## How to add SSL to your localhost with puma

https://medium.com/@matayoshi.mariano/how-to-add-ssl-to-your-localhost-with-puma-37a66a649f29

Well, with the new update from Chrome from 80, if we have third party cookies you will need to add the SameSite=None; Secure, but this means that third party cookies will only be sent over HTTPS connection.

The following video is explaining this way better than me:

Also, I leave you guys a blog post from Chrome with the SameSite Cookie Changes.

OK, so if you are like me, who is developing services that shared a cookie between each other and using Ruby on Rails with <u>Puma</u> as your web server you will need to have HTTPS connection.

## Creating a certificate

So the first thing you will need to do is to create a certificate for your service you want to add the HTTPS connection. Let's use <a href="mkcert">mkcert</a> to generate it, i'm going to localhost, but you can use whatever name you want

→ ~ mkcert localhostUsing the local CA at

"/Users/marianomatayoshi/Library/Application Support/mkcert" † Warning: the
local CA is not installed in the system trust store! △ Warning: the local CA
is not installed in the Firefox trust store! △ Run "mkcert -install" to avoid
verification errors !! □ Created a new certificate valid for the following names
□- "localhost"The certificate is at "./localhost.pem" and the key at

"./localhost-key.pem" 

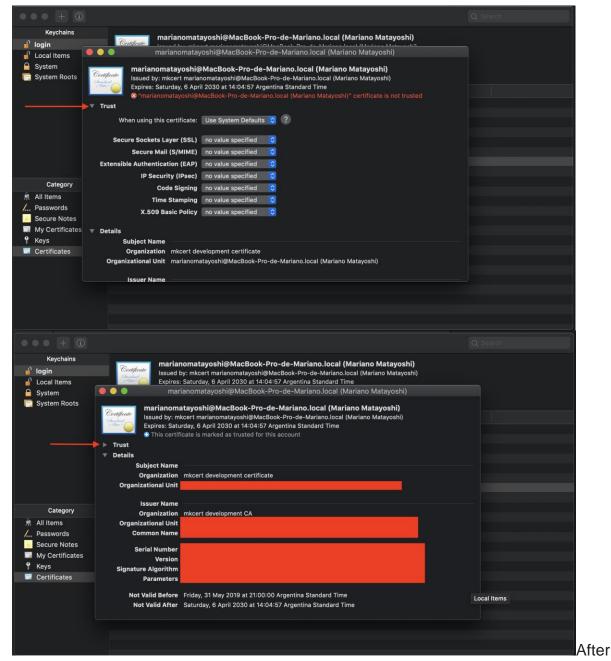
✓

Now we should mark these cert as trusted, I'm working on a Mac computer, so not sure how to handle this particular part on Windows or on a Linux distro.

For Mac users open the Keychain Access and drag the certificate to the Keychain, the <code>localhost.pem</code> file, you could see some error, but it will end up adding it..

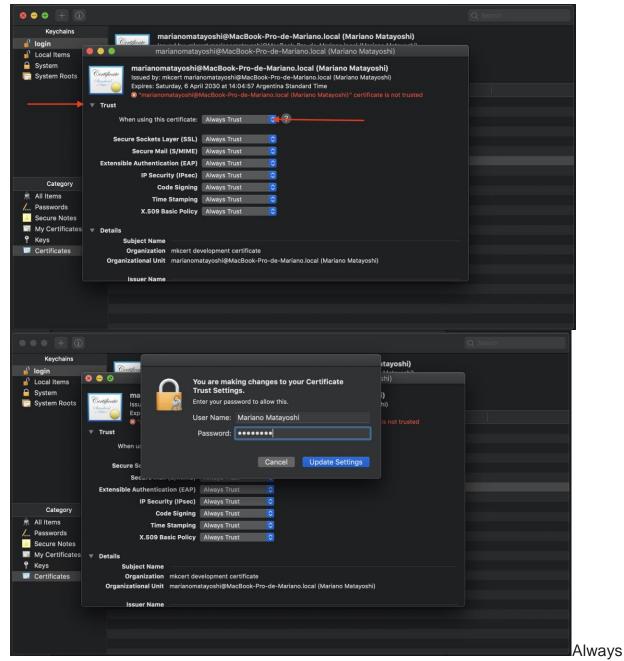
Just after adding the certificate

Double-click the cert you just added, click the -> Trust



double clicking the cert

And at the When using this certificate: select the Always Trust option.



trust the cert

## Localhost on SSL

Now the interesting part:

In your puma config you will want to have something like this:

I ended up creating a  ${\tt local-certs}$  folder inside  ${\tt config}$  folder and pasted the cert and key there.

## Then running bundle exec puma -C puma.rb will prompt something like this

```
→ ~ bundle exec puma -C puma.rb

[97] Puma starting in cluster mode...

[97] * Version 4.1.0 (ruby 2.3.8-p459), codename: Fourth and One

[97] * Min threads: 5, max threads: 5

[97] * Environment: development

[97] * Process workers: 2

[97] * Phased restart available

[97] * Listening on tcp://0.0.0.0:3001

[97] * Listening on ssl://0.0.0.0:3000?cert=config/local-certs/localhost.pem&key=config/local-certs/localhost-key.pem&verify_mode=none&no_tlsv1=false&no_tlsv1_1=false

[97] Use Ctrl-C to stop

[97] - Worker 0 (pid: 105) booted, phase: 0

[97] - Worker 1 (pid: 108) booted, phase: 0
```

And if you go to <a href="https://localhost:3000">https://localhost:3000</a>, you will see something like this □



SSL on localshot:3000