**Forward Proxy Setup with Apache**

***Apache Setup***

1. Install/ Download Apache from the official site [1].
2. Extract the apache folder. Open the httpd.conf in the conf folder.
3. Uncomment the following modules
   1. LoadModule proxy\_module modules/mod\_proxy.so
   2. LoadModule proxy\_module modules/mod\_proxy\_http.so
   3. LoadModule proxy\_module modules/mode\_proxy\_connect.so
   4. LoadModule proxy\_module modules/mod\_ssl.so
   5. LoadModule proxy\_module modules/mod\_xml2enc.so
   6. LoadModule proxy\_module modules/mod\_proxy\_html.so
   7. LoadModule proxy\_module modules/mod\_proxy\_http2.so
4. Uncomment the following Include
   1. Include conf/extra/httpd-vhosts.conf
   2. Include conf/extra/httpd-default.conf
5. Edit the Listen PORT [ open port for http]
6. Edit the proxy\_html.conf add the following
   1. ProxyRequests On
7. Edit the httpd\_vhosts.conf add the following

<VirtualHost \*:\*>

ProxyRequests On

ProxyVia On

</VirtualHost>

1. Edit the httpd\_ssl.conf
   1. ServerName IP:PORT
   2. Change all PORT to the Open PORT for https
   3. Edit the SSLCertificateFile and SSLCertificateKeyFile and point to the .crt and .key file for the SSL.
2. After the configuration is done. Open a cmd with administrator privileges and cd to the bin folder in Apache and run the following command
   1. httpd.exe -k install -n "ApacheProxy"
3. Open Services, we will find a service named ApacheProxy. We will start the service. If the service is running successfully we have done it successfully.

***Add Proxy in Windows Setup***

1. Search proxy settings or Open proxy settings[ Network & Internet > Proxy] in Windows
2. Turn on Manual Proxy and Add the IP and PORT of the Apache proxy server
3. Save the configuration.

A screenshot of a computer

Description automatically generated

[1] https://www.apachelounge.com/download/

[2] https://binodmahto.medium.com/configure-apache-as-a-forward-proxy-on-windows-412b3350808c