

PyMerge

PyMerge is a diff/merge utility written in Python, enabling seamless, cross-platform use.

Installation

System Requirements:

Although PyMerge should run on most machines with Python 3.7+ installed, for best performance your computer should have the specifications listed below:

- Minimum recommended machine specifications:
 - Dual core processor, 2.5GHz
 - 2GB Ram
 - [Python 3.7+](#)
 - OS:
 - Windows 7 or later
 - macOS 10.9 or later
 - Linux

Option 1: Installer:

Download the appropriate installer for PyMerge.

OS	Architecture	Installer
Windows	x64	PyMerge-1.0-windows-x64-installer.exe
Windows	x86	PyMerge-1.0-windows-installer.exe
macOS	--	PyMerge-1.0-osx-installer
Linux	x64	PyMerge-1.0-linux-x64-installer.run
Linux	x86	PyMerge-1.0-linux-installer.run

Option 2: Clone the repository

You may optionally clone the repository and just run PyMerge.py directly (this is the more portable way of doing things) from your command line.

Dependencies

For the most part, PyMerge uses native Python modules. The exceptions to this are when the Cython extensions need to be generated. The installer includes Cython modules for Linux, Windows, or macOS, but on occasion, new object files will need to be compiled. This can be done by navigating to the cython_accelerator folder in the main application folder and running the following in terminal/command-line:

```
python3 setup.py build_ext --inplace
```

In the event that something goes wrong with compiling the object file, PyMerge will automatically use the Python versions of the file diff algorithms it has implemented.

Use

Command line usage:

In your terminal, type

```
python3 PyMerge.py <file1> <file2>
```

Where <file1> is the file you would like to appear on the left-hand side of the comparison window and <file2> is the file you would like to appear on the right-hand side. This will start the application and load the comparison table for the two files passed as arguments.

For example:

```
python3 PyMerge.py myFile1.txt myFile2.txt
```

Alternatively, you may start the application without any arguments and load the files: later:

```
python3 PyMerge.py
```

Running with invocation script/executable:

Each installation includes a script or executable meant to invoke the main program. For macOS and Linux this will be a bash file (.sh) or a binary. For Windows this will be a batch file (.bat) or a binary. Double clicking these files will run the main PyMerge application. No files will be loaded this way, so you must select the file you would like to compare after the program initializes.

Merging a file

Once two files have been loaded into the comparison table and PyMerge has finished analyzing the files, the differences between the two files will be displayed using color codes. Red indicates that two lines are different between the two files. Dark gray indicates that lines have been added in the other file. Light green/mint or white indicates that the lines are the same.

To merge a line, press the array button in the center of the comparison table. The text will merge from one side, to the side that the arrow is pointing to. The line will then change its background color to a light blue to indicate that a merge has occurred.

Undo/Redo Accidents happen. To undo or redo a merge, press the curved arrow buttons on the top toolbar, or press the 'Ctrl+Z' and 'Ctrl+Y' hot-keys. This will restore the state to what it was before the last merge event.

Saving a file

Once you have finished merging the two files, you can save the files using File->Save. A backup of your original file will be created and the newly merged changes will be written to the original file. The changes are written in-place because creating a new file would likely cause issues with any version control tools being used to track the two files. Merging in-place removes the possibility that the VCS will recognize the files as new rather than changed.

Retrieving a backup

In the event that a file is saved accidentally, the original data is not lost. Backups of the original files are saved to a folder called 'backups' in the main application folder. Find the correct backup file (they have the same name as the original but with .bak appended onto the end), write click, and extract using your preferred compression utility. These backup files are just ZIP archives.

Acknowledgements

Icons

- add.png:
- down-arrow.png:
- up-arrow.png:
- left-arrow.png:
- right-arrow.png:
- undo-arrow.png:
- redo-arrow.png:

Installer builder:

- BitRock InstallBuilder Enterprise 19.8.0

