

Brutus text editor user guide

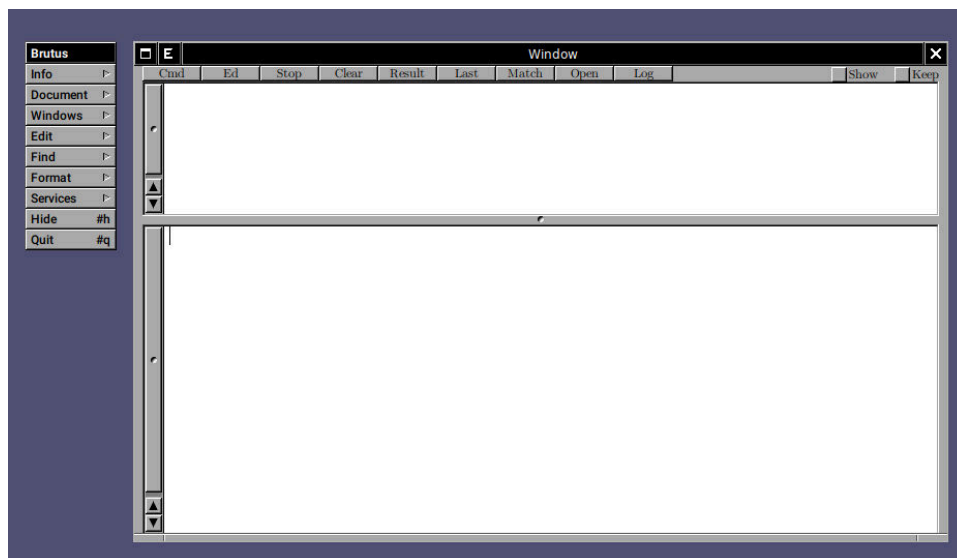
1. Why?

Inspired by **Sam**, and **Acme**, from **Plan 9** operating system, my intent is to have an interface that allows system commands, and line the editor **ed**, to edit text. Instead of hard code in the text editor operations such as text substitution, searching, and so on, these operations are delegated to system commands. This gives the user a huge flexibility in its editing operations, and avoid code duplication.

2. Why the name?

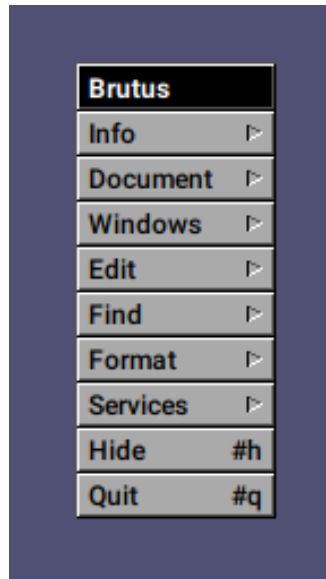
Because it's barebones. There is no syntax, no bells, and it does not do much besides presenting, and organizing text, text files and windows. It's brute.

3. The Brutus interface:



The main interface consists of two text areas, and some buttons. The text area on top is the *command area*. This is where commands are inserted. The buttons on the top control, and execute actions based on the content, or text selection, in the command area.

3.1. The Menu:



The Menu allows the user to do the most basic operations, like open files, navigate between the windows, save, etc.

3.2. The Cmd button:

This button execute a shell command from the command area.

3.3. The Ed button:

This button execute an **ed** command from the command area.

3.4. The Stop button:

The Stop button stop the execution of a running command.

3.5. The Clear button:

The Clear button wipes the text from the command area.

3.6. The Result button:

The Result button place the last result of a command in the command area.

3.7. The Last button:

The Last button place the last executed command on the command area.

3.8. The Match button:

The Match button match a selection from the command area on the text.

3.9. The Open button:

The Open button open files from the selected filenames in the command area.

3.10. The Show button:

The Show button redirects the result of the commands to the command area, instead of applying in the text.

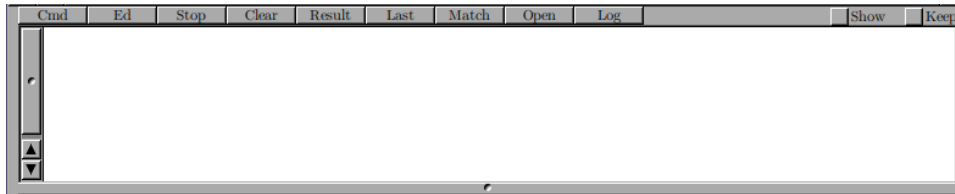
3.11. The Keep button:

The Keep button prevents the contents of the command area to be erased between commands.

3.12. The Log button:

The Log button place a log of the executed commands, together with it's results, in the command area.

4. The command area:



This is where commands are inserted, and executed. Commands can be of two types:

- System commands
- Ed commands

The *Cmd* button execute system commands, and the *Ed* button executes *ed* commands. Examples will be given in the next sections.

5. How the shell commands work?

Shell commands (commands executed with the *Cmd* button) can be executed in two different ways. The first way, when you just type the commands in the command area, is equivalent to:

```
1      cat '/path/to/tempfile' | command 1> '/path/to/tempresult' 2>> '/path/to/tempresult'; \  
2      mv '/paht/to/tempresult' '/path/to/tempfile'
```

Where */path/to/tempfile* is */tmp/.brutus_temp*, */path/to/tempresult* is */tmp/.brutus_command_result*, and *command* is the command inserted in the command area. This shell code is placed in a shell script file, called */tmp/.brutus_script.sh*, and after it's execution, the results are read, from */tmp/.brutus_temp*.

The second way, is when you have a *!* before the command, for example:

```
1      !ls
```

This is the same as the first way, but without the *cat* pipe part, like:

```
1      command 1> '/path/to/tempresult' 2>> '/path/to/tempresult'; \  
2      mv '/paht/to/tempresult' '/path/to/tempfile'
```

All the commands are executed in the directory that contains the file opened, that means, for the file */etc/lynx/lynx.cfg*, for example, commands will be executed in */etc/lynx/*.

5.1. Variables:

These variables are available to be used in system commands:

- *%file%*
- *%dir%*

The variable *%file%* will be substituted by the file name of the file being edited, and *%dir%* will be substituted by the directory that contain this file. For example:

```
1      mv /path/to/some/file %dir%
```

On most situations, *\$PWD* would be used instead, but it is useful to have the directory of the file stored, depending of what you are doing, it's less one thing to store in case your commands changes to some other

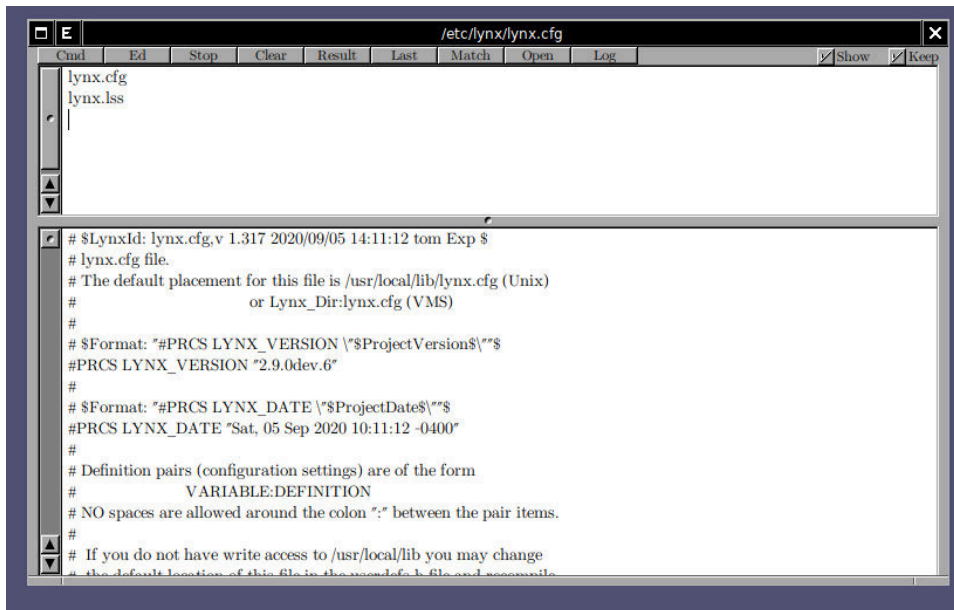
directory.

The `%file%` variable works the same way:

```
1      echo %file%
```

6. View results of commands:

For example, given that you have a file opened, let's say `/etc/lynx/lynx.cfg`. Write in the command area `ls`, check the *Show* button, and click run. You should see this:



7. Substitute text using commands:

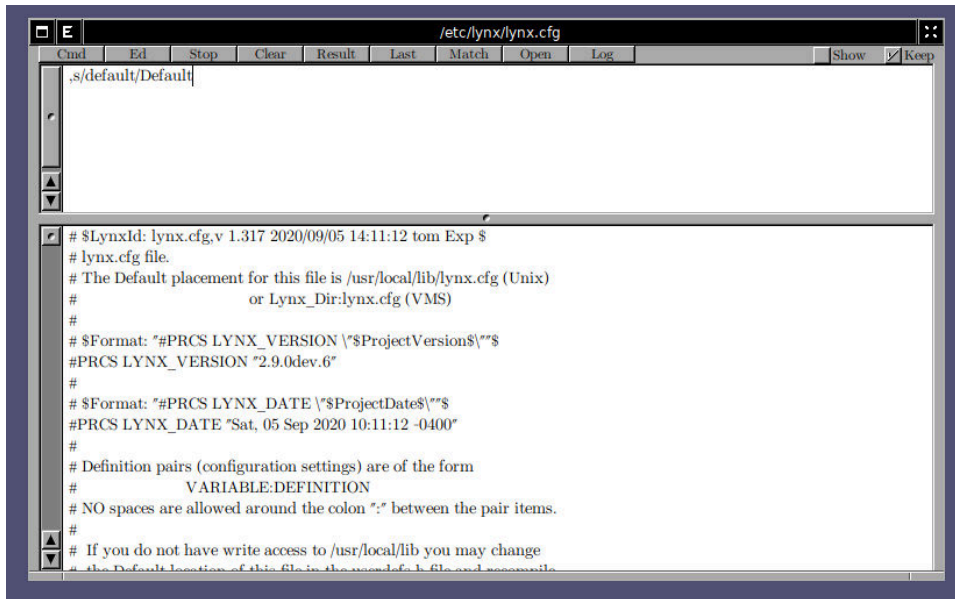
Let's say, in the same file, you want to replace *default* with *Default*. You can use an Ed command like this:

```
1      ,s/default/Default
```

To do that:

- clear the command area pressing the Clear button, if there's text there
- uncheck the Show button, if it's on
- type `,s/default/Default` in the command area
- click the Ed button

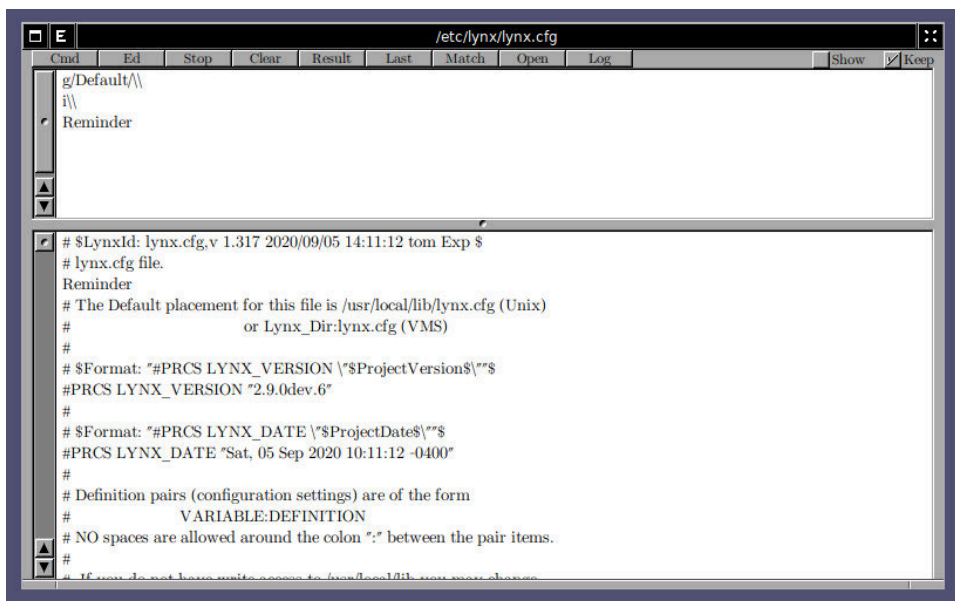
You should see this:



Notice the word default, on line 3, that's now capitalized. This is a trivial example, but you can do more, for example, lets say we want to insert *Reminder* before each line that contained the word Default. We can use another Ed command:

```
1      /g/Default/\
2      i\
3      Reminder
```

You should see this:



8. Opening files from results of commands:

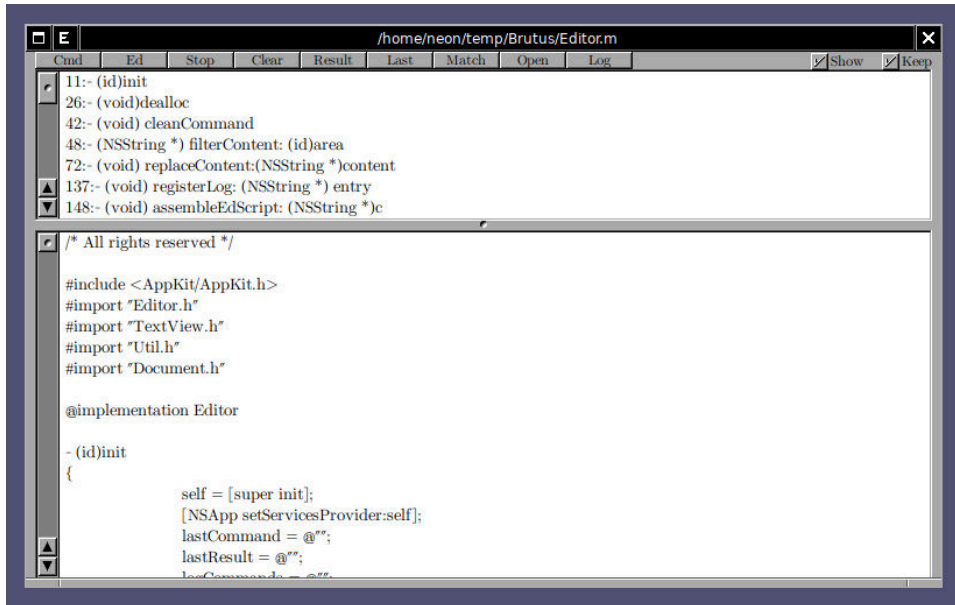
You can highlight filenames in the command area, and click the Open button. This will open the files for editing.

9. Match line numbers or strings from results of commands:

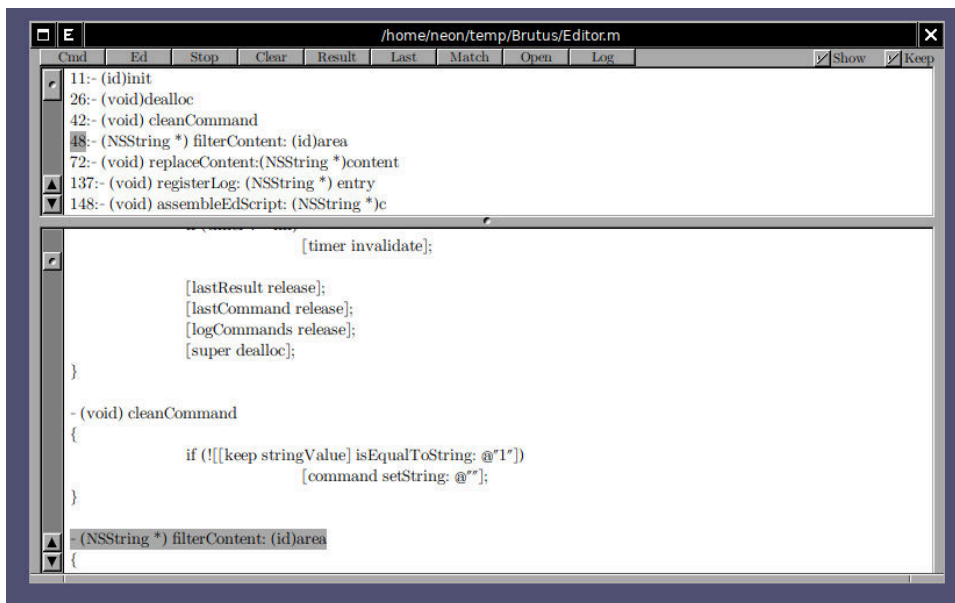
Let's say you are editing an *Objective-C* You can use **grep**, like this:

```
1      grep -n '^[+-]'
```

Type this in the command area, enable Show, and click Cmd. You should see this:



From there, you can highlight a line number (the number before :), or the line contents (the string after :), and click match. You should see this:



Where I selected 48 in the command area, and clicked the Match button.

10. Drag & Drop:

Brutus accepts *Drag & Drop* from other **GNUstep** applications. If you drag & drop a text file the text area, the contents of the dropped file will be copied. You can, also, copy the file name, instead of it's contents, by first holding the *Shift* key, then drag the file, and drop in the editor. Notice that you need to press, and hold

the *Shift* key while the editor is focused, then you go to the other application, still holding *Shift*, drag, and drop it in the editor. Notice, also, that the contents, or the name of the file being dropped will be placed in the current cursor position.

This works with *rtf* files, too.

11. The client:

In the directory *BrutusClient*, there is an application that allows you to open files from command line, scripts, etc. After installed, it can be used like the following:

```
1      openapp BrutusClient /path/to/file/name
```

To open the file in a specific line number, let's say, 10, use:

```
1      openapp BrutusClient /path/to/file/name:10
```

To open the file and search for a string, use:

```
1      openapp BrutusClient /path/to/file/name:string
```

Notice that you need to pass the full path of the file. This program uses the *Brutus service*, it's only function is provide access to that service to applications that are not written using **GNUstep**. The *Brutus service* is explained next.

12. Brutus service

The Brutus editor provides a service, called *Brutus*, that other **GNUstep** applications can use to open files. You can select a file in **GWorkspace**, or some file name in the **Terminal**, for example, and send it to this service. These files will be opened for editing.