### Let's Encrypt

Having your site secured with an SSL certificate is very important, it ensures customers they are safe, and it is reported that Google has begun ranking sites higher if they have an SSL certificate enabled. https://webmasters.googleblog.com/2014/08/https-as-ranking-signal.html

DK Systems is helping its customers with a product called Let's Encrypt. It is included with each cPanel site.

## What is Let's Encrypt

Let's Encrypt is a free, automated, and open certificate authority (CA), run for the public's benefit. It is a service provided by the Internet Security Research Group (ISRG).

They provide people with the digital certificates they need to enable HTTPS (SSL/TLS) for websites, for free, in the most user-friendly way we can. Their goal is to create a more secure and privacy-respecting Web.

The key principles behind Let's Encrypt are:

- **Free**: Anyone who owns a domain name can use Let's Encrypt to obtain a trusted certificate at zero cost.
- **Automatic**: Software running on a web server can interact with Let's Encrypt to painlessly obtain a certificate, securely configure it for use, and automatically take care of renewal.
- **Secure**: Let's Encrypt will serve as a platform for advancing TLS security best practices, both on the CA side and by helping site operators properly secure their servers.
- Transparent: All certificates issued or revoked will be publicly recorded and available for anyone to inspect.
- **Open**: The automatic issuance and renewal protocol will be published as an open standard that others can adopt.
- **Cooperative**: Much like the underlying Internet protocols themselves, Let's Encrypt is a joint effort to benefit the community, beyond the control of any one organization.

For more detailed information about how the Let's Encrypt CA works.

If you are doing ecommerce you may want to consider a paid SSL certificate, they offer many more advantages, the main one insurance against an attack.

\*\* Some images may appear slightly different based on the version of cPanel installed. The names will be the same, so it is important to look for the name.

Log into your cPanel site:

Sites hosted by DK Systems:

https://cpanel2.myrealoffice.com:2083 https://cpanel4.myrealoffice.com:2083

Sites hosted by MJ Media:

https://cpanel5.myrealoffice.com:2083

Scroll down to Security section Look for Let's Encrypt SSL, one left click

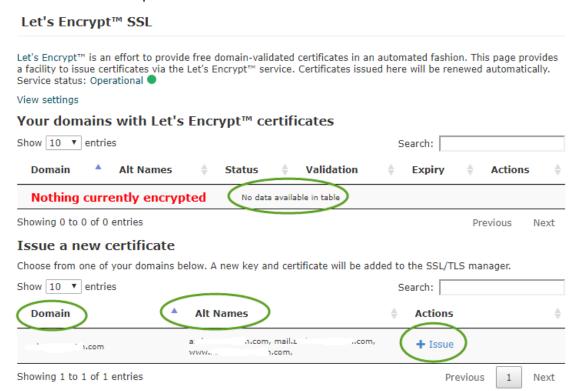


Verify you do not have anything issued through Let's Encrypt

The Domain column is your domain, for example: example.com

Alt Names are the names you want to allow the SSL to represent. The typical are: the domain name itself and the www, do not use the mail. For example: example.com and <a href="https://www.example.com">www.example.com</a>

Click Issue to start the process

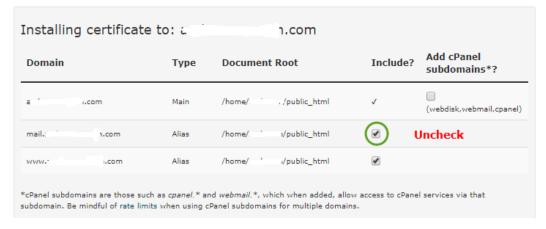


Verify a check mark is in www Include column, the main domain, cannot be checked or unchecked. Uncheck the line with mail. If you leave a check mark and your mail subdomain is on another server you will get an error.

## Let's Encrypt™ SSL

The Let's Encrypt™ service has rate limits for issuing large numbers of certificates and domains per certificate. Click here for more information.

Please select any extra domains to include:



Click Issue

Issue

\*cPanel subdon subdomain. Be

You should see "The SSL certificate is now installed..." This is a successful installation. Click Go Back

# Let's Encrypt™ SSL

The SSL certificate is now installed onto the domain "a locom" using the IP address ". The existing virtual host was updated with the new certificate. Apache is restarting in the background.

### Success!



# Verifying your SSL cert is installed

After clicking on Let's Encrypt SSL from your panel or after clicking on Go Back you should see your Issued SSL certificates. A few things to look at and keep an eye:

- a. Expiry, when your SSL certificate expires. Our server is set up to reissue the certificate every X amount of days. For security reasons, that is not published.
- b. Actions, are what you can do with the certificate
  - Remove, removes from the site, if you remove and not reinstalling you need to make sure you turn of any redirection

- View, see the certificate
- Reinstall, if you wan to create a new SSL



### Redirecting your website to use HTTPS

After installing the certificate, you want to make sure your site now uses HTTPS versus HTTP.

Click the Home icon in the corner



Is a little complicated so if you do not feel comfortable doing these steps, you should contact either your web developer or DK Systems, will configure it for a small charge.

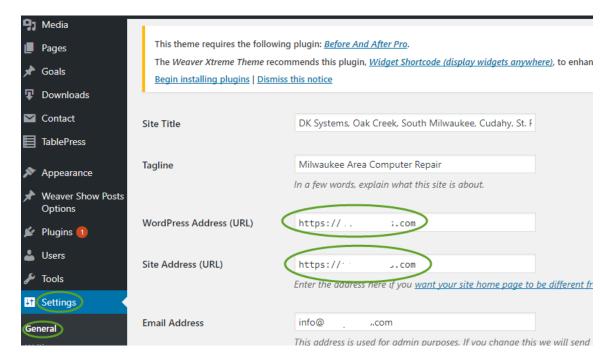
### Basic sites

You need to add the following lines of code to your .htaccess file under public\_html RewriteEngine On RewriteCond %{SERVER\_PORT} 80 RewriteRule ^(.\*)\$ https://example.com/\$1 [R,L]

### WordPress

To make WordPress fully secured, you will need to adjust your WordPress Address (URL) and Site Address (URL) accordingly (https://example.com).

You can do it in your WordPress Admin Dashboard > Settings > General menu:



In WordPress you can check for insecure links not using HTTPS with a 3<sup>rd</sup> party app. Here are a few examples:

- https://www.whynopadlock.com
- https://www.sslchecker.com/insecuresources
- http://www.w3checker.net/insecuresources

After adding Let's Encrypt we need to update a DNS record.

To test your site, go to the following site: <a href="https://www.ssllabs.com/ssltest/">https://www.ssllabs.com/ssltest/</a> Type your domain in, we suggest checking the box not to publish Click Submit

# **SSL Server Test**

This free online service performs a deep analysis of the configuration of any SSL web server on the public Internet. P information you submit here is used only to provide you the service. We don't use the domain names or the t will.



You should receive a grade of at least an A, maybe an A-