....

Header set X-Content-Type-Options nosniff

</VirtualHost>

**4- Content-Security-Policy**

edit etc/apache2/sites-available 000-default-le-ssl.conf

add the following in virtual host

Header always set Content-Security-Policy "default-src 'self' data: blob: \*.google.com \*.gstatic.com; style-src 'self' 'unsafe-inline' \*.google.com \*.googleapis.com; script-src 'self' 'unsafe-inline' \*.googleapis.com \*.google.com;"

https://stackoverflow.com/questions/62105213/setting-content-security-policy-in-apache-web-server

systemctl restart apache2

**5- X-Permitted-Cross-Domain-Policies**

sudo nano etc/apache2/sites-available/000-default-le-ssl.conf

set X-Permitted-Cross-Domain-Policies "none"

\*\*000-default-le-ssl.conf file\*\*

ServerName preview2.valuelinksoftware.com

DocumentRoot /var/www/wordpress

ServerAdmin webmaster@localhost

<Directory /var/www/wordpress>

Options Indexes FollowSymLinks MultiViews

AllowOverride All

Order allow,deny

allow from all

</Directory>

Header always set Strict-Transport-Security "max-age=15552000; includeSubDomains"

Header set X-Content-Type-Options nosniff

Header always set Content-Security-Policy "default-src 'self' data: blob: \*.google.com \*.>

Header set X-Permitted-Cross-Domain-Policies "none"

systemctl restart apache2

**6- Referrer-Policy**

sudo nano etc/apache2/sites-available/000-default-le-ssl.conf

Header set Referrer-Policy "no-referrer"

systemctl restart apache2

https://geekflare.com/http-header-implementation/

**7- Clear-Site-Data**

sudo nano etc/apache2/sites-available/000-default-le-ssl.conf

Header always set Clear-Site-Data "cache"

systemctl restart apache2

https://geekflare.com/http-header-implementation/

**8- Cache-Control**

sudo nano etc/apache2/sites-available/000-default-le-ssl.conf

Header set Cache-Control "max-age=84600, public"

systemctl restart apache2

https://www.howtogeek.com/devops/how-to-configure-cache-control-headers-in-apache/

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