

C02 Utilisation d'un IDE


Programmation en langage C++

BTS CIEL 1^{ère} année

Lycée Louis Rascol, Albi



Release : v1.1 (2023-09-02) [j-serrand](#)

 [ciel-ir-rascol/cpp-cours](#)

Sommaire

1. IDE *Integrated Development Environment*

2. Compte JetBrains

3. Installation de CLion

4. Créer son premier projet

Qu'est ce qu'un IDE ?

Environnement de Développement Intégré :

- Éditeur de texte
- Compilateur
- Linker
- Debugger
- Gestionnaire de version intégré (Git et GitHub)

Les IDEs C++

- CodeLite
- Code : :Blocks
- Eclipse
- Visual Studio
- Visual Studio Code
- XCode
- **CLion**



Sommaire

1. IDE *Integrated Development Environment*

2. **Compte JetBrains**

3. Installation de CLion

4. Créer son premier projet

Demande de compte étudiant

Aller sur : <https://www.jetbrains.com/shop/eform/students>



Produits JetBrains pour l'apprentissage

Avant de vous inscrire, veuillez consulter [la FAQ et les conditions de l'abonnement éducatif](#).

S'inscrire avec [E-mail de l'université](#) Carte ISIC/ITIC Document officiel GitHub

Situation : Je suis étudiant-e **1**
 Je suis enseignant-e

Niveau d'études : Étudiant universitaire

L'informatique ou l'ingénierie est-elle votre principal domaine d'étude ?
 Oui **Adresse e-mail en e.rascal.net**
 Non

Adresse e-mail : **2**

Je confirme que l'adresse e-mail de l'université indiquée ci-dessus est valide et qu'elle m'appartient.

Demande de compte étudiant

Nom : Votre nom complet, tel qu'il figure sur votre passeport, votre carte d'identité, votre permis de conduire ou tout autre document légal.

Marc Dupont **3**

Pays/Région France

J'ai moins de 13 ans

J'ai lu et j'accepte l' [Accord de compte JetBrains](#) **4**

Je consens à l'utilisation par JetBrains de mon nom, de mon adresse e-mail et de mes données de localisation dans le cadre de communications par e-mail concernant les produits JetBrains détenus ou les services utilisés par mon organisation ou moi-même. Je comprends que je peux révoquer ce consentement à tout moment dans mon profil. De plus, chaque e-mail contient un lien de désabonnement. (Facultatif)

En soumettant ce formulaire, vous reconnaissez que nous utiliserons vos données personnelles indiquées dans ce formulaire pour traiter votre candidature, pour traiter vos données à cette fin, pour notre protection et pour remplir nos obligations légales. Nous pouvons faire appel à des services tiers pour nous aider dans ce traitement. Pour en savoir plus, veuillez consulter la [politique de confidentialité de JetBrains](#).

DEMANDER DES PRODUITS GRATUITS **5**

Demande de compte étudiant

📧 Consultez votre boîte mail **prénom.nom@e.rascal.net**

JetBrains Educational Pack confirmation ➤ Boîte de réception x



JetBrains Account  <no_reply@jetbrains.com>

À joris.serrand ▾

🌐 anglais ▾ > français ▾ [Traduire le message](#)

Hi,

You're receiving this email because your email address was used to register or update a JetBrains Educational Pack.

Please click this link to proceed:

<https://www.jetbrains.com/shop/eform/students/request?code=axnr91i2k81w25mow411b045t>

6

After accepting the License Agreement, you will be asked to sign up for a JetBrains Account. You will need to use this account whenever you want to access JetBrains tools.

If you have any questions, please email us – we're always happy to help.

Kind Regards,

The JetBrains team

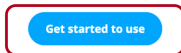
www.jetbrains.com

The Drive to Develop

Ouverture d'un compte JetBrains



Keep it going! You're just one step away from using JetBrains Educational Pack for free.



Ouverture d'un compte JetBrains

TOOLBOX SUBSCRIPTION AGREEMENT FOR STUDENTS AND TEACHERS

Version 4.0, effective as of September 1, 2021

IMPORTANT! READ CAREFULLY:

THIS IS A LEGAL AGREEMENT. BY CLICKING ON THE "I AGREE" (OR SIMILAR) BUTTON THAT IS PRESENTED TO CUSTOMER AT THE TIME OF PURCHASE, OR BY DOWNLOADING, INSTALLING, COPYING, SAVING ON CUSTOMER'S DEVICE, OR OTHERWISE USING JETBRAINS SOFTWARE, SUPPORT, OR PRODUCTS, CUSTOMER BECOMES A PARTY TO THIS AGREEMENT AND CONSENTS TO BE BOUND BY ALL THE TERMS AND CONDITIONS SET FORTH BELOW.

JetBrains and Customer may each also be referred to individually as a "Party" or jointly as the "Parties".

1. PARTIES

1.1. "Customer" or "you" means a student or an instructor specified in the Subscription Confirmation who is at least 13 years old, or in the case of Redistributable Products, the sole proprietor or legal entity with sufficient legal capacity to enter into this Agreement using the Redistributable Product in accordance with this Agreement. For the purpose of this Agreement:

(A) "student" is an individual who is enrolled at a recognized educational institution (university, college, high school, primary school, or a similar institution with educational goals), and upon request from JetBrains is able to provide proof of such enrollment;

(B) "instructor" is an individual who gives lectures and/or seminars at a recognized educational institution (university, college, high school, primary school, or a similar institution with educational goals), and upon request by JetBrains is able to provide proof of such involvement.

1.2. "JetBrains" or "we" means JetBrains s.r.o., having its principal place of business at Na Hrebenech II 1718/8, Prague, 14000, Czech Republic, registered in the Commercial Register maintained by the Municipal Court of Prague, Section C, File 86211, ID No.: 265 02 275.

Please review and accept this license agreement to proceed with product activation.

8

I Accept

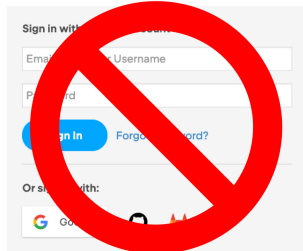
Ouverture d'un compte JetBrains



Welcome to JetBrains Account

Link your JetBrains Educational Pack to a new or an existing JetBrains Account.

You will need to use this account whenever you want to access JetBrains tools.



Sign in with:

Email or Username

Password

Sign In Forgot Password?

Or sign in with:

Google

A large red prohibition sign (a circle with a diagonal slash) is overlaid on the entire sign-in form.

⚠ Adresse e-mail en **e.rascal.net**

Not registered yet?

Create JetBrains Account

joris.serrand@e.rascal.net

Sign Up

9

10

The registration form is shown with red annotations: a red box around the email input field, a red circle with the number '9' to its right, and a red circle with the number '10' below the 'Sign Up' button.

Ouverture d'un compte JetBrains



Welcome to JetBrains Account!

Please complete the registration form below

Email address

Username **11**
Latin symbols (A-z), digits (0-9) or a valid email address 5 to 100 characters long.

This account is the gateway to all of your purchases. Please choose a strong password to protect them.

Password **12**

Re-enter password

I have read and I accept the [JetBrains Account Agreement](#) **13**

14

JetBrains Account allows you:

- Access your purchases and view your order history
- Identify expired and outdated licenses, order new licenses and upgrades
- Manage your company licenses and distribute them to end users

You will receive emails from us in **Français**. [Change](#)
You can change your preferred language at any time in your JetBrains Account settings.

Licence étudiant JetBrains

JETBRAINS Licenses Your Account Help Joris Serrand -

Joris Serrand
[Transactions / Invoices](#)
[Notifications](#)

Two-factor authentication (2FA) is available!
To enable an extra layer of security for your JetBrains Account, [turn on two-factor auth.](#)

1 Student Pack License [Buy new license](#)

JetBrains Product Pack for Students License ID: XXXXXXXXXXXXXXXXXXXX
[Download](#)

Licensed to: **Joris Serrand**
License restriction: For educational use only
Valid through: **August 08, 2024** **Licence renouvelable valide 1 an**

Following products included:

- CLion
- dotTrace
- ReSharper
- DataGrip
- GoLand
- ReSharper C++
- DataSpell
- IntelliJ IDEA Ultimate
- Rider
- dotCover
- PhpStorm
- RubyMine
- dotMemory
- PyCharm
- WebStorm

After downloading and installing the software, simply run it and follow the on-screen prompts to sign in with your JetBrains Account.

Sommaire

1. IDE *Integrated Development Environment*

2. Compte JetBrains

3. Installation de CLion

4. Créer son premier projet

Télécharger CLion

Two-factor authentication (2FA) is available
To enable an extra layer of security for your JetBrains Account, turn on two-factor auth.

1 Student Pack License [Buy new license](#)

JetBrains Product Pack for Students
Download

License ID: [REDACTED]

CLion	2023.2	Download
DataGrip	2023.2	Download
DataSpell	2023.2	Download
GoLand	2023.2	Download
IntelliJ IDEA Ultimate	2023.2	Download
PhpStorm	2023.2	Download
PyCharm	2023.2	Download
ReSharper	2023.2	Download
ReSharper C++	2023.2	Download
ReSharper Ultimate	2023.2	Download

Download !

- DataSpell
- IntelliJ IDEA Ultimate
- Rider
- dotCover
- PhpStorm
- RubyMine
- dotMemory
- PyCharm
- WebStorm

software, simply run it and follow the on-screen prompts to sign in with your JetBrains Account.

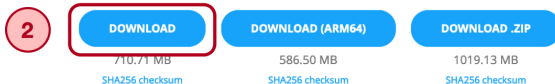
Télécharger CLion



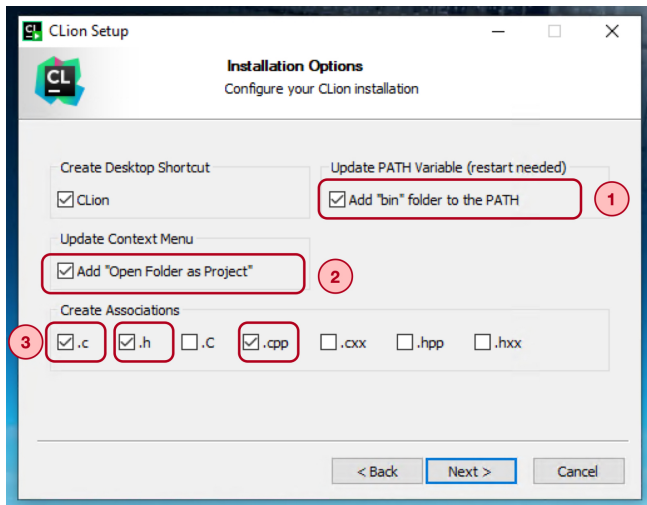
Download CLion 2023.2



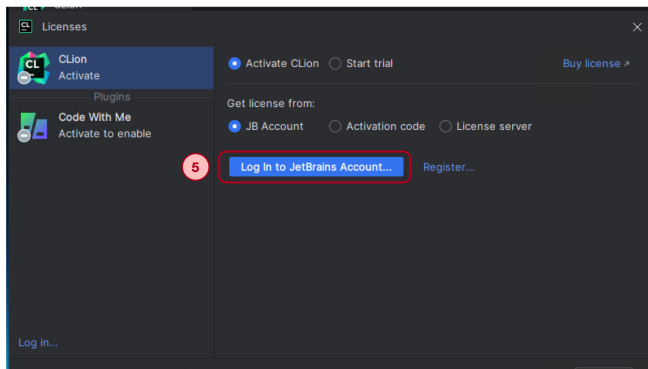
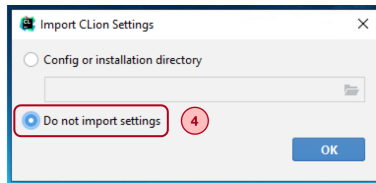
Product: [CLion](#)
Version: 2023.2
Build: 232.8660.186
Released: July 26, 2023



Installation sur Windows



Installation sur Windows



Installation sur Windows



Sign In [Create Account](#)





6

Username

Password

7 [Forgot password?](#)

Or sign in with:

 Google   

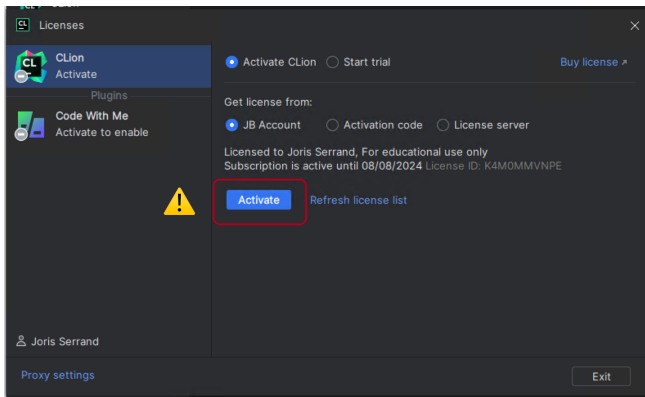
Installation sur Windows



Authorization Successful

You can close this page and return to the IDE

Installation sur Windows



Sommaire

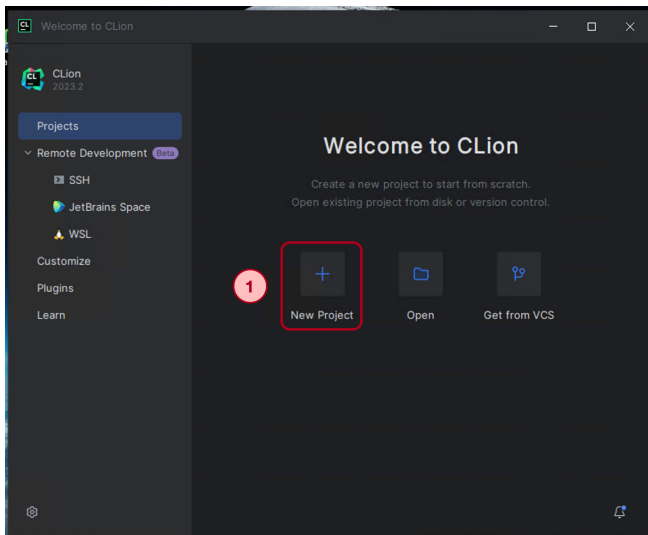
1. IDE *Integrated Development Environment*

2. Compte JetBrains

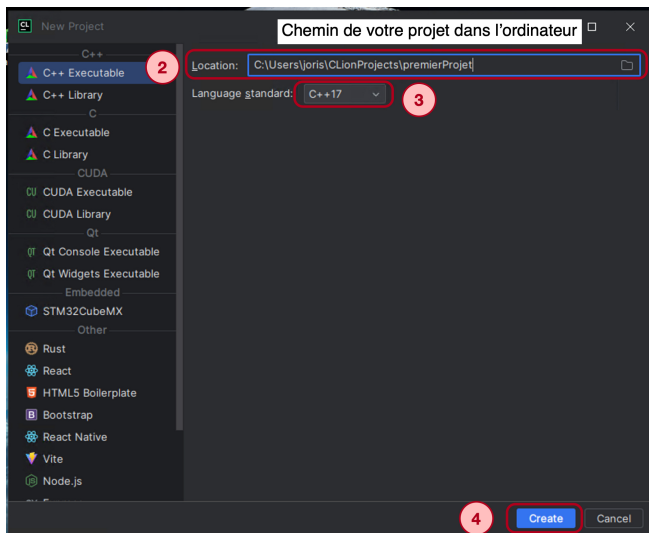
3. Installation de CLion

4. Créer son premier projet

Créer un projet

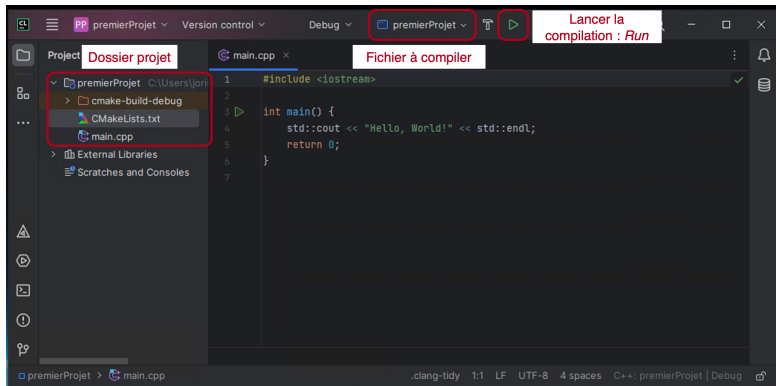


Créer un projet



Hello, World!

- Lors de la création d'un nouveau projet CLion crée automatiquement un *Hello, World!*
- *Hello, World!* → Programme de test simpliste



Hello, World!

The screenshot shows an IDE window with a project named 'premierProjet'. The file explorer on the left shows the project structure, with 'main.cpp' selected and highlighted by a red box. A white box with red text 'Fichier à compiler' points to this file. The main editor displays the code for 'main.cpp', with the function definition enclosed in a red box and labeled 'Fonction main()'. The code is as follows:

```
1 #include <iostream>
2
3 int main() {
4     std::cout << "Hello, World!" << std::endl;
5     return 0;
6 }
7
```

At the bottom, the Run console shows the execution output, also enclosed in a red box and labeled 'Sortie du programme'. The output is:

```
C:\Users\joris\CLionProjects\premierProjet\cmake-build-debug\premierProjet.exe
Hello, World!
Process finished with exit code 0
```

Hello, World!

```
1  #include <iostream>
2
3  int main(){
4      std::cout << "Hello, World!" << std::endl;
5      return 0;
6  }
```

>_ Sortie Console :

```
C:\Users\joris\premierProjet\cmake-build-debug\premierProjet.exe
Hello, World!
```

```
Process finished with exit code 0
```