Duplicate Code Management Software

CloneTracker Setup Guide

Sider Corporation
v1.0_en

1. What is CloneTracker?

CloneTracker is an app that not only detects duplicate codes, but also manages duplicate codes in the past, present, and future, in order to improve the quality of software code.

The longer a software development project lasts, the more duplicate codes will grow exponentially.
Duplicate code is useful because it allows you to reuse past source code if managed properly. However, it is extremely costly to manage duplicate codes that are increasing exponentially, and there has never been a tool to track duplicate codes that change as software grows.

CloneTracker has been developed with a new concept of duplicate code integrity management by combining academic knowledge about duplicate codes with the software developer's daily needs.

2. Features

CloneTracker has two features. The first is a function that detects duplicate codes that exist in the target directories, and the second is a function that tracks changes in the detected duplicate codes and detects inconsistencies between duplicate codes that may cause bugs. The analysis is performed on the user's computer, so your source code is not sent to external servers.
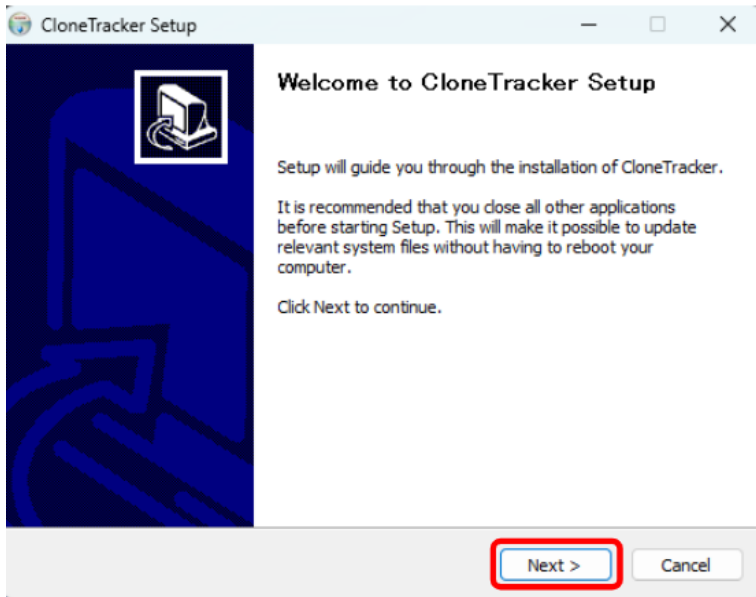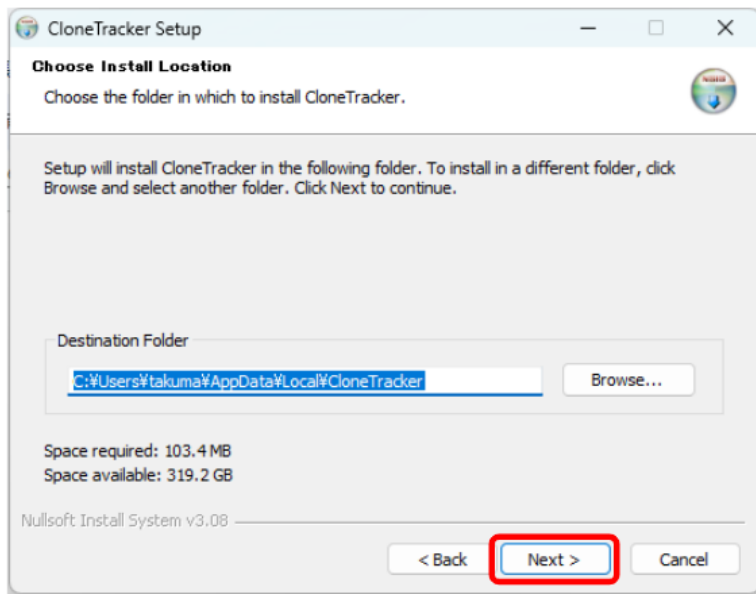
3. Install CloneTracker

Let's try CloneTracker.
CloneTracker has a Free Trial plan. Please download CloneTracker compatible with your OS from this product site.
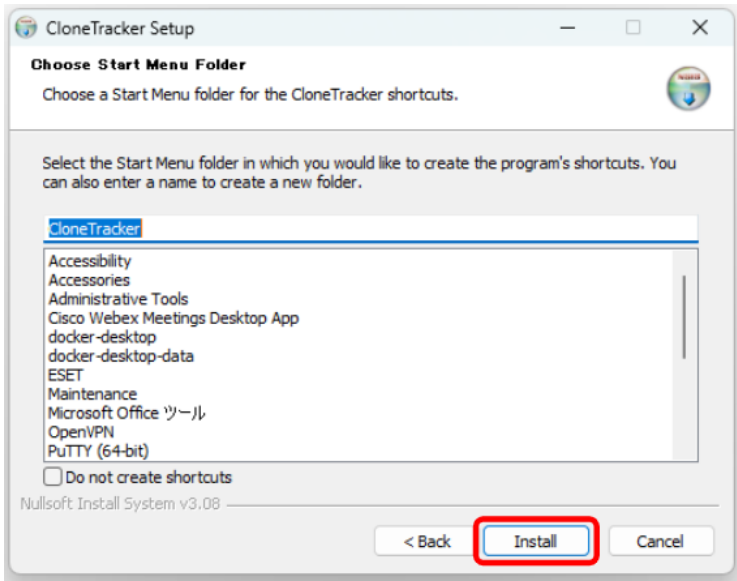
3-1. Windows version

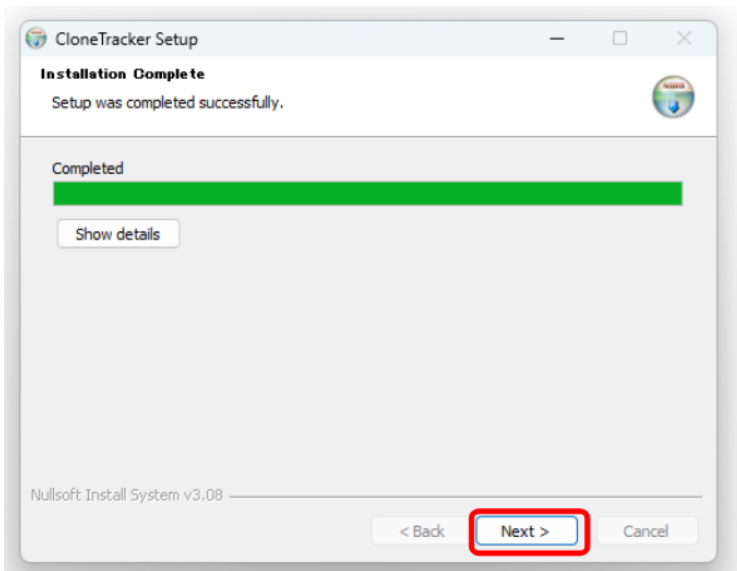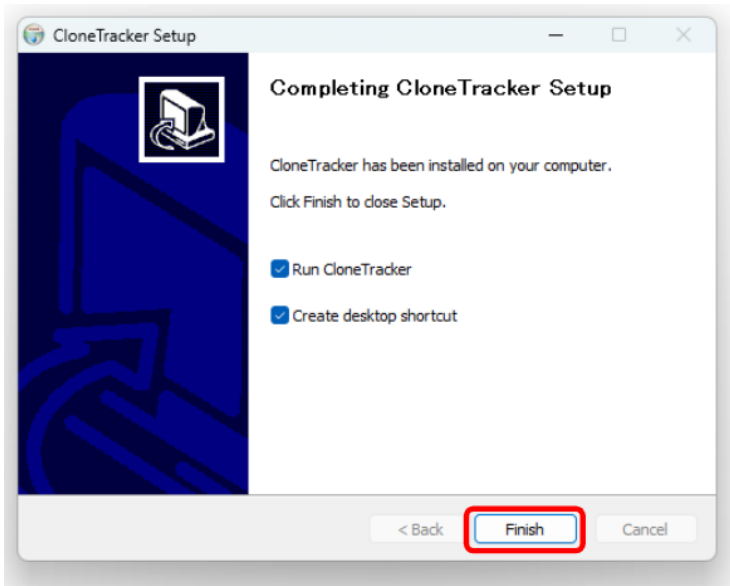Run the downloaded installer file.

Click "Next"

Click "Next"

Click "Install"

Once the setup is completed, click "Next".

Click "Finish"
CloneTracker is automatically executed, and the project registration screen will be shown.

3-2. Mac Version

Run the downloaded installer file.
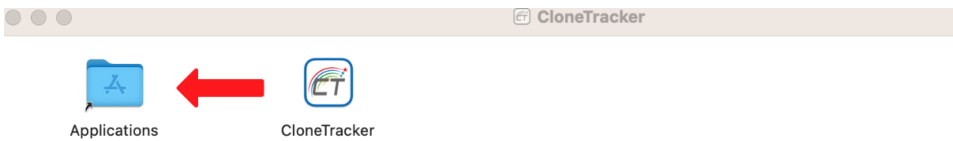
The screen above will be shown. Please Drag & Drop CloneTracker to Applications.
Then double-click CloneTracker.
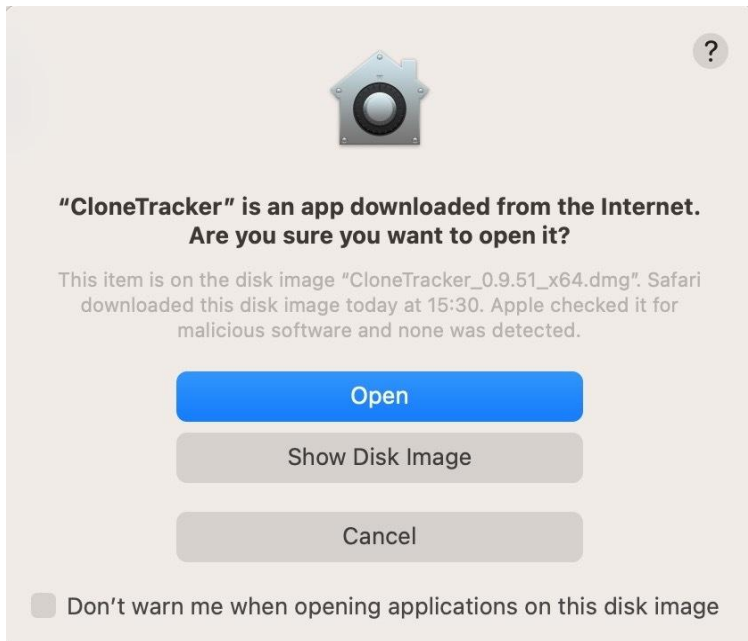
The screen above will be displayed, so click "Open".
The setup is complete and the project registration screen is displayed.

3-3. Settings

All you have to do is set up the analysis target directory.
On the project registration screen, select the directory to be analyzed.

Register project

Project Directory *Required

Please choose a directory that includes the '.git' folder to enable Git integration

CHOOSE DIRECTORY

Languages

※ In α version, you can set Python/Java/JavaScript/PHP/VB.net/Rust as the target languages for analysis.

☑ C/C++ ☑ C#

α Ver.: ☐ Java ☐ Python ☐ Javascript ☐ PHP ☐ VB.NET ☐ Rust

Project Name ⓘ

Ignore Rules ⓘ

test, *sample*, *proto*, *example*, *3rdparty*, dist, vendor, vendors, node_modules

※ The paths that are set to be excluded from analysis by default are as follows.
test, *sample*, *proto*, *example*, *3rdparty*, dist, vendor, vendors, node_modules

Retrospective Analysis Span ⓘ

Last 3 months (one analysis ... ▼

Encoding

⦿ UTF-8 ◯ Shift-JIS ◯ EUC-JP

License key

REGISTER

Expiry date: 2023-11-03 (Free trial)

REGISTER

※ CloneTracker is an application that runs continuously in the background

Analysis target directory:
Click the "CHOOSE DIRECTORY" button to display File Explorer and select the directory to be analyzed. You can target only directories that have .git files directly under them.

Now, CloneTracker is ready for analysis. You can also set up the following items if you want to.

Register project

Project Directory *Required

Please choose a directory that includes the '.git' folder to enable Git integration

<div style="border:1px solid #ccc; text-align:center">CHOOSE DIRECTORY</div>

①

Languages

※ In α version, you can set Python/Java/JavaScript/PHP/VB.net/Rust as the target languages for analysis.

☑ C/C++   ☑ C#

α Ver.: ☐ Java   ☐ Python   ☐ Javascript   ☐ PHP   ☐ VB.NET   ☐ Rust

②

Project Name ⓘ

③

Ignore Rules ⓘ

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④

Retrospective Analysis Span ⓘ

Last 3 months (one analysis ... ▾

⑤

Encoding

◉ UTF-8   ○ Shift-JIS   ○ EUC-JP

⑥

License key   REGISTER

Expiry date: 2023-11-03   (Free trial)

<div style="background:#3b6fd4; color:white; text-align:center">REGISTER</div>

※ CloneTracker is an application that runs continuously in the background

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①Setting the programming language to be analyzed
Select the language you want to analyze in the directory set for analysis.
By default, C/C++ is set, if you want to select another language, please check the checkbox.

②Setting the project name
By default, the directory name is entered. You can change the name to one that is easier for you to manage. You can also change the project name on the project settings screen after registration.

③Exclusion file/folder settings:
If files and folders containing test code, sample code, or old versions of code are included in the analysis, unnecessary duplicate code will be detected. Please properly set exclusion files/folders for analysis so that you can get the best analysis results.

Enter the name of the files or folders you want to exclude. You can use use wildcards. The format is the same as the ".gitignore" file, which is the file exclusion function in Git. Please refer to the [Git manual for details.](#)

④Setting a retrospective analysis period
In the default settings, the .git file in the analysis target directory is referenced and the commit history is used to calculate how far back in the past to analyze.
If you want to perform analysis retroactively to the past than the default settings, change this period manually.

⑤Setting the number of past analyses
In the default settings, the recommended number of past analyses is calculated from the commit history by referring to the .git file in the analysis target directory. The commit ID to be analyzed is calculated by the number of commits from the period set in ③ to the present divided equally by the number of past analyses.

Example
If there are 100 commits from the retrospective analysis time to the present, and the number of past analyses is set to "5", then:
CloneTracker analyzes commit IDs corresponding to 100, 80, 60, 40, 20, and the latest code.

⑥Character code selection:
Select the character code of the source code in the target directory from the pull-down menu.

Once you finish the setup, click the "REGISTER" button, then the initial analysis is started. During the initial analysis, past source code on git will also be analyzed, it may take several hours before the analysis results are displayed.

Please also refer to the operation guide.