

CLion

The best C/C++ tool

phil

Why care about tooling?



- Developers spend a lot of time on their computers
- Be the most productive
- Save time when doing repetitive tasks
- Use the best tool depending on your job
- Personal opinion

Job of a C/C++ dev

What do we do every day?

- Edit code
- Read documentation
- Compile code
- Run + Debug
- Test code
- Collaborate with other people

What's on the market?

for C/C++

- Vim
- Emacs
- Notepad++
- Visual Studio
- Visual Studio Code
- CLion

Text Editor vs IDE

Text Editor

Edit text

- Designed to work with a single file
- Syntax highlighting
- Multi-file editing
- Extensibility

IDE

Integrated Development Environment

- Work on a project with lots of files
- Powerful text editor
- Compiler + Debugger
- Code completion
- Refactoring
- Source code management

CLion

by JetBrains



- Pronounced as “**sea lion**”
- C/C++ IDE with support for Swift and Rust
- Available on Windows, Linux, macOS
- Free for Epitech students
- 89€ per year for personal use
- Updates all year long

Features



- Code generation / analysis
- Debugger built-in
- Easy documentation
- Templates
- Refactor
- Unit testing
- Good VCS support / Local history

Compilers and toolchains



- Originally built for CMake projects
- Initial Makefile support since 2020.2
- Windows: MSVC, WSL 2
- macOS/Linux: gcc, clang
- Remote support with ssh

CLion vs VS Code



- CLion works better when working with a project, not a single file
- VS Code has the concept of workspaces but you need to configure it
- With CLion everything works out of the box

Get your license

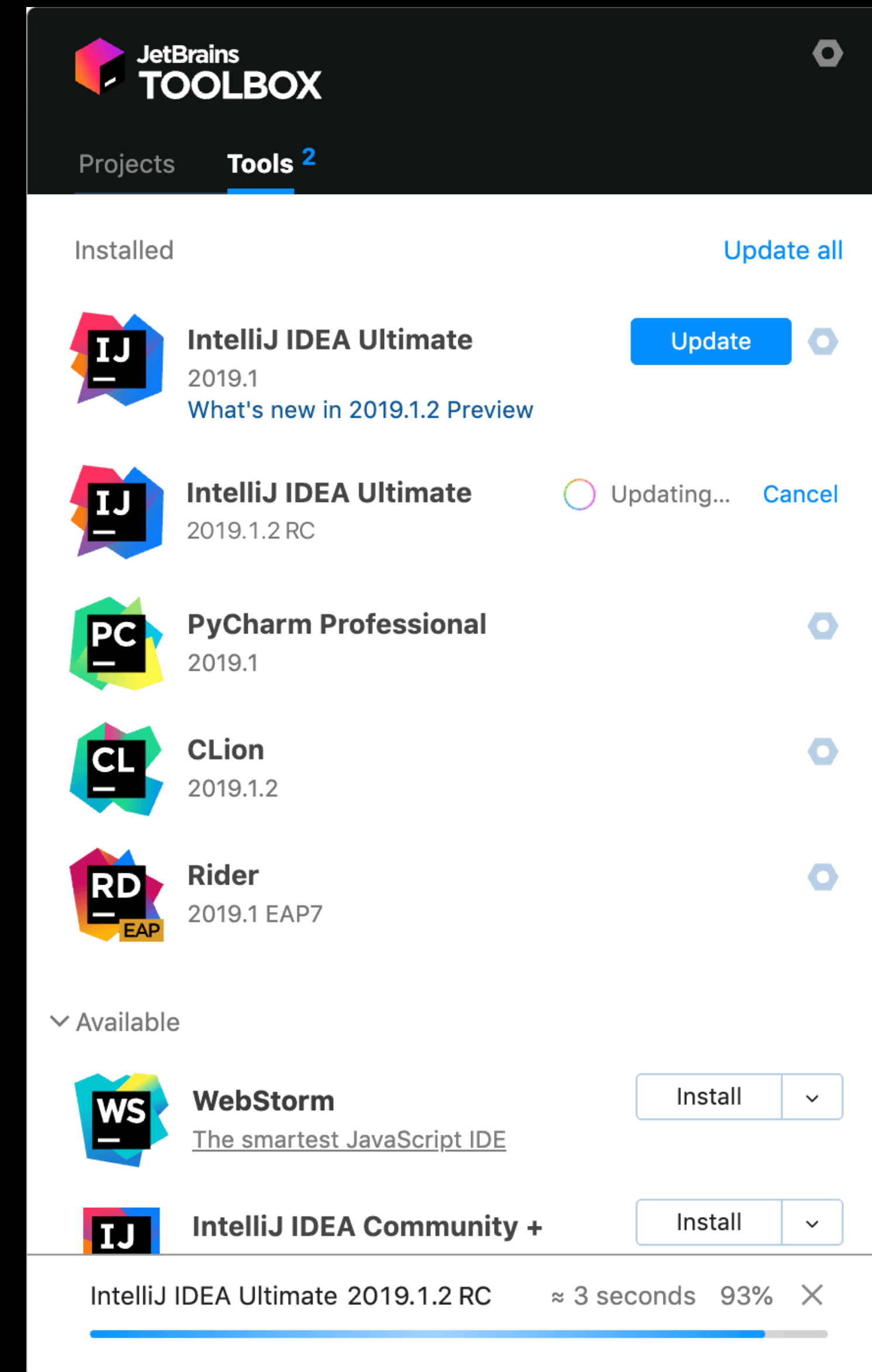


- <https://account.jetbrains.com>
- Create your account with your epitech email
- Register as a student to get your free license
- Renew it every year

Toolbox

<https://www.jetbrains.com/toolbox-app>

- Install JetBrains tools
- Update them easily
- EAP (Early Access Program)



Get started



- Install CLion
- Open an existing C/C++ project
- Take a look around
- Learn about the IDE <https://www.jetbrains.com/clion/learn>

One more thing



- CLion config for Epitech: <https://github.com/GauthierPLM/CLionEpitech>
- clang-format for Epitech: <https://github.com/SirWrexes/epitech-clang-format>
- Epitech Docker for CLion: <https://github.com/x4m3/clion-epitech-docker>

Thank you

- <https://philippeloctaux.com>