

Instructions: How to Configure DVWA to run over HTTPS

The following instructions assume a DVWA installation that is using Bitnami XAMPP installation on Windows 10 operating system. Also, these instructions assume the XAMPP installation directory of the following: `C:\xampp`

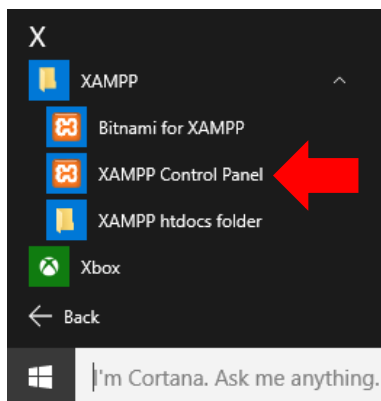
NOTE: I used the OpenSSL that comes packaged with XAMPP. I did not use a separate installation of OpenSSL. In order to use the packaged version, you simply type “openssl” at the prompt once you are in the appropriate directory (i.e., the XAMPP installation directory). See steps below.

As you proceed through the steps below, **you must remember your private key password**. Also, during the certificate generation step, you will be prompted for answers to questions. Certificate value prompts are up to your discretion. For most answers, I left the values blank since I am running Burp and DVWA in an isolated VM. The only one I did answer was for CN (Common Name) where I put in my first name.

Open DOS command prompt and type the following commands:

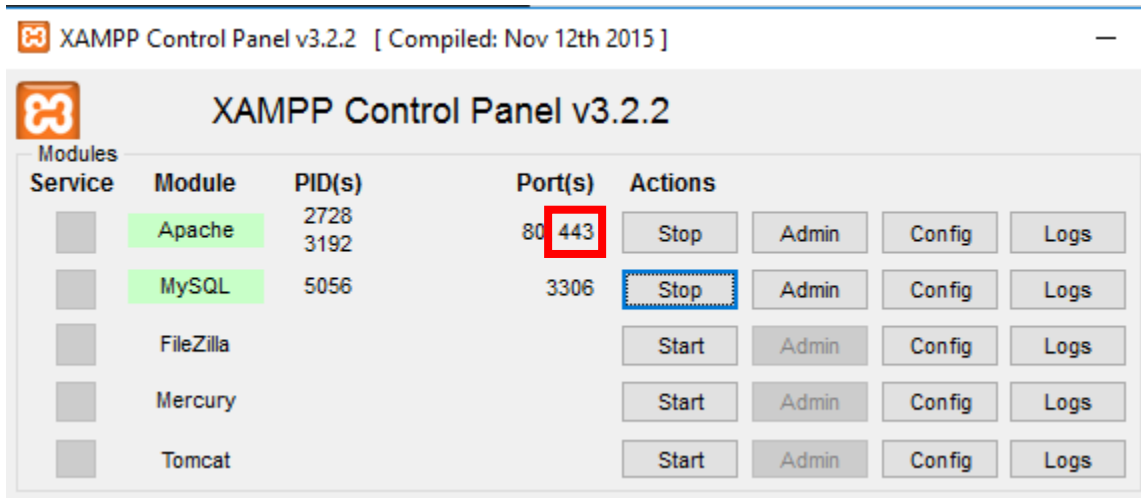
1. `cd C:\xampp\apache\bin`
2. `C:\xampp\apache\bin>openssl <enter>`
3. `OpenSSL>genrsa -des3 -out server.key 1024`
4. `OpenSSL>req -new -key server.key -config "C:\xampp\php\extras\openssl\openssl.cnf" -out server.csr`
5. `OpenSSL>bye`
6. `C:\xampp\apache\bin>copy server.key server.key.org`
7. `openssl <enter>`
8. `OpenSSL>rsa -in server.key.org -out server.key`
9. `OpenSSL>x509 -req -days 365 -in server.csr -signkey server.key -out server.crt`
10. `OpenSSL>bye`
11. `C:\xampp\apache\bin>copy server.crt c:\xampp\apache\conf\ssl.crt`
12. `C:\xampp\apache\bin>copy server.key c:\xampp\apache\conf\ssl.key`

Open the XAMPP Control Panel (Start -> X -> XAMPP folder -> XAMPP Control Panel)



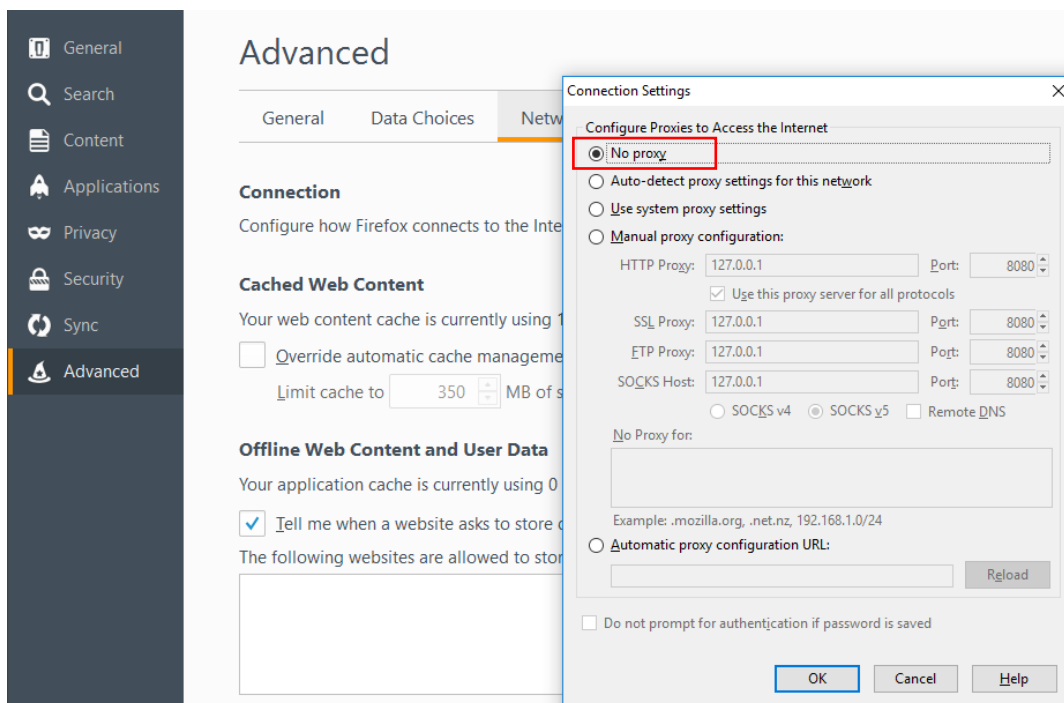
If you installed your self-signed certificate properly, you will now see a port 443 added to the Apache instance.

Start Apache/Restart Apache via Bitami XAMPP. Verify that port 443 is now running by the green color.



Open Browser to this URL: <https://127.0.0.1/DVWA-1.9/login.php>

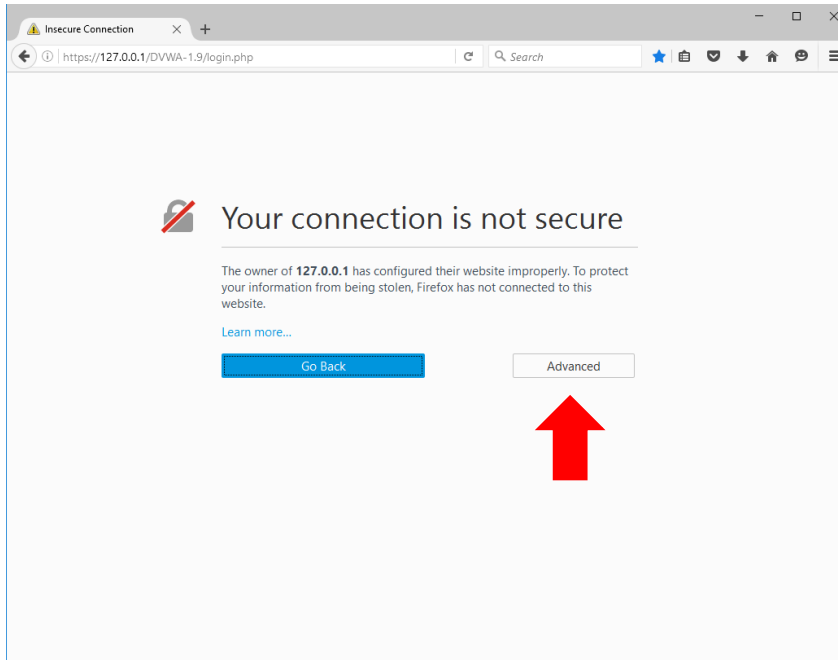
If you receive a message of “Proxy is refusing connections”, go to your Proxy settings and select No Proxy:



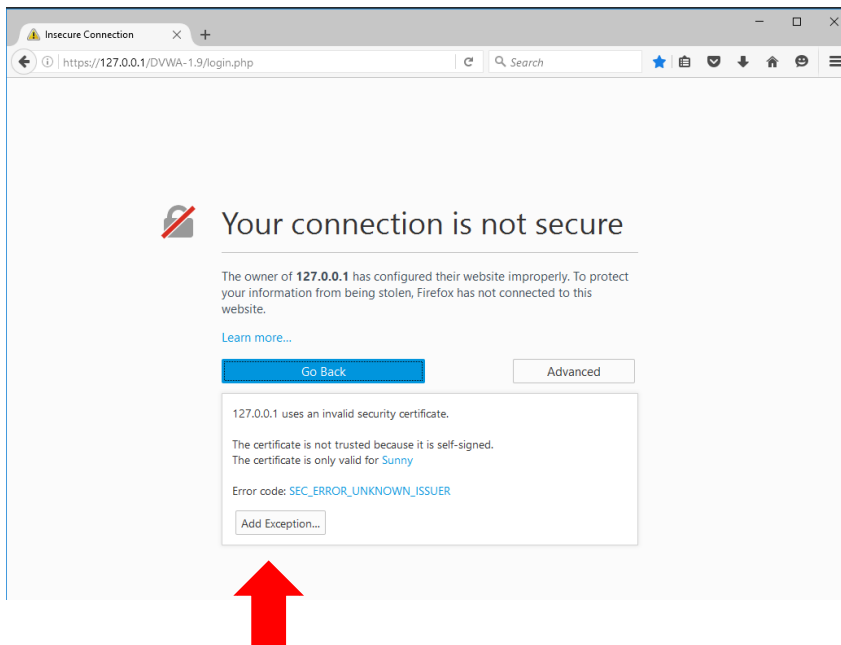
Now, browse again to the URL: <https://127.0.0.1/DVWA-1.9/login.php>

You should be presented with a security warning. This is because you created a self-signed certificate.

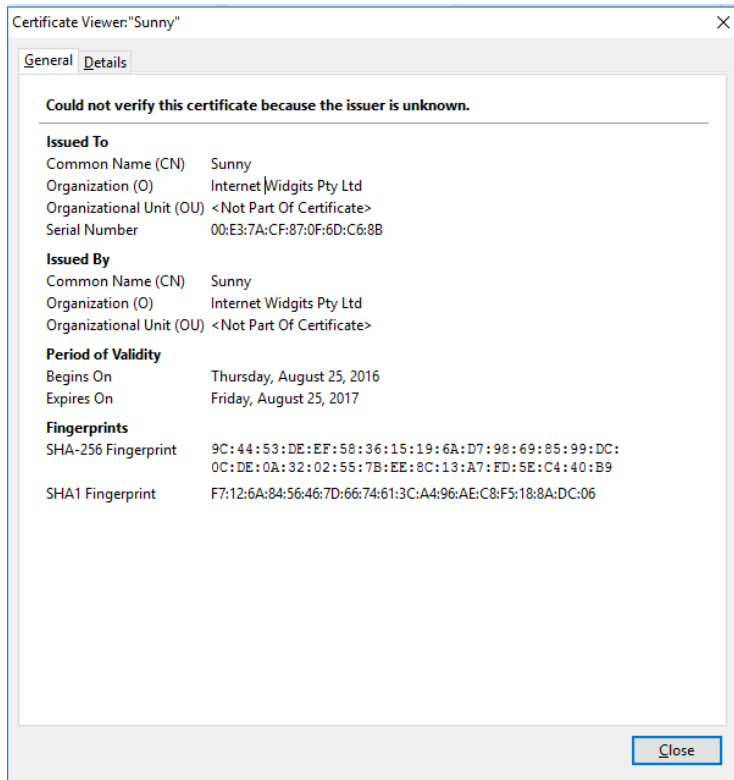
Click Advanced button.



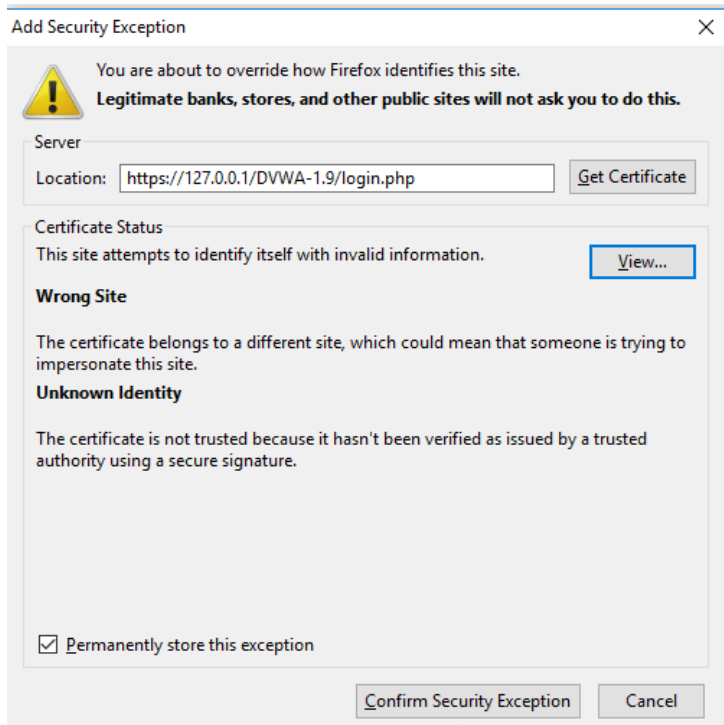
Add Exception button



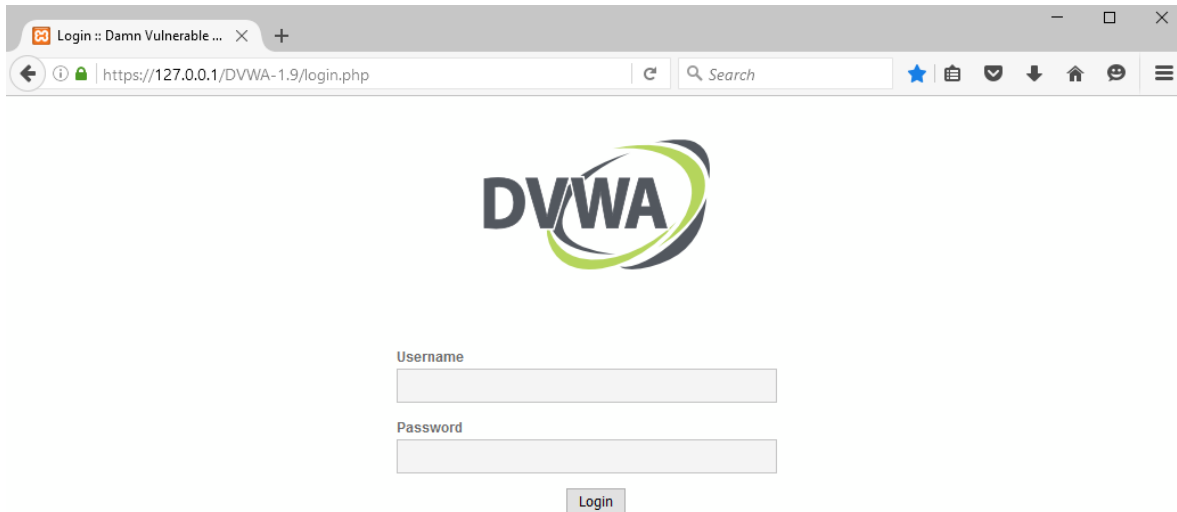
If you select to view the certificate, you can verify the details match your prompt answers from the certificate generation steps you performed earlier.



Click Confirm Security Exception



You should now be presented with the DVWA login screen.



[Damn Vulnerable Web Application \(DVWA\)](#) is a RandomStorm OpenSource project.

Be sure to switch your proxy settings back to have Burp intercept your HTTP/HTTPS traffic. You need to have Burp used over SSL protocol now as well.

