
IndentByFold Documentation

Release 0.7.3

Frank Fesevur

18 Oct 2020

Contents

1	Introduction	2
1.1	Installation Note	2
1.2	History	2
2	Frequently Asked Questions	3
3	Building IndentByFold	5
3.1	Building the documentation	5
4	Wish list	6
5	Contact	7
6	License	8
7	Changelog	9
7.1	Next Version (YYYY-MM-DD)	9
7.2	Version 0.7.3 (2019-11-10)	9
7.3	Version 0.7.2 (2019-11-07)	9
7.4	Version 0.7.1 (2013-04-17)	9
7.5	Version 0.7 (2011-09-18)	10
7.6	Version 0.6 (2011-06-19)	10
7.7	Version 0.5 (2011-05-21)	10
8	GNU General Public License	11
8.1	Preamble	11
8.2	TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION	12

Contents:

CHAPTER 1

Introduction

IndentByFold is a plug-in for [Notepad++](#). It uses fold points to indent the code. So if the fold level increases or decreases, so should the indentation.

1.1 Installation Note

For the plug-in to work properly it is important to disable Notepad++'s built-in Auto Indent. Go to `Settings - Preferences - MISC` and untick `Auto Indent`.

1.2 History

In May 2011 Ben Bluemel released the first version of the IndentByFold plug-in. He released three version, up till 0.7. But since then he switched away from Notepad++ and stopped developing his plug-ins. In April 2013 Frank Fesevur took over the maintenance of the plug-in.

Frequently Asked Questions

Q: The plug-in works beautifully for HTML, but I couldn't get it to work for Python. I open a new file, set the language to Python, start typing - no indenting. I use the `Reindent File` command - no indenting. What can I do to make it work?

A: Python has a bit of a conflict here, Python's fold points are generated dependent on indentation, and this plug-in is dependent on fold points to know how to do the indentation. Not really much I can do about this I'm afraid. That's why `Reindent File` is disabled for Python.

Q: In CSS, `}` brackets don't indent left like they do in the C-styled languages. Between `<style>` tags in HTML, indentation doesn't happen at all.

A: This is an issue with the CSS lexer in Scintilla¹, rather than in `IndentByFold`. It's inconsistent in that it sets the next line's fold level to be the same as the current.

Q: The `Reindent File` command doesn't always work.

A: I investigated this quite thoroughly and think it has to do with caching in Scintilla¹ or Notepad++ itself, although I obviously don't want to rule out that it is something in the plugin. See [issue #2](#) for more details.

The easy work-around is to go to the last line of your file, run the command `Reindent File` from there and see that your file is reindented as expected.

Q: The plugin indents wrong in certain `if else` situations in various languages

My (JavaScript) code looks like this:

```
function myFunction(args) {
    if (checkSomething(arg)) {
        doSomething(arg);
    } else {
        doSomethingElse(arg);
    }
}
```

But after a `Reindent File` is looks like this:

¹ Scintilla is the source code editing component that Notepad++ is built around.

```
function myFunction(args) {  
    if (checkSomething(arg)) {  
        doSomething(arg);  
    } else {  
        doSomethingElse(arg);  
    }  
}
```

TL;DR: Scintilla doesn't understand your code style and it's unlikely that I will fix it.

A: The whole idea of IndentByFold is to use the folding points that Scintilla¹ recognizes and tell Notepad++ to indent the code at those points. This makes the plugin almost completely language independent! When you look at the [+] or [-] in the left margin you can see what those parsers think are folding points.

All the points mentioned in the various question I got those folding point don't exist in the situations mentioned. There simply is no [+] or [-] at those lines.

There are two solutions to this issue. The best would be that the folding points recognition by Scintilla is improved. This is an upstream fix for Scintilla that I don't intend to develop.

The other is that the plugin will need to get language specific solutions for those languages that can recognize this special cases and work around the limitations of Scintilla. And I don't see myself doing that any time soon.

To give a little background. The plugin was originally developed by Ben Bluemel in 2011. He abandoned it a little later and all I did was make sure it is still around today because I like it the way it is. It suits my coding style and it works good enough for me. The code has changed very little, in its core it is still Ben's code. It doesn't have much comment and there are many points in the code where I haven't got a clue what exactly is happening.

I really need to dig in to try and solve a problem that I never run in to myself because I don't use that code style or those languages. Knowing that I have many other projects (online and offline) that need my attention I don't see that happen any time soon.

That all being said, I understand your problem. I will obviously gladly review and merge pull requests that solve these problems. See [issue #1](#) for more details.

Know that when your style look like this, everything works as expected. Note that the } is not on the same line as a {.

```
function myFunction(args) {  
    if (checkSomething(arg)) {  
        doSomething(arg);  
    }  
    else {  
        doSomethingElse(arg);  
    }  
}
```

Building IndentByFold

To compile IndentByFold you can use [Visual Studio](#). Project files for VS2019 are provided and actively used. Visual Studio Community Edition is enough to get the job done.

There is also a [MinGW-w64](#) makefile, using both their 32-bit and 64-bit compilers. It can be used from [Cygwin](#), [MSYS2](#) and on Linux (including [WSL](#)).

Know that the MinGW version of the DLL can't be loaded in Notepad++. For some reason Notepad++ says the DLL is not compatible.

3.1 Building the documentation

The documentation of IndentByFold is written in [reStructuredText](#) and hosted on [Read The Docs](#).

To build you need [Python Sphinx](#) and the [Sphinx RTD Theme](#).

You can build it with native Python Sphinx on Windows, WSL or Cygwin.

Use `make html` in the `docs` directory to generate the documentation. Other forms of output are not used, but might work.

You can also build it is use the included [Dockerfile](#).

Run `docker build -t python-sphinx .` to build the image and use `docker run --rm -ti -v "%CD%":/docs python-sphinx make html` to build the docs.

CHAPTER 4

Wish list

- Reindent a selection.
- Integrate Python Ident plugin
- Check if the `Auto Indent` checkbox in the Notepad++ settings has been unchecked. Use `TinyXml2` to parse the `config.xml` file and check `<GUIConfig name="MaitainIndent">`.
- Maybe add a menu item to see if the plug-in is active. Depends on checking the `Auto Indent` checkbox.
- Sometimes the plug-in changes a file after opening it. Not sure when that happens exactly.

CHAPTER 5

Contact

The plug-in's web page can be found at <https://github.com/ffes/indentbyfold/>. The downloads and issue tracker can be found there as well.

If you have problems with, questions about or suggestions for IndentByFold and you want to contact me directly, you can send me an email at fesevur@gmail.com

CHAPTER 6

License

This plug-in is published under the GPL-2 license. See *GNU General Public License* for the full license agreement. You can find the sources of the latest version or the latest developments at [GitHub](#).

7.1 Next Version (YYYY-MM-DD)

- Added a *FAQ item* that the plugin indents wrong in certain `if else` situations in various languages.
- Added a *FAQ item* that the command `Reindent File` fails in certain situations.

7.2 Version 0.7.3 (2019-11-10)

- Fix how version numbers were retrieved. In the `v0.7.2` DLLs it still said `v0.7.1`. Now the version numbers are completely based upon the git repository. The version in the documentation still need to be updated manually, but that is probably not possible due to the automatic processing by Read The Docs.

7.3 Version 0.7.2 (2019-11-07)

- Provide a 64-bit version of the plug-in.
- Converted the documentation from DocBook to reStructuredText. The documentation is now hosted at [Read The Docs](#).

7.4 Version 0.7.1 (2013-04-17)

- Frank Fesevur has taken over the maintenance of this plug-in.
- Fixed: Reindent file is now one undo action.
- Fixed: Disabled `Reindent File` for Python, see *the FAQ* for more details.
- Restructured the source files to personal preference.
- Solution files for VS2005 are provided as well.
- Started to write documentation using DocBook. This is the first result. The current FAQ is based upon issues posted on [Ben's BitBucket](#) page. The revision history until version 0.7 was taken from the [forum post](#) about this plug-in.

7.5 Version 0.7 (2011-09-18)

- This release fixes issues with certain lexers that notify on the following line (Ruby, HTML, Lisp, Lua, Pascal, XML). For these lexers you need to have a line following the one you are typing on.
- The following screencast shows it in use and how it works: <http://screencast.com/t/tUD2nfeLX>

7.6 Version 0.6 (2011-06-19)

- This changes IndentByFold to more heavily rely on the SC_MOD_CHANGEFOLD notification from Scintilla.

This means that when you end a fold (e.g. with a `}`) it will unindent to the same level as the start of the fold.

- One Bonus feature of this handles `} else {`, in that it will unindent at the `}`, and when you have `else {`, it will know that the fold has increased again, so will on the next line increase the indent.

NOTE: This can only do it in one go (i.e. you can't go onto a line with `}`, and type in `else {`, and expect it to be indented on the next line, as it won't have known that it unindented for the `}`. I may be able to work around this at some point, so we shall see, but hopefully not too much of an issue.

- Same goes for the Reindent file, because it doesn't actually have a logged decrement of the fold at `} else {`, it looks to the reindent code that it's remained at the same level (so won't decrement the indentation for `} else {`)

7.7 Version 0.5 (2011-05-21)

- Idea behind this plug-in is rather simple, if the fold level increases or decreases, so should the indentation.
- Using C-like languages as an example:
 - Typing in `{` and pressing enter, will mean the line you are now on, has 1 more level of indent than the `{`.
 - Typing in `}` and pressing enter, will match the indentation of `{` line, so the `}` is now lined up properly.
- There is also an option in the plug-in menu to reindent the file based on the fold levels.

GNU General Public License

8.1 Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software - to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps:

1. copyright the software, and
2. offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

8.2 TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

8.2.1 Section 0

This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The “Program”, below, refers to any such program or work, and a “work based on the Program” means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term “modification”.) Each licensee is addressed as “you”.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

8.2.2 Section 1

You may copy and distribute verbatim copies of the Program’s source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

8.2.3 Section 2

You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a. You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b. You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c. If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: If the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

8.2.4 Section 3

You may copy and distribute the Program (or a work based on it, under Section 2 in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a. Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b. Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c. Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

8.2.5 Section 4

You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

8.2.6 Section 5

You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

8.2.7 Section 6

Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

8.2.8 Section 7

If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8.2.9 Section 8

If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

8.2.10 Section 9

The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

8.2.11 Section 10

If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

8.2.12 NO WARRANTY Section 11

BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS

WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

8.2.13 Section 12

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS