[LMS] How to setup custom hostname and SSL certificate for your LMS domain in 5 minutes

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You can easily map your external domain to BrainCert sub-domain using a CNAME entry in your DNS server in order to receive the performance and security benefits of BrainCert. CNAME stands for 'canonical name' and is a redirection to the zone file of the entered target domain. After you have added the CNAME entry in your DNS server, click the '**Request SSL Certificate**' button in "Account & Settings" --> "Domain" area and BrainCert will attempt to issue an SSL certificate for the custom hostname without any other validation or private key requirements. It's that simple!

HTML5 Virtual Classroom relies on SSL (HTTPS) to function and it will not work with external domains. BrainCert recommends using our native enterprise SSL feature for this service.

```
Browser < – SSL – > BrainCert Enterprise SSL proxy < – SSL – >
mylms.braincert.com
```

Follow the instructions below and we promise it will only take less than 5 minutes. :)

Step 1 - Create CNAME record in your DNS server

Log in to your domain registrar's site and locate the Zone File Settings, DNS Manager, or similar area of your control panel. Here you will create a CNAME record that points your LMS domain to **mylms.braincert.com ('mylms' example here is actually your LMS domain name)**. You'll generally see three fields

Alias - For example, **www** or **live**
(indicating that the `www.yourdomain.com` or `lms.yourdomain.com` record should point to your LMS sub-domain `mylms.braincert.com`)

Record Type - Should be `CNAME`
(indicating that you would like to point to BrainCert by using its name)

Points To - Should be `mylms.braincert.com`

In this example, we are using CloudFlare as DNS server. Select CNAME as the entry, and alias as "lms" that points to our LMS sub-domain mylms.braincert.com. If you are using CloudFlare, remember to turn off orange cloud for this entry to grey cloud. You can create similar CNAME entry with any registrar where your domain is registered such as Namecheap, Godaddy, 1and1, and so on.

Note: Depending on your provider you may already have a CNAME set up with your domain Alias. If so, you will need to edit this existing CNAME so that 'Points To' is mylms.braincert.com

Step 2 - Map your custom hostname

To map an external domain, go to "Account & Settings" --> "Domain" and click on "Set external domain mapping" tab.the "Hostname and SSL Certificate" tab on the left.

Type your custom hostname that you would like to use and click button "Set custom hostname". You don't need to type http:// or https:// as art of the hostname at this time. In this example, we have used `lms.eduweaver.com` as custom hostname.

Make sure to click "Set custom hostname" button to save your changes.

Step 3 - Generate SSL Certificate

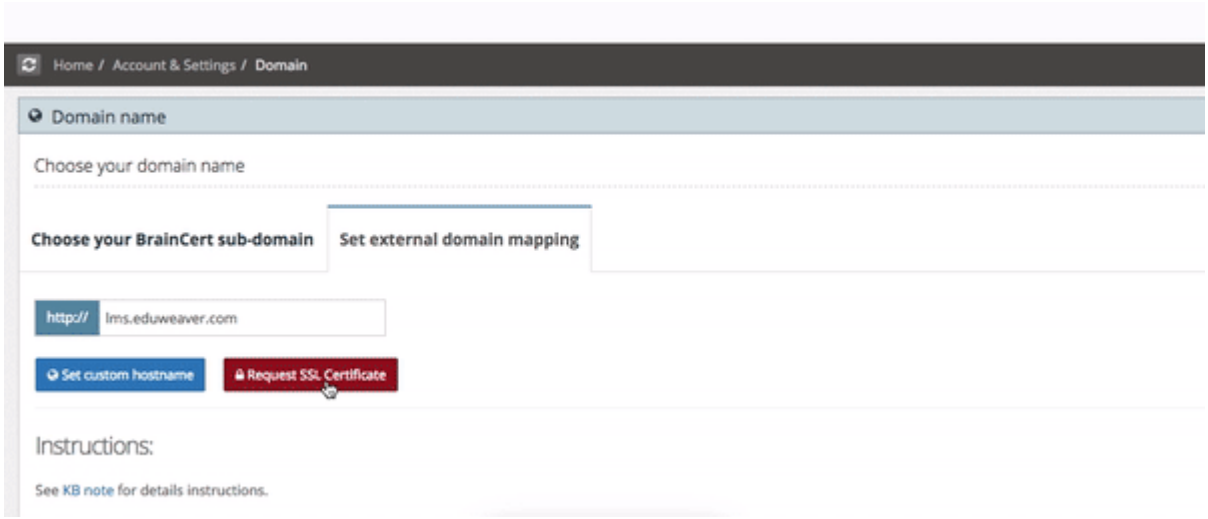
After completing step 2, now it is time to generate your free enterprise SSL certificate. Until today, your best bet with other platforms was to CNAME your hostname to their infrastructure, having you generate a private key and CSR, send the latter to a CA for signing, and then securely provide them with the key material (and again upon renewal). Or maybe you have engineering resources to spend and can build and maintain a solution to generate and securely store private keys, acquire and renew certificates, and push them to a CDN so TLS can be terminated in a performant manner (i.e., as close to your customers' users as possible). Whichever route you choose, the technical complexity and burden of maintenance is high—either for your customers or your engineering and support teams.

BrainCert's free enterprise SSL certificate was built with these difficulties in mind, and solves this

with the simplicity that you would expect. With our highly-secure SSL certificate, all you has to do is to CNAME your domain to the BrainCert LMS sub-domain in order to receive the performance and security benefits of BrainCert. Furthermore, there is no need to send us your SSL certificate key or CSR.

Click on the button "Request SSL Certificate" to get started.

You will see a popup with clear instructions guiding you with this SSL certificate process.



Once done, click on the "Finish" green button in the popup to finish the SSL setup process. Once the CNAME is in place and BrainCert takes care of the rest. We'll provision the hostname at our edge for forwarding on to your specified origin, acquire SSL certificates to enable HTTPS and HTTP/2, and sit in front of any DDoS or L7 attacks that may target your custom hostname. All the benefits of BrainCert's enterprise network, including CDN and content optimization, are extended to your custom hostname without you having to do anything other than adding a simple DNS record.

Additionally, because this SSL solution is built on BrainCert's industry leading SSL/TLS implementation, your customers visiting your custom LMS hostname (external domain) will benefit from all of the work we've done to make HTTPS fast, secure, and reliable such as deploying OCSP stapling, implementing TLS 1.3 (and 0-RTT), and optimizing TLS over TCP. Most importantly, by terminating these TLS connections as physically close to your customers as possible (as opposed to directly on your origin), your customers will benefit from the most interconnected network on the internet.

Click on the "Hostname and SSL Certificate" tab on the left navigation. You will now see that your domain field is greyed out and cannot be edited. This is because SSL certificate is now active your this hostname. You will also see the info icon on the right side of the hostname field which also confirms that SSL certificate is now active.

When you click on the info icon or "Request SSL Certificate" button again, you will see a popup with the success message.

To change hostname, click on the delete icon to start all over again.

Click on the "I agree" green button to confirm deletion of your SSL certificate.

Please note that LMS customers are required to setup SSL redirection to effectively use the new certificate. Go to "Account & Settings" --> "Basic Settings" and set "Force SSL?" to "Yes" and save your changes.

Step 4 - Turn off CloudFlare orange cloud

If you currently using CloudFlare for SSL proxying, we recommend you to turn off the orange cloud to grey cloud to receive the performance and security benefits of BrainCert. Please note that this is required only for the CNAME record that is pointing to `mylms.braincert.com`. You may continue to use CloudFlare for all your other records if needed.

Orange clouded connections will not be allowed after August 27, 2017.

Step 5 - Testing your SSL hostname

Congratulations! Now that you have completed all the steps, it is now time to verify the CNAME mapping and SSL certificate.

Check CNAME mapping

You can use dig tool by using your command prompt in windows or Mac terminal to check the CNAME mapping. You should see your hostname with correct CNAME mapping to your LMS hostname `mylms.braincert.com`.

```
$ dig liveclass.eduweaver.com
; <<>> DiG 9.8.3-P1 <<>> lms.eduweaver.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 3515
;; flags: qr rd ra; QUERY: 1, ANSWER: 6, AUTHORITY: 0, ADDITIONAL: 0
;; QUESTION SECTION:
;lms.eduweaver.com.        IN A
;; ANSWER SECTION:
lms.eduweaver.com. 300 IN CNAME mylms.braincert.com.
mylms.braincert.com. 300 IN A 104.17.196.79
```

```
mylms.braincert.com. 300 IN A 104.17.195.79
mylms.braincert.com. 300 IN A 104.17.194.79
mylms.braincert.com. 300 IN A 104.17.193.79
mylms.braincert.com. 300 IN A 104.17.192.79
;; Query time: 36 msec
;; SERVER: 192.168.1.1#53(192.168.1.1)
;; WHEN: Tue Aug  1 17:01:34 2017
;; MSG SIZE  rcvd: 145
```

Check SSL Certificate

Open your browser and go to your external LMS domain with https:// in the front. You will see a green lock icon that confirms a secure SSL connection.

If you see a browser error similar to the message below, it means that your SSL certificate is not setup correctly. The connection is not secure and virtual classroom will not work.