# 4.6 Apache HTTP to HTTPs

Quick notes and needs to be flushed out and tested.

### Introduction

Different ways of doing this. Complete rewrite or file based. We'll cover both but the recommended approach is to use rewrite which covers not just the main index file but all scenarios.

There is a third scenario, which is if you having your CDN (Content Deliver Network) like Akamai host the redirects. The advantage with a CDN is the faster (done on the edge servers serving your content) and which also remove the load from your web servers.

Further reading from Apache seems to say this Rewrite is NOT the right approach and to use Redirect instead,

A common use for RewriteRule is to redirect an entire class of URLs. For example, all URLs in the /one directory must be redirected to http://one.example.com/, or perhaps all http requests must be redirected to https.

These situations are **better handled by the Redirect directive**. Remember that Redirect preserves path information. That is to say, a redirect for a URL /one will also redirect all URLs under that, such as /one/two.html and /one/three/four.html.

BUT all over the internet people recommend Rewrite...

## Switch HTTP to HTTPS using Redirect

According to what I've read when redirecting everything don't bother with a document root,

```
NameVirtualHost *:80

<VirtualHost *:80>
    ServerName www.example.com
    Redirect / https://secure.example.com/
</VirtualHost>

<VirtualHost _default_:443>
    ServerName secure.example.com
    DocumentRoot /usr/local/apache2/htdocs
    SSLEngine On

# etc...
</VirtualHost>
```

I've still to try and see if this impacts the entire site. Based on what I see I can't quite grasp how it would...

#### Switch HTTP to HTTPS with Rewrite

```
. . .
```

```
RewriteEngine On
RewriteCond %{HTTPS} off
RewriteRule (.*) https://%{SERVER_NAME}/$1 [R,L]
```

## References

https://wp-mix.com/htaccess-redirect-http-to-https/

Shows using rewrite - https://wiki.apache.org/httpd/RedirectSSL