

Installer OpenSTF sur Windows

1) Il faut absolument avoir la version 8.11.3 de Node **node-v8.11.3-x86.msi**

<https://nodejs.org/dist/v8.11.3/>

2) Il faut aussi la version 2.7.15 de Python **python-2.7.15.msi**

<https://www.python.org/downloads/release/python-2715/>

Windows x86-64 MSI installer	Windows	for AMD64/EM64T/x64	0ffa44a86522f9a37b916b361eebc552	20246528	SIG
Windows x86 MSI installer	Windows		023e49c9fba54914ebc05c4662a93ffe	19304448	SIG

3) Installer ZeroMQ :

```
npm install -g zmq
```

4) Installer CMake **cmake-3.17.3-win32-x86.msi**

<https://cmake.org/download/>

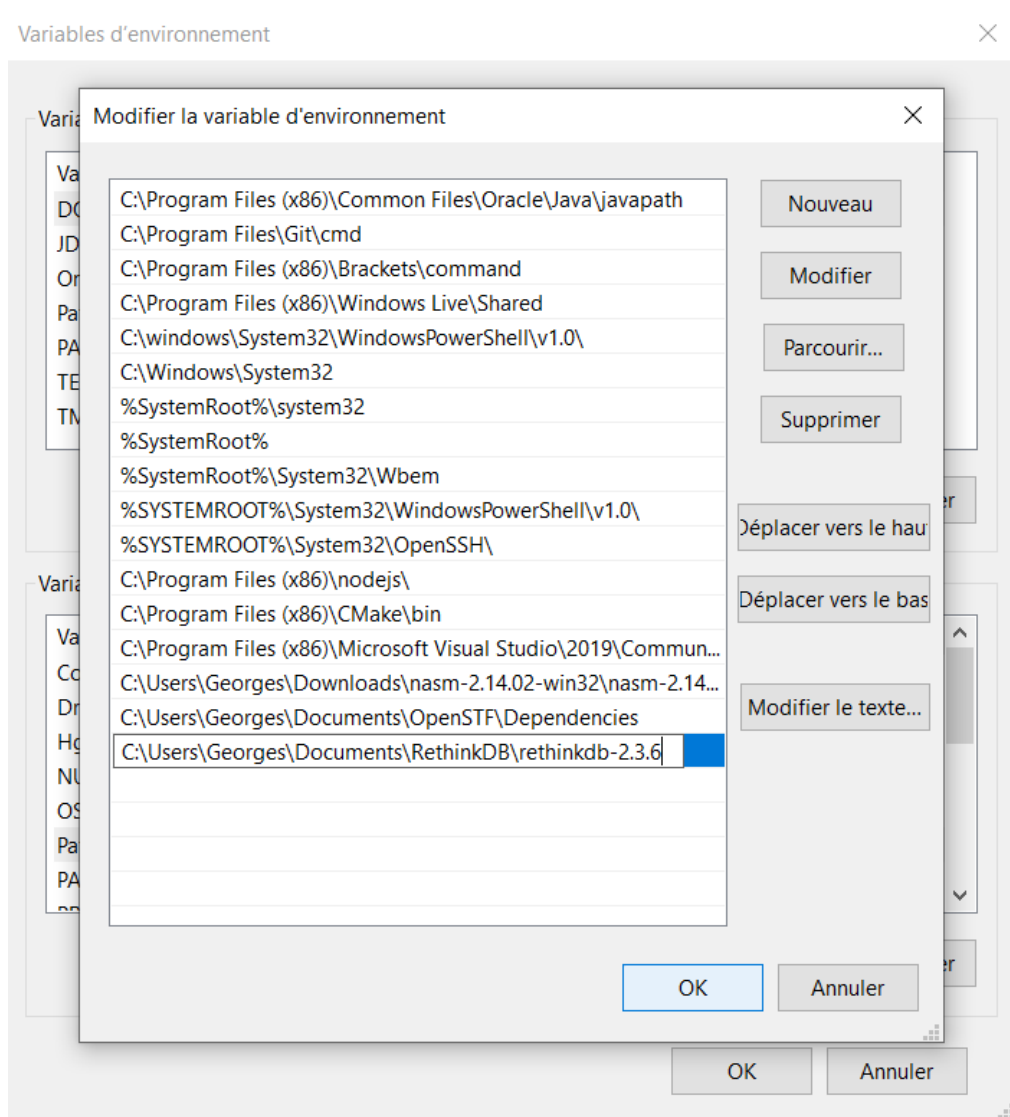
Binary distributions:

Platform	Files
Windows win64-x64 Installer: Installer tool has changed. Uninstall CMake 3.4 or lower first!	cmake-3.17.3-win64-x64.msi
Windows win64-x64 ZIP	cmake-3.17.3-win64-x64.zip
Windows win32-x86 Installer: Installer tool has changed. Uninstall CMake 3.4 or lower first!	cmake-3.17.3-win32-x86.msi
Windows win32-x86 ZIP	cmake-3.17.3-win32-x86.zip

5) Télécharger la version 2.3.6 de RethinkDB **rethinkdb-2.3.6**

<https://download.rethinkdb.com/#browse/search=keyword%3Drethinkdb%20windows:c770169c0b2e3ed872bbbb55a6612794:36e3dec8de528c9b9b0ee2d823ec6a67>

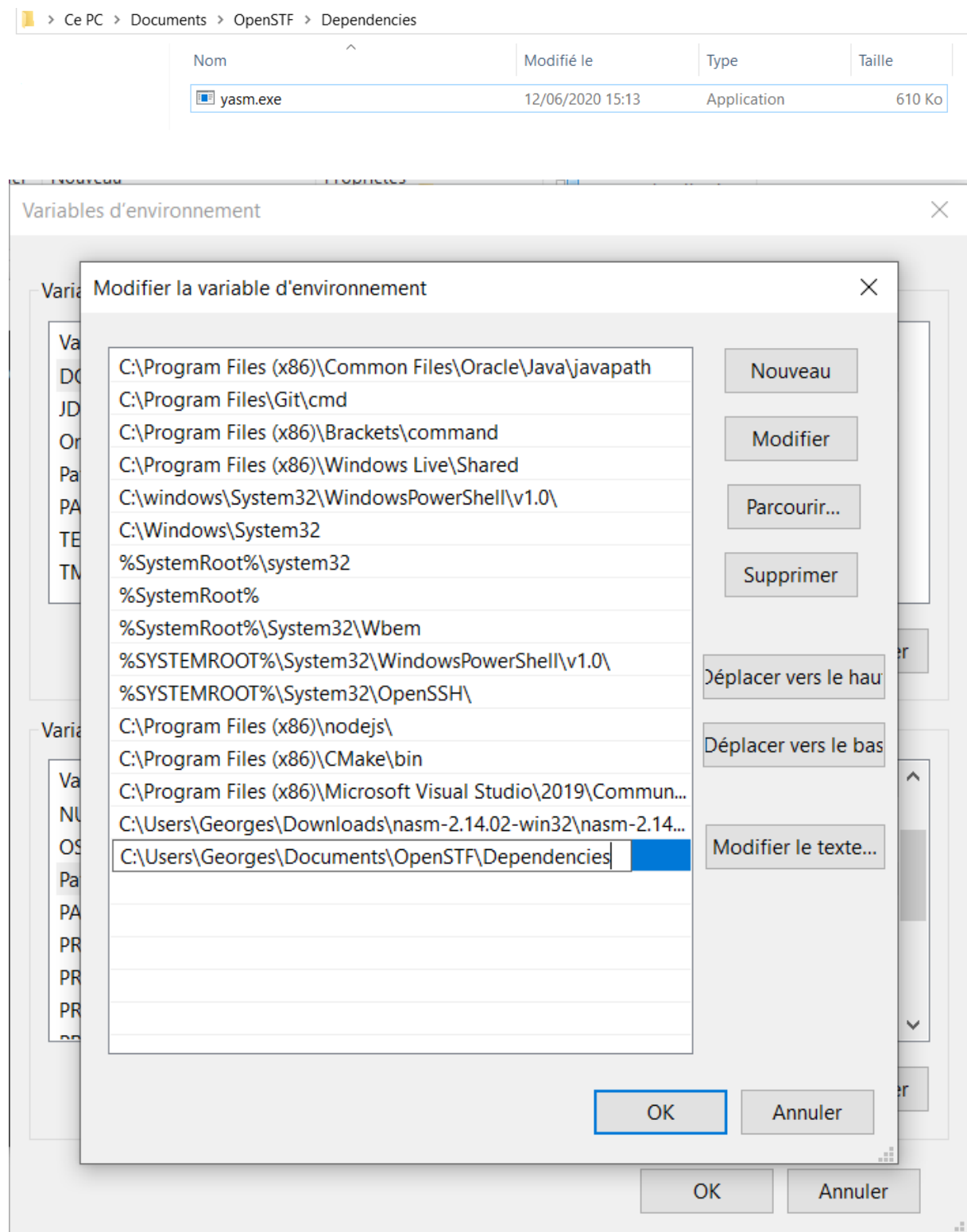
6) Rajouter le chemin d'accès vers **rethinkdb.exe** au Path



7) Installer Yasm **yasm-1.3.0-win64.exe**
<https://yasm.tortall.net/Download.html>

8) Renommer cet exécutable en **yasm.exe**

9) Comme pour RethinkDB, créer un dossier facile d'accès et rajouter yasm.exe à l'intérieur. Rajouter ensuite ce chemin au Path :

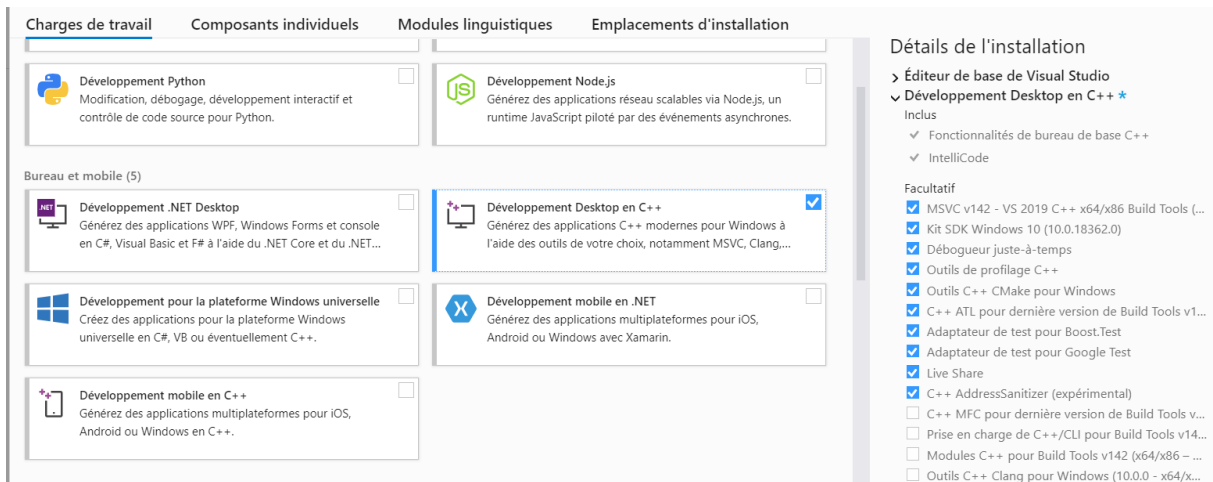


10) Télécharger Visual Studio 2019 (installer avec les droits admin si besoin)

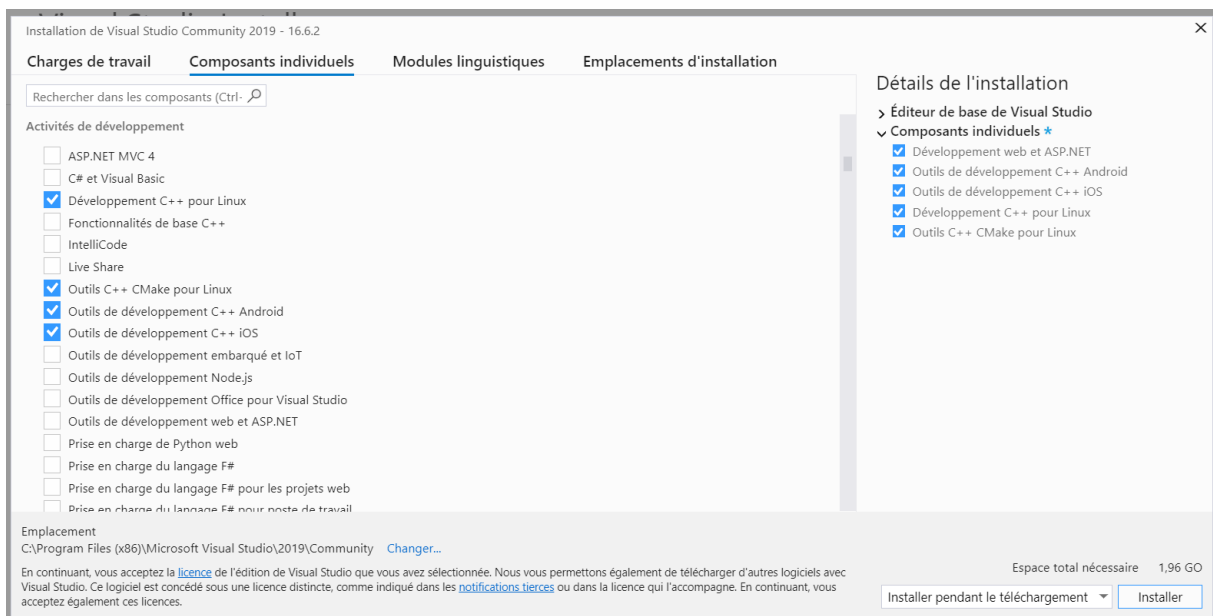
<https://visualstudio.microsoft.com/fr/downloads/>

11) Lors de l'installation de VS 2019 veillez à bien cocher :

- Dans la partie Charge de travail, cochez **Développement Desktop en C++** :



- Et dans la partie **Composants individuels** :
 - Développement C++ pour Linux
 - Outils C++ CMake pour Linux
 - Outils de développement C++ Android
 - Outils de développement C++ iOS



Puis cliquer sur Installer

12) Sur PowerShell en mode admin tapez la commande

```
npm install -g windows-build-tools
```

Remarque : Visual Studio Build Tools 2017 sera ajouté à Visual Studio Installer mais ce sera peut-être à vous de le lancer manuellement

13) Installer node-gyp

```
npm install -g node-gyp
```

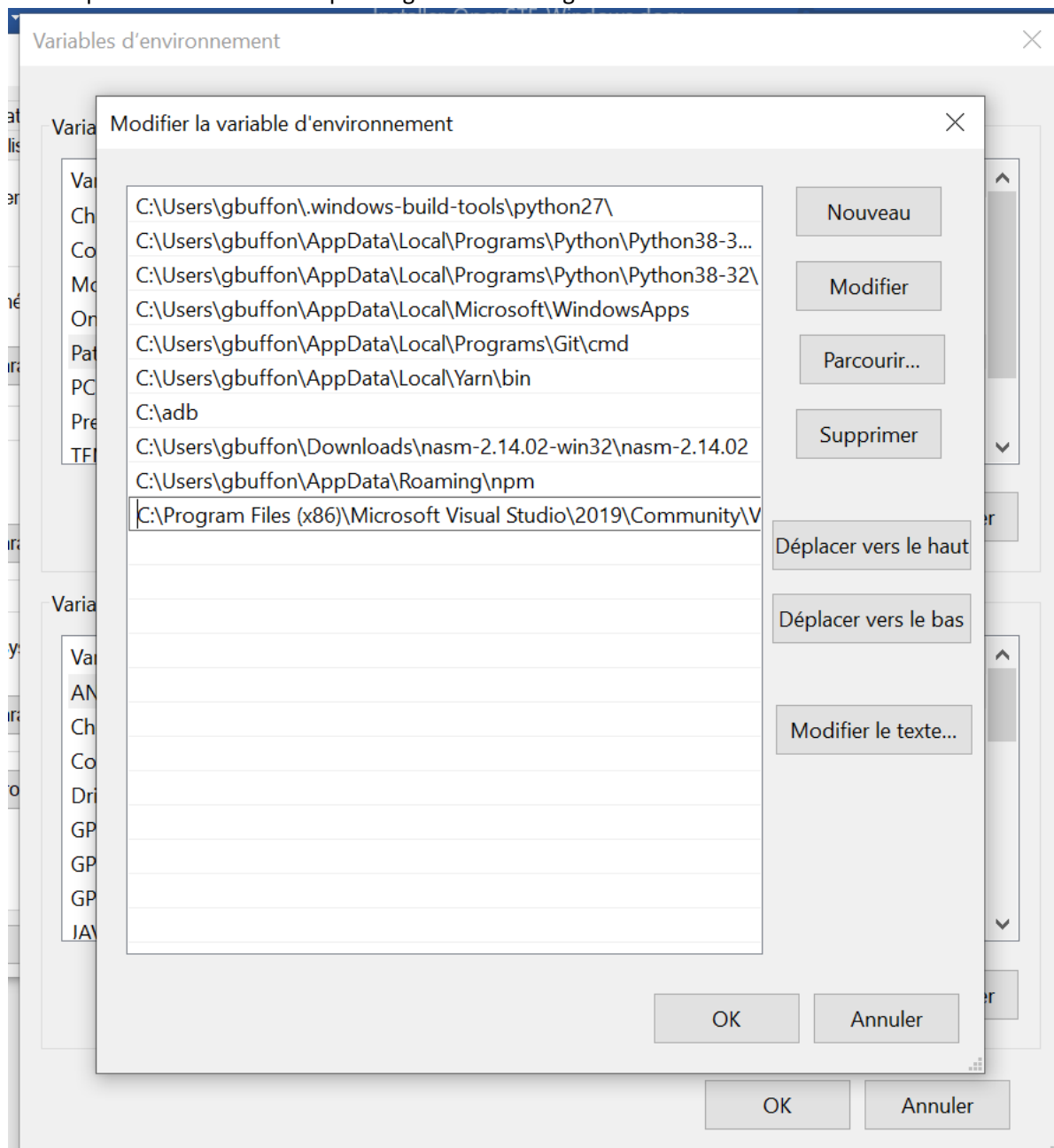
14) Sur le bureau par exemple cloner sorccu/node-jpeg-turbo

```
git clone --recursive https://github.com/sorccu/node-jpeg-turbo
```

15) Ajouter ce qui suit à votre PATH en allant à Panneau de configuration\Tous les Panneaux de configuration\Système -> Paramètres avancés -> Variables d'environnement

C:\Program Files (x86)\Microsoft Visual
Studio\2019\Community\VC\Tools\MSVC\14.26.28801\bin\Hostx86\x86

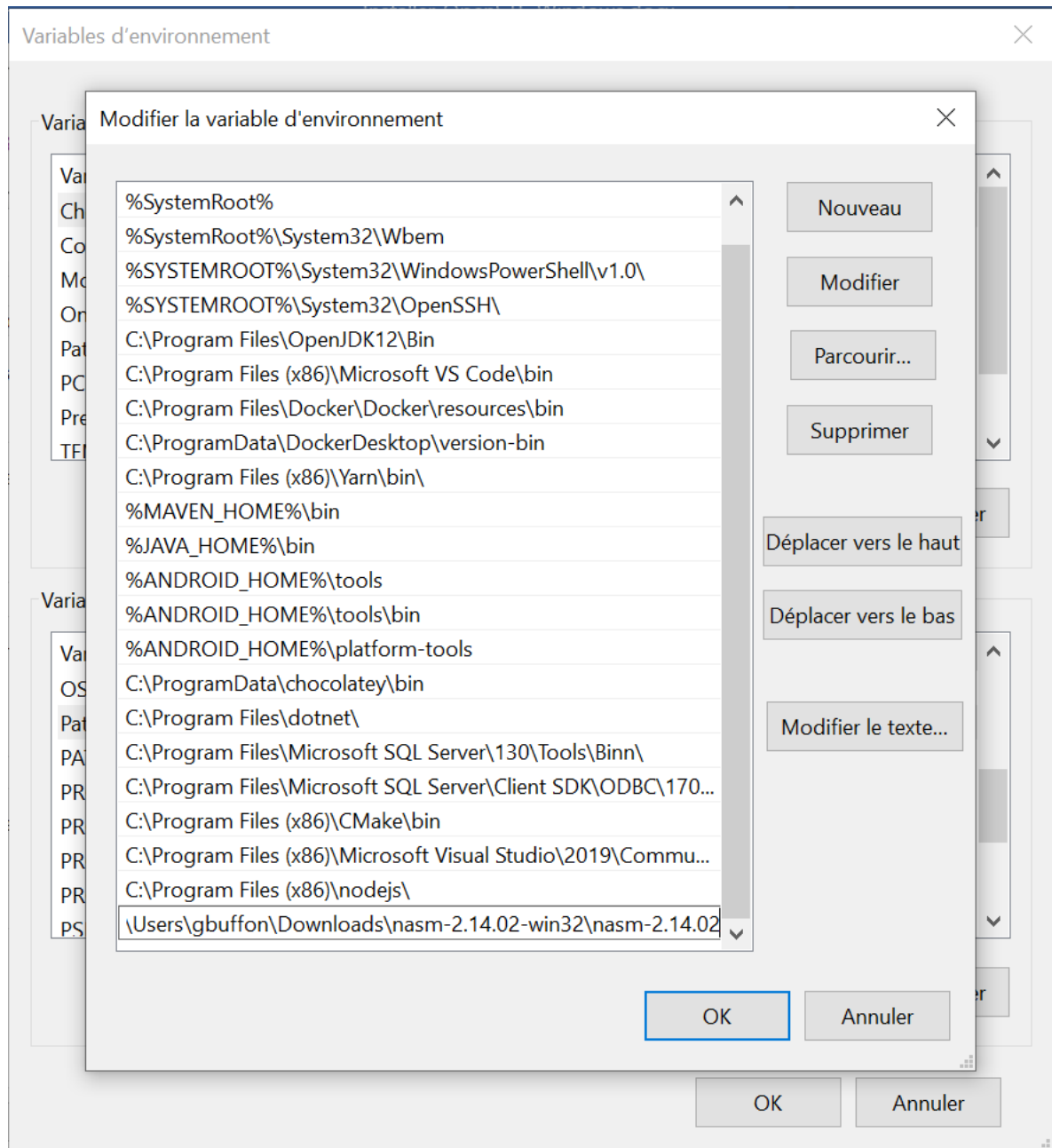
Remarque : le chemin d'accès peut légèrement changer en fonction de la version de VS



16) Installer Nasm **nasm-2.14.02-win32.zip** afin de pouvoir build libjpeg-turbo :

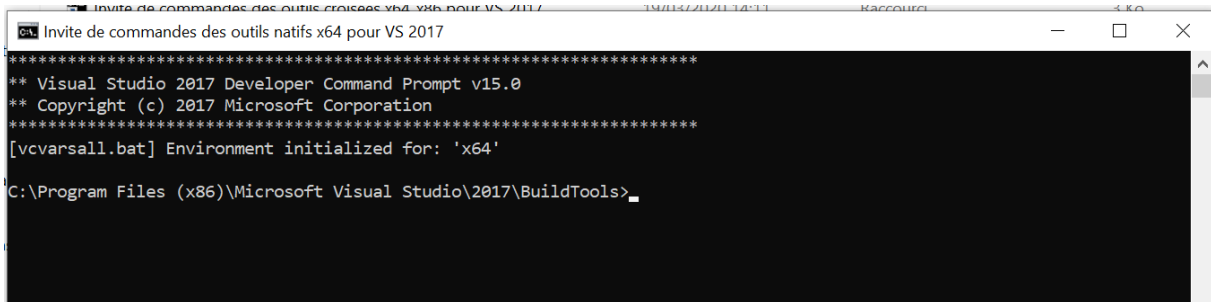
<https://www.nasm.us/pub/nasm/releasebuilds/2.14.02/win32/>

Ensuite il faut ajouter le chemin vers **nasm.exe** à votre PATH



17) Ouvrir l'invite de commandes des outils natifs x64 pour VS 2017 en allant à :

C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Visual Studio 2017\Visual Studio Tools\VC



```
Invite de commandes des outils natifs x64 pour VS 2017
*****
** Visual Studio 2017 Developer Command Prompt v15.0
** Copyright (c) 2017 Microsoft Corporation
*****
[vvarsall.bat] Environment initialized for: 'x64'
C:\Program Files (x86)\Microsoft Visual Studio\2017\BuildTools>
```

18) se rendre au bureau (si c'est l'emplacement que vous avez choisi)

19) cd node-jpeg-turbo

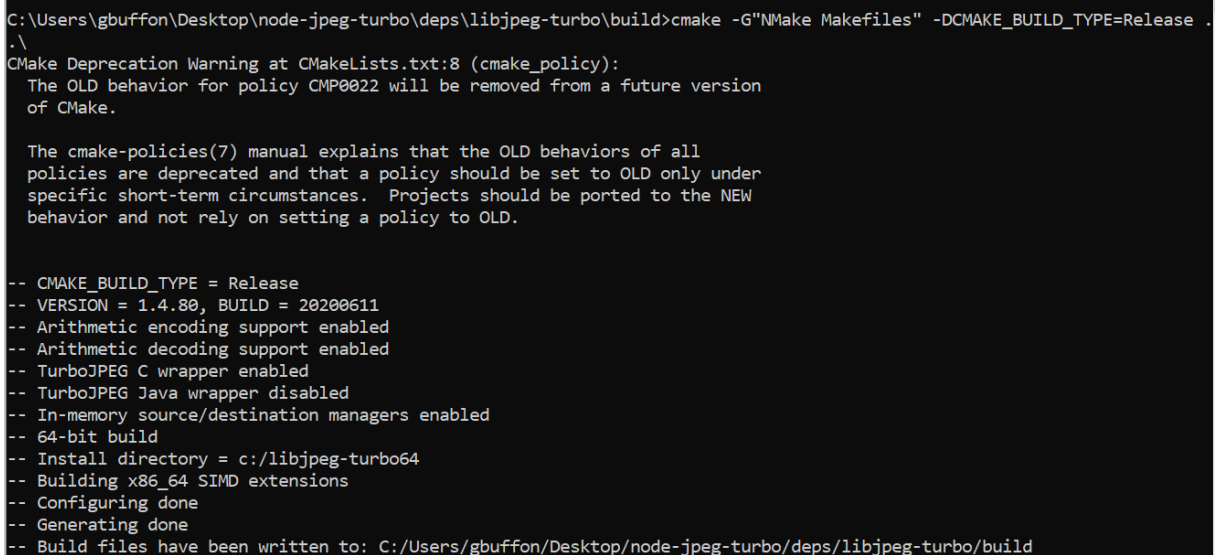
20) cd deps\libjpeg-turbo

21) mkdir build

22) cd build

23) cmake pour build libjpeg turbo :

cmake -G"NMake Makefiles" -DCMAKE_BUILD_TYPE=Release ..\



```
C:\Users\gbuffon\Desktop\node-jpeg-turbo\deps\libjpeg-turbo\build>cmake -G"NMake Makefiles" -DCMAKE_BUILD_TYPE=Release .
.\
CMake Deprecation Warning at CMakeLists.txt:8 (cmake_policy):
  The OLD behavior for policy CMP0022 will be removed from a future version
  of CMake.

  The cmake-policies(7) manual explains that the OLD behaviors of all
  policies are deprecated and that a policy should be set to OLD only under
  specific short-term circumstances. Projects should be ported to the NEW
  behavior and not rely on setting a policy to OLD.

-- CMAKE_BUILD_TYPE = Release
-- VERSION = 1.4.80, BUILD = 20200611
-- Arithmetic encoding support enabled
-- Arithmetic decoding support enabled
-- TurboJPEG C wrapper enabled
-- TurboJPEG Java wrapper disabled
-- In-memory source/destination managers enabled
-- 64-bit build
-- Install directory = c:/libjpeg-turbo64
-- Building x86_64 SIMD extensions
-- Configuring done
-- Generating done
-- Build files have been written to: C:/Users/gbuffon/Desktop/node-jpeg-turbo/deps/libjpeg-turbo/build
```

24) Lancer la commande :

nmake

```
Invite de commandes des outils natifs x64 pour VS 2017
[ 95%] Building C object sharedlib/CMakeFiles/djpeg.dir/__/rdswitch.c.obj
rdswitch.c
[ 95%] Building C object sharedlib/CMakeFiles/djpeg.dir/__/wrgif.c.obj
wrgif.c
[ 95%] Building C object sharedlib/CMakeFiles/djpeg.dir/__/wrppm.c.obj
wrppm.c
[ 96%] Building C object sharedlib/CMakeFiles/djpeg.dir/__/wrbmp.c.obj
wrbmp.c
[ 96%] Building C object sharedlib/CMakeFiles/djpeg.dir/__/wrtarga.c.obj
wrtarga.c
[ 97%] Linking C executable djpeg.exe
[ 97%] Built target djpeg
Scanning dependencies of target jpegtran
[ 97%] Building C object sharedlib/CMakeFiles/jpegtran.dir/__/jpegtran.c.obj
jpegtran.c
[ 98%] Building C object sharedlib/CMakeFiles/jpegtran.dir/__/cdjpeg.c.obj
cdjpeg.c
[ 98%] Building C object sharedlib/CMakeFiles/jpegtran.dir/__/rdswitch.c.obj
rdswitch.c
[ 99%] Building C object sharedlib/CMakeFiles/jpegtran.dir/__/transupp.c.obj
transupp.c
[ 99%] Linking C executable jpegtran.exe
[ 99%] Built target jpegtran
Scanning dependencies of target jcstest
[100%] Building C object sharedlib/CMakeFiles/jcstest.dir/__/jcstest.c.obj
jcstest.c
[100%] Linking C executable jcstest.exe
[100%] Built target jcstest
```

25) Supprimer maintenant le dossier build (pour ne pas avoir d'erreur à l'étape suivante)

26) Retourner à la racine du projet soit dans node-jpeg-turbo

27) npm install

Remarque : si l'installation échoue, ne vous inquiétez pas.

28) node-gyp configure

```
Sélection Invite de commandes des outils natifs x64 pour VS 2017
gyp info find VS using VS2017 (15.9.28307.1177) found at:
gyp info find VS "C:\Program Files (x86)\Microsoft Visual Studio\2017\BuildTools"
gyp info find VS run with --verbose for detailed information
gyp info spawn C:\Python27\python.exe
gyp info spawn args [ 'C:\\Users\\Georges\\AppData\\Roaming\\npm\\node_modules\\node-gyp\\gyp\\gyp_main.py',
gyp info spawn args 'binding.gyp',
gyp info spawn args '-f',
gyp info spawn args 'msvs',
gyp info spawn args '-I',
gyp info spawn args 'C:\\Users\\Georges\\Desktop\\node-jpeg-turbo\\build\\config.gypi',
gyp info spawn args '-I',
gyp info spawn args 'C:\\Users\\Georges\\AppData\\Roaming\\npm\\node_modules\\node-gyp\\addon.gypi',
gyp info spawn args '-I',
gyp info spawn args 'C:\\Users\\Georges\\AppData\\Local\\node-gyp\\Cache\\8.11.3\\include\\node\\common.gypi',
gyp info spawn args '-Dlibrary=shared_library',
gyp info spawn args '-Dvisibility=default',
gyp info spawn args '-Dnode_root_dir=C:\\Users\\Georges\\AppData\\Local\\node-gyp\\Cache\\8.11.3',
gyp info spawn args '-Dnode_gyp_dir=C:\\Users\\Georges\\AppData\\Roaming\\npm\\node_modules\\node-gyp',
gyp info spawn args '-Dnode_lib_file=C:\\Users\\Georges\\AppData\\Local\\node-gyp\\Cache\\8.11.3\\node.lib',
gyp info spawn args '-Dmodule_root_dir=C:\\Users\\Georges\\Desktop\\node-jpeg-turbo',
gyp info spawn args '-Dnode_engine=v8',
gyp info spawn args '--depth=.',
gyp info spawn args '--no-parallel',
gyp info spawn args '--generator-output',
gyp info spawn args 'C:\\Users\\Georges\\Desktop\\node-jpeg-turbo\\build',
gyp info spawn args '-Goutput_dir=.' ]
gyp info ok
```


29) node-gyp build

```
Invite de commandes des outils natifs x64 pour VS 2017
back::Call' [C:\Users\Georges\Desktop\node-jpeg-turbo\build\jpegturbo.vcxproj]
c:\users\georges\desktop\node-jpeg-turbo\node_modules\nan\nan.h(1742): note: voir la déclaration de 'Nan::Callback::Call'
c:\users\georges\desktop\node-jpeg-turbo\src\buffer_size.cc(86): warning C4996: 'Nan::Callback::Call': a été déclaré déconseillé
c:\users\georges\desktop\node-jpeg-turbo\src\decompress.cc(270): warning C4996: 'Nan::Callback::Call': a été déclaré déconseillé [C:\Users\Georges\Desktop\node-jpeg-turbo\build\jpegturbo.vcxproj]
c:\users\georges\desktop\node-jpeg-turbo\node_modules\nan\nan.h(1742): note: voir la déclaration de 'Nan::Callback::Call'
c:\users\georges\desktop\node-jpeg-turbo\src\compress.cc(337): warning C4996: 'Nan::Callback::Call': a été déclaré déconseillé
c:\users\georges\desktop\node-jpeg-turbo\node_modules\nan\nan.h(1742): note: voir la déclaration de 'Nan::Callback::Call' [C:\Users\Georges\Desktop\node-jpeg-turbo\build\jpegturbo.vcxproj]
c:\users\georges\desktop\node-jpeg-turbo\node_modules\nan\nan.h(1742): note: voir la déclaration de 'Nan::Callback::Call'
c:\users\georges\desktop\node-jpeg-turbo\src\buffer_size.cc(102): warning C4996: 'Nan::Callback::Call': a été déclaré déconseillé
c:\users\georges\desktop\node-jpeg-turbo\node_modules\nan\nan.h(1742): note: voir la déclaration de 'Nan::Callback::Call'
win_delay_load_hook.cc
Création de la bibliothèque C:\Users\Georges\Desktop\node-jpeg-turbo\build\Release\jpegturbo.lib et de l'objet C:\Users\Georges\Desktop\node-jpeg-turbo\build\Release\jpegturbo.exp
Génération de code en cours
All 750 functions were compiled because no usable IPDB/IOBJ from previous compilation was found.
Fin de la génération du code
jpegturbo.vcxproj -> C:\Users\Georges\Desktop\node-jpeg-turbo\build\Release\jpegturbo.node
gyp info ok
```

30) npm install

```
C:\Users\Georges\Desktop\node-jpeg-turbo>npm install

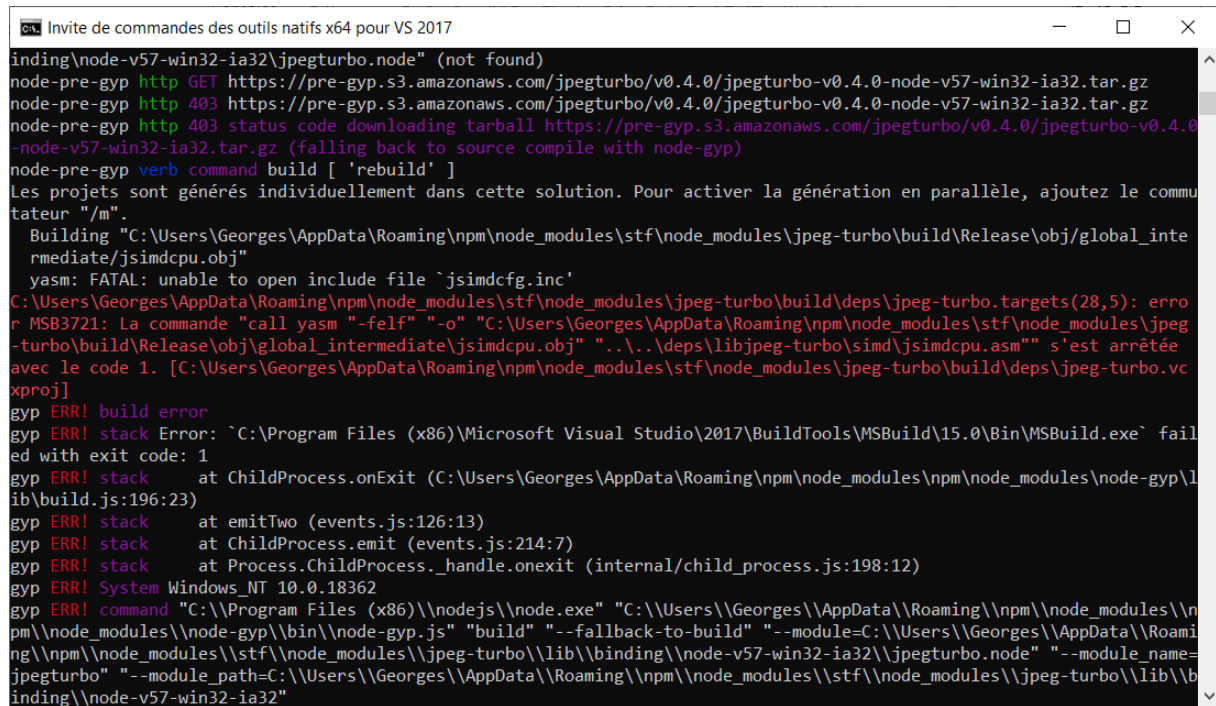
> jpeg-turbo@0.4.0 install C:\Users\Georges\Desktop\node-jpeg-turbo
> node ./prebuilt-bindings install

[prebuilt-bindings] => Testing 'C:\Users\Georges\Desktop\node-jpeg-turbo\build\Release\jpegturbo.node'...
[prebuilt-bindings] => Prebuilt bindings installed!
npm notice created a lockfile as package-lock.json. You should commit this file.
audited 4 packages in 0.98s
found 0 vulnerabilities
```

31) Ca y est, vous êtes prêt à installer STF :

```
npm install -g stf
```

A ce niveau, vous aurez sûrement l'erreur suivante :



```
inding\node-v57-win32-ia32\jpegturbo.node" (not found)
node-pre-gyp http GET https://pre-gyp.s3.amazonaws.com/jpegturbo/v0.4.0/jpegturbo-v0.4.0-node-v57-win32-ia32.tar.gz
node-pre-gyp http 403 https://pre-gyp.s3.amazonaws.com/jpegturbo/v0.4.0/jpegturbo-v0.4.0-node-v57-win32-ia32.tar.gz
node-pre-gyp http 403 status code downloading tarball https://pre-gyp.s3.amazonaws.com/jpegturbo/v0.4.0/jpegturbo-v0.4.0-
-node-v57-win32-ia32.tar.gz (falling back to source compile with node-gyp)
node-pre-gyp verb command build [ 'rebuild' ]
Les projets sont générés individuellement dans cette solution. Pour activer la génération en parallèle, ajoutez le commu
tateur "/m".
Building "C:\Users\Georges\AppData\Roaming\npm\node_modules\stf\node_modules\jpeg-turbo\build\Release\obj\global_inter
mediate\jsimdcpu.obj"
yasm: FATAL: unable to open include file 'jsimdcfg.inc'
C:\Users\Georges\AppData\Roaming\npm\node_modules\stf\node_modules\jpeg-turbo\build\deps\jpeg-turbo.targets(28,5): erro
r MSB3721: La commande "call yasm "-felf" "-o" "C:\Users\Georges\AppData\Roaming\npm\node_modules\stf\node_modules\jpeg
-turbo\build\Release\obj\global_intermediate\jsimdcpu.obj" "..\..\deps\libjpeg-turbo\simd\jsimdcpu.asm" s'est arrêtée
avec le code 1. [C:\Users\Georges\AppData\Roaming\npm\node_modules\stf\node_modules\jpeg-turbo\build\deps\jpeg-turbo.vc
xproj]
gyp ERR! build error
gyp ERR! stack Error: 'C:\Program Files (x86)\Microsoft Visual Studio\2017\BuildTools\MSBuild\15.0\Bin\MSBuild.exe' fail
ed with exit code: 1
gyp ERR! stack at ChildProcess.onExit (C:\Users\Georges\AppData\Roaming\npm\node_modules\npm\node_modules\node-gyp\l
ib\build.js:196:23)
gyp ERR! stack at emitTwo (events.js:126:13)
gyp ERR! stack at ChildProcess.emit (events.js:214:7)
gyp ERR! stack at Process.ChildProcess._handle.onexit (internal/child_process.js:198:12)
gyp ERR! System Windows_NT 10.0.18362
gyp ERR! command "C:\\Program Files (x86)\\nodejs\\node.exe" "C:\\Users\\Georges\\AppData\\Roaming\\npm\\node_modules\\n
pm\\node_modules\\node-gyp\\bin\\node-gyp.js" "build" "--fallback-to-build" "--module=C:\\Users\\Georges\\AppData\\Roami
ng\\npm\\node_modules\\stf\\node_modules\\jpeg-turbo\\lib\\binding\\node-v57-win32-ia32\\jpegturbo.node" "--module_name=
jpegturbo" "--module_path=C:\\Users\\Georges\\AppData\\Roaming\\npm\\node_modules\\stf\\node_modules\\jpeg-turbo\\lib\\b
inding\\node-v57-win32-ia32"
```

Très peu de documentation à ce sujet est disponible sur le web.

32) Je vous propose donc de vous rendre dans

C:/Users/<nom_d_utilisateur>/AppData/Roaming/npm/node_modules/

et de rajouter **stf** manuellement en trouvant le zip à cette adresse :


<https://drive.google.com/file/d/1mehoYII0XmNgw7myP8dEGLRrCkVFX24W/view?usp=sharing>


Remarque : allez à **C:\Users\<nom_d_utilisateur>\AppData\Roaming\npm**

Si vous ne trouvez pas **stf** et **stf.cmd** rajoutez-les (vous les trouverez dans le dépôt)

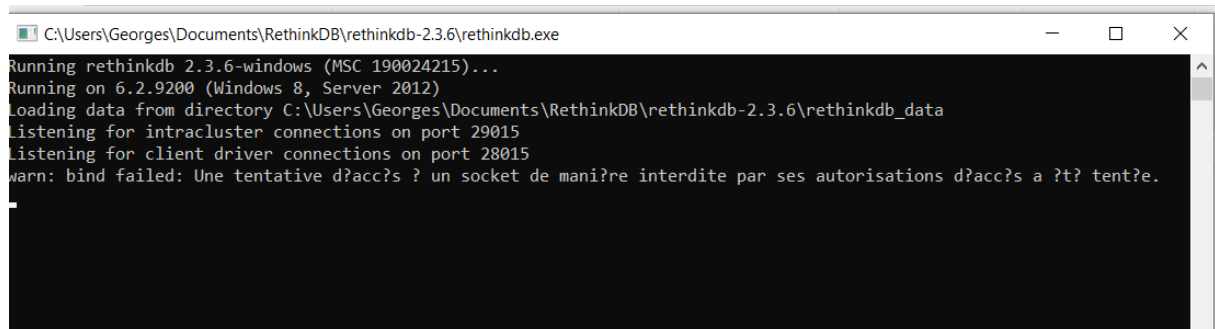
 stf	11/06/2020 17:34	Fichier	1 Ko
 stf.cmd	11/06/2020 17:34	Script de commande ...	1 Ko

33) Avant d'utiliser stf, il faut avoir **rethinkdb** qui tourne. Lancer l'exécutable rethinkdb.exe

 rethinkdb_data

 rethinkdb.exe

En lançant l'exécutable, il se peut que vous ayez l'erreur suivante :



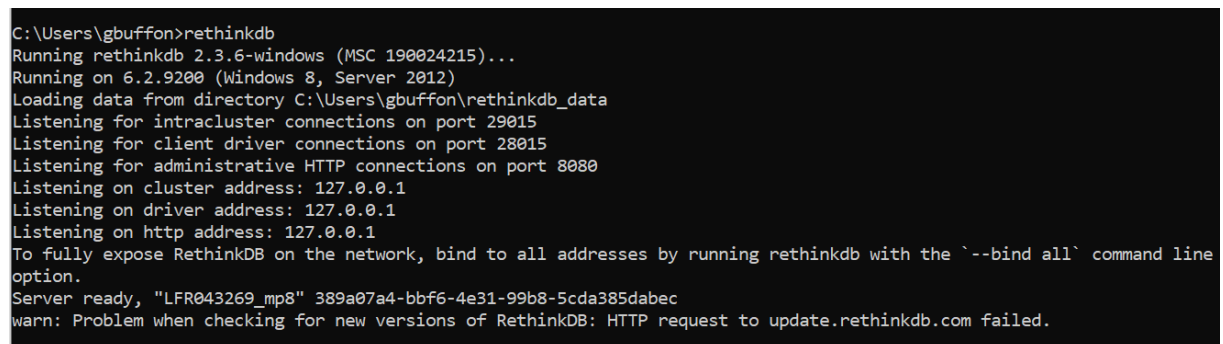
```
C:\Users\Georges\Documents\RethinkDB\rethinkdb-2.3.6\rethinkdb.exe
Running rethinkdb 2.3.6-windows (MSC 190024215)...
Running on 6.2.9200 (Windows 8, Server 2012)
Loading data from directory C:\Users\Georges\Documents\RethinkDB\rethinkdb-2.3.6\rethinkdb_data
Listening for intracluster connections on port 29015
Listening for client driver connections on port 28015
warn: bind failed: Une tentative d'acc?s ? un socket de mani?re interdite par ses autorisations d'acc?s a ?t? tent?e.
```

Veuillez vous assurer qu'aucun service n'est lancé sur le port 8080.

Sinon vous pouvez changer le port http, le port recevant les connections d'autres nœuds et les driver client de Rethinkdb respectivement avec les options :

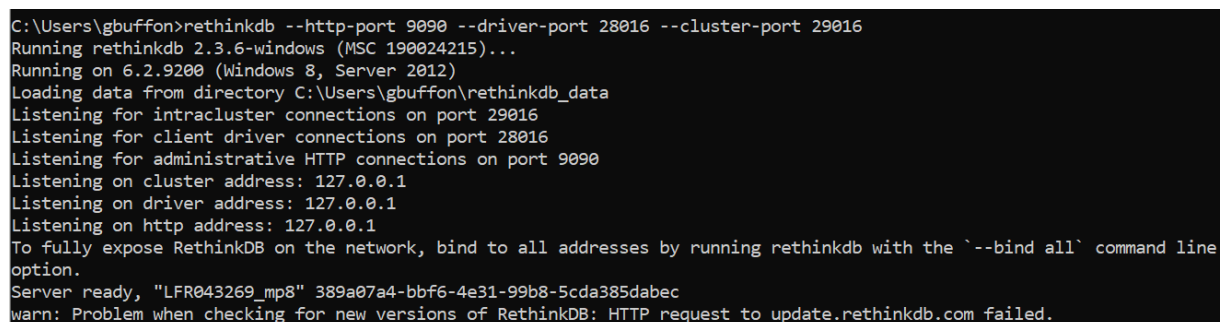
```
--http-port numero_du_port
--cluster-port numero_du_port
--driver-port numero_du_port
```

Valeurs par défaut :



```
C:\Users\gbuffon>rethinkdb
Running rethinkdb 2.3.6-windows (MSC 190024215)...
Running on 6.2.9200 (Windows 8, Server 2012)
Loading data from directory C:\Users\gbuffon\rethinkdb_data
Listening for intracluster connections on port 29015
Listening for client driver connections on port 28015
Listening for administrative HTTP connections on port 8080
Listening on cluster address: 127.0.0.1
Listening on driver address: 127.0.0.1
Listening on http address: 127.0.0.1
To fully expose RethinkDB on the network, bind to all addresses by running rethinkdb with the `--bind all` command line option.
Server ready, "LFR043269_mp8" 389a07a4-bbf6-4e31-99b8-5cda385dabec
warn: Problem when checking for new versions of RethinkDB: HTTP request to update.rethinkdb.com failed.
```

Valeurs modifiées :



```
C:\Users\gbuffon>rethinkdb --http-port 9090 --driver-port 28016 --cluster-port 29016
Running rethinkdb 2.3.6-windows (MSC 190024215)...
Running on 6.2.9200 (Windows 8, Server 2012)
Loading data from directory C:\Users\gbuffon\rethinkdb_data
Listening for intracluster connections on port 29016
Listening for client driver connections on port 28016
Listening for administrative HTTP connections on port 9090
Listening on cluster address: 127.0.0.1
Listening on driver address: 127.0.0.1
Listening on http address: 127.0.0.1
To fully expose RethinkDB on the network, bind to all addresses by running rethinkdb with the `--bind all` command line option.
Server ready, "LFR043269_mp8" 389a07a4-bbf6-4e31-99b8-5cda385dabec
warn: Problem when checking for new versions of RethinkDB: HTTP request to update.rethinkdb.com failed.
```



34) Vous pouvez lancer STF :


stf local


```
Invite de commandes - stf local
2020-06-11T19:49:35.861Z INF/reaper 14724 [reaper001] Subscribing to permanent channel "**ALL"
2020-06-11T19:49:35.872Z INF/reaper 14724 [reaper001] Reaping devices with no heartbeat
2020-06-11T19:49:35.873Z INF/processor 17080 [proc002] App dealer connected to "tcp://127.0.0.1:7112"
2020-06-11T19:49:35.877Z INF/processor 17080 [proc002] Device dealer connected to "tcp://127.0.0.1:7115"
2020-06-11T19:49:35.878Z INF/db 14724 [reaper001] Connecting to 127.0.0.1:28015
2020-06-11T19:49:35.891Z INF/reaper 14724 [reaper001] Receiving input from "tcp://127.0.0.1:7111"
2020-06-11T19:49:35.895Z INF/reaper 14724 [reaper001] Sending output to "tcp://127.0.0.1:7116"
2020-06-11T19:49:36.250Z INF/db 12332 [*] Connecting to 127.0.0.1:28015
2020-06-11T19:49:36.315Z INF/processor 12332 [proc001] App dealer connected to "tcp://127.0.0.1:7112"
2020-06-11T19:49:36.320Z INF/processor 12332 [proc001] Device dealer connected to "tcp://127.0.0.1:7115"
2020-06-11T19:49:37.222Z INF/provider 17580 [*] Subscribing to permanent channel "a3SIMEOHT2i3P6s29XGr1A=="
2020-06-11T19:49:37.246Z INF/provider 17580 [*] Sending output to "tcp://127.0.0.1:7116"
2020-06-11T19:49:37.257Z INF/provider 17580 [*] Receiving input from "tcp://127.0.0.1:7114"
2020-06-11T19:49:37.281Z INF/provider 17580 [*] Tracking devices
2020-06-11T19:49:37.830Z INF/poorxy 1524 [*] Listening on port 7100
2020-06-11T19:49:38.419Z INF/auth-mock 23232 [*] Listening on port 7120
2020-06-11T19:49:39.134Z INF/storage:plugins:image 5816 [*] Listening on port 7103
2020-06-11T19:49:39.256Z INF/storage:plugins:apk 24056 [*] Listening on port 7104
2020-06-11T19:49:39.540Z INF/storage:temp 23720 [*] Listening on port 7102
2020-06-11T19:49:39.687Z INF/app 25204 [*] Using pre-built resources
2020-06-11T19:49:39.751Z INF/app 25204 [*] Listening on port 7105
2020-06-11T19:49:39.763Z INF/db 25204 [*] Connecting to 127.0.0.1:28015
2020-06-11T19:49:40.152Z INF/websocket 25548 [*] Subscribing to permanent channel "**ALL"
2020-06-11T19:49:40.167Z INF/websocket 25548 [*] Listening on port 7110
2020-06-11T19:49:40.172Z INF/db 25548 [*] Connecting to 127.0.0.1:28015
2020-06-11T19:49:40.179Z INF/websocket 25548 [*] Sending output to "tcp://127.0.0.1:7113"
2020-06-11T19:49:40.188Z INF/websocket 25548 [*] Receiving input from "tcp://127.0.0.1:7111"
2020-06-11T19:49:43.033Z INF/api 20988 [*] Subscribing to permanent channel "**ALL"
2020-06-11T19:49:43.204Z INF/api 20988 [*] Listening on port 7106
2020-06-11T19:49:43.221Z INF/api 20988 [*] Sending output to "tcp://127.0.0.1:7113"
2020-06-11T19:49:43.224Z INF/api 20988 [*] Receiving input from "tcp://127.0.0.1:7111"
2020-06-11T19:49:43.629Z INF/db 20988 [*] Connecting to 127.0.0.1:28015
```

35) En se rendant à <http://localhost:7100> il faudra se connecter. Vous pouvez utiliser n'importe quelle valeur pour le nom et l'email

← → ↺ ⬆ ⓘ localhost:7100/auth/mock/



 georges

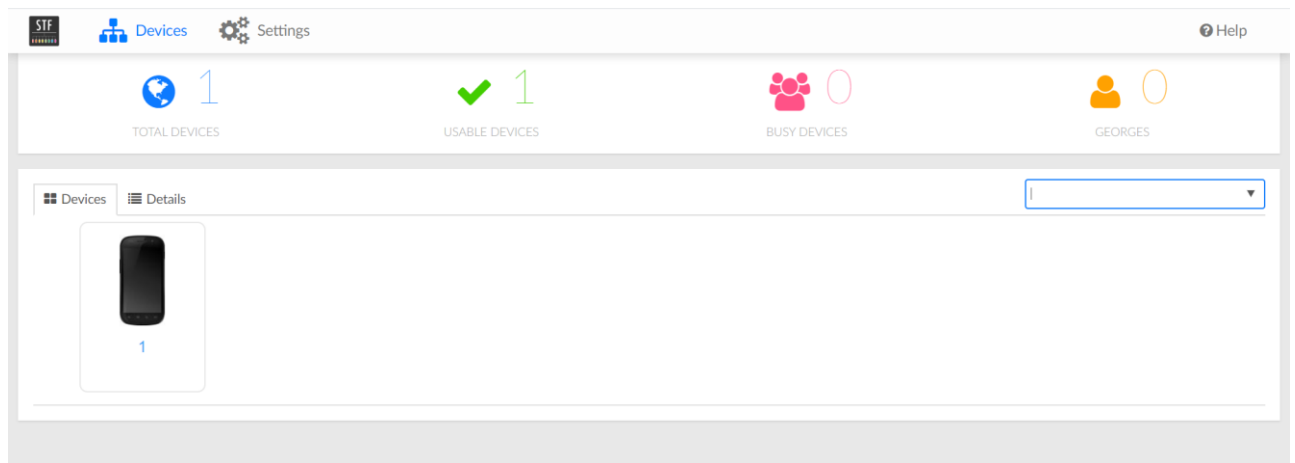
 georges-sxm@hotmail.fr

Log In

36) Vous pouvez alors connecter des téléphones et les contrôler depuis OpenSTF.

Remarque : il faudra activer le **mode développeur** du téléphone et **accepter le débogage USB**.

Attention : Les téléphones sous Android 10 ne fonctionnent pas à ce jour avec STF.



Sources utilisées

Problème avec yasm + créer jpegturbo.node :

<https://github.com/sorccu/node-jpeg-turbo/issues/8>

<https://rethinkdb.com/docs/start-a-server/>

<https://github.com/openstf/stf>

<https://github.com/openstf/stf/issues/1066>