## **Certification HTTPS**

Installez certbot sur ubuntu 20 : <a href="https://certbot.eff.org/instructions?ws=other&os=ubuntufocal">https://certbot.eff.org/instructions?ws=other&os=ubuntufocal</a>

```
root@ubuntu-js:~# certbot
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Enter email address (used for urgent renewal and security notices)
 (Enter 'c' to cancel): si@valoxy.fr
Please read the Terms of Service at
https://letsencrypt.org/documents/LE-SA-v1.3-September-21-2022.pdf. You must
agree in order to register with the ACME server. Do you agree?
(Y)es/(N)o: y
Would you be willing, once your first certificate is successfully issued, to
share your email address with the Electronic Frontier Foundation, a founding
partner of the Let's Encrypt project and the non-profit organization that
develops Certbot? We'd like to send you email about our work encrypting the web,
EFF news, campaigns, and ways to support digital freedom.
(Y)es/(N)o: n
Account registered.
Please enter the domain name(s) you would like on your certificate (comma and/or
space separated) (Enter 'c' to cancel): valostart.fr
Requesting a certificate for valostart.fr
Successfully received certificate.
Certificate is saved at: /etc/letsencrypt/live/valostart.fr/fullchain.pem
Key is saved at: /etc/letsencrypt/live/valostart.fr/privkey.pem
This certificate expires on 2023-09-10.
These files will be updated when the certificate renews.
Certbot has set up a scheduled task to automatically renew this certificate in t
he background.
Deploying certificate
Successfully deployed certificate for valostart.fr to /etc/apache2/sites-availab
le/000-default-le-ssl.conf
Congratulations! You have successfully enabled HTTPS on https://valostart.fr
If you like Certbot, please consider supporting our work by:
 * Donating to ISRG / Let's Encrypt: https://letsencrypt.org/donate
* Donating to EFF:
                                      https://eff.org/donate-le
```

Copié/Collé le code dans le fichier racine (app.js ou index.js) (yourdomain.com dans le code à échangé)

```
const fs = require('fs');
const http = require('http');
const https = require('https');
const express = require('express');
const app = express();
// Certificate
const privateKey = fs.readFileSync('/etc/letsencrypt/live/yourdomain.com/privkey.pem', 'utf8');
const certificate = fs.readFileSync('/etc/letsencrypt/live/yourdomain.com/cert.pem', 'utf8');
const ca = fs.readFileSync('/etc/letsencrypt/live/yourdomain.com/fullchain.pem', 'utf8');
const credentials = {
      key: privateKey,
      cert: certificate,
      ca: ca
};
// Starting both http & https servers
const httpServer = http.createServer(app);
const httpsServer = https.createServer(credentials, app);
httpServer.listen(80, () => {
      console.log('HTTP Server running on port 80');
});
httpsServer.listen(443, () => {
      console.log('HTTPS Server running on port 443');
});
//force user à https
app.enable('trust proxy')
app.use(function(request, response, next) {
  if (process.env.NODE_ENV != 'development' && !request.secure) {
     return response.redirect("https://" + request.headers.host + request.url);
  next();
```

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