

# Auxilium Developer's Guide

Version 0.1.6

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## Auxilium Developer Introduction

This manual provides information about helping to maintain and/or extend the capabilities of the Auxilium open source project. The information on how to just get and use Auxilium is available at <https://ericmotleybytes.github.io/auxilium/>, which also has links to the latest Auxilium User Guide in both [html](#) and [pdf](#) formats. Before attempting Auxilium development, or getting too deep into this manual, it is probably wise to look over these end-user resources.

## Auxilium Primary GitHub Repository

The original and primary Auxilium GitHub repository site, which is developer oriented, is at <https://github.com/ericmotleybytes/auxilium>.

## Recommended Collaborative Development Process

The GitHub recommended collaborative development process is also supported and recommended for Auxilium. This is sometimes called the “fork and branch” workflow. The basic workflow is as follows.

1. Get a GitHub account if you do not already have one. The free account option is fine.
2. “Fork” the main Auxilium repository at <https://github.com/ericmotleybytes/auxilium>.
3. “Clone” the forked repository to your local system.
4. Add a Git remote for the original repository.
5. Create a feature branch in which to place your changes.
6. Make your changes to the new branch.
7. Commit the changes to the branch.
8. Push the branch to GitHub.
9. Open a pull request from the new branch to the original repo.
10. Clean up after your pull request is merged.

A good tutorial for this process is available at <http://blog.scottlowe.org/2015/01/27/using-fork-branch-git-workflow/>. GitHub also has good documentation such as their repository fork description at <https://help.github.com/articles/fork-a-repo/>.

## Tools

All runtime Auxilium programs are written in pure [Bash](#) version 4.2 or higher. So to just use Auxilium, Bash is the only absolute prerequisite.

For development several additional tools are required to support development unit testing and documentation generation. These tools include:

- Bats. The Bash Automated Testing System. Available at <https://github.com/sstephenson/bats>.
- Pandoc. A universal document converter. See <http://pandoc.org/> and <https://github.com/jgm/pandoc>.
- LaTeX. Used by Pandoc to generate PDF files. *TeX Live* is recommended. See <http://www.tug.org/texlive/>.

- Pandoc Preprocessor. The “pp” Pandoc-oriented text preprocessor. See <http://cdsoft.fr/pp/> and <https://github.com/CDSOft/pp>.

## Platforms

Auxilium programs are all written in [Bash](#), the standard [Linux](#) shell language. Bash is an interpretive language, so as long as your platform has a relatively new version of Bash installed, it *should* be able to run the runtime Auxilium Bash scripts. There is no need of different runtime versions of Auxilium for different hardware platforms because there are no hard-compiled programs.

That being said, to date Auxilium has only been tested on Linux platforms. The author, however, would be very interested in user experience reports.

## Authors

Eric Alan Christiansen  
eric@motleybytes.com  
<https://www.linkedin.com/in/ericchristiansen/>

## Legal

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### Licensing

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See <https://www.gnu.org/licenses/gpl-3.0.en.html>

## See Also

- <https://ericmotleybytes.github.io/auxilium/> : The Auxilium Information and Downloads site.
- <https://github.com/ericmotleybytes/auxilium> : The master auxilium GitHub repository. You can also report bugs, describe issues, and request enhancements here.
- <http://blog.scottlowe.org/2015/01/27/using-fork-branch-git-workflow/> : A good tutorial on the GitHub “fork and branch” workflow.
- <https://help.github.com/articles/fork-a-repo/> : GitHub documentation about how to “fork” a repository.
- <https://github.com/sstephenson/bats> : Bats, the Bash Automated Testing System.
- <http://pandoc.org/> : Pandoc information page.
- <https://github.com/jgm/pandoc> : Pandoc GitHub page.
- <http://www.tug.org/texlive/LaTeX> : The ‘TeX Live’ LaTeX system.

- <http://cdsoft.fr/pp/> : “pp”, the pandoc preprocessor.
- <https://github.com/CDSOft/pp> : “pp”, the pandoc preprocessor on GitHub.
- <https://testanything.org/> : A description of TAP, the unit testing Test Anything Protocol.