



INTRODUCING BYOBU

COMPOUNDING MANY SMALL CHANGES FOR LARGER EFFECTS

Dirk Eddelbuettel

7⁴ Video Lightning Talk #004

May 31, 2020

Previously we

- Introduced the series with an overview in [episode 000](#)
- Episodes [001](#), [002](#), and [003](#) covered shell customization
- And the [GitHub repo t4](#) for comments, questions etc

Introducing 'byobu'

- A 'text based window manager'
- A powerful way to have multiple *persistent* sessions
- Ideal for both session over the network
- Or your local setup on laptop or server

Byobu - Google Chrome

Byobu | Home | About | Downloads | Support | Sources | Documentation | News

Byobu

Byobu is a [GPLv3](#) open source text-based window manager and terminal multiplexer. It was originally designed to provide elegant enhancements to the otherwise functional, plain, practical [GNU Screen](#), for the [Ubuntu](#) server distribution. Byobu now includes an enhanced profiles, convenient keybindings, configuration utilities, and toggle-able system status notifications for both the GNU Screen window manager and the more modern [Tmux](#) terminal multiplexer, and works on most Linux, BSD, and Mac distributions.

```
Learn Byobu while listening to Mozart
-----
ctrl-left/right/up/down  Move focus among splits
shift-F3/F4               Move focus among splits
ctrl-F3/F4                Move a split
ctrl-shift-F3/F4         Move a window
shift-Alt-Left/Right/Up/Down  Resize a split
F5                         Reload profile, refresh status
Alt-F5                    Toggle UTF-8 support, refresh status
shift-F5                  Toggle through status lines
ctrl-F5                   Reconnect ssh/gpg/dbus sockets
ctrl-shift-F5             Change status bar's color randomly
F6                         Detach session and then logout
shift-F6                  Detach session and do not logout

mirkiano@x230: ~$ # Byobu is great for disconnecting from session
mirkiano@x230: ~$ # and coming back later, perhaps even SOR
mirkiano@x230: ~$ # F6 will disconnect from the current session
mirkiano@x230: ~$ # while leaving all of your programs running
mirkiano@x230: ~$ # F6...
mirkiano@x230: ~$
```

Source: <https://www.byobu.org>

First Steps

- Launch via **byobu** (my default, uses **tmux**)
- Or via **byobu-screen** or **byobu-tmux** to select a backend
- Simplification: we will assume one session only

My main operations

- Help on keys (Shift-F1)
- Menu (F9) and Status Display
- New window (prefix-c)
- Name window (prefix-a)
- Running through windows (alt-left, alt-right)
- DEMO

Other main operations

- Vertical split (Ctrl-F2), Horizontal split (Shift-F2)
- Zoom in/out of split (Shift-F11)
- Rearrange splits (Shift-F8)
- Detach / attach
- Kill terminal ... and resume
- DEMO

Local resource

For completeness, my file `~/byobu/keybindings.tmux`:

```
set -g prefix F12
unbind-key -n C-a
unbind C-b
set -g prefix `
bind-key ` send-prefix
```

This use the backtick instead of Ctrl-b and undefines Ctrl-a (to yield standard bash behavior). Also see the menu launched by F9 and helper script `byobu-ctrl-a`.

Maybe some more **byobu**

- Session management?
- Other topics?
- Likely Next Sunday

SERIES RESOURCE

The screenshot shows the GitHub interface for the repository 'eddelbuettel / t4'. At the top, there are navigation options: 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The repository name is 'eddelbuettel / t4' with 'Unwatch', '1 Star', and '0 Fork' buttons. Below the repository name, it says 'Support repo for T⁴ Video Lightning Talks' with an 'Edit' button. There are statistics for '1 commit', '1 branch', '0 packages', '0 releases', and '1 contributor'. A navigation bar includes 'Branch: master', 'New pull request', 'Create new file', 'Upload files', 'Find file', and 'Clone or download'. The commit history shows 'eddelbuettel' with an 'initial commit' 31 seconds ago, and 'README.md' with an 'initial commit' 31 seconds ago. The 'README.md' file content is displayed below, featuring a title 't4: Tips, Trick, Tools and Toys' and sections for 'What Is This?', 'Schedule so far', 'What Else?', and 'Who'.

eddelbuettel / t4

Unwatch 1 Star 0 Fork 0

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Support repo for T⁴ Video Lightning Talks Edit

Manage topics

1 commit 1 branch 0 packages 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find file Clone or download

eddelbuettel initial commit Latest commit 21b22f5 31 seconds ago

README.md initial commit 31 seconds ago

README.md

t4: Tips, Trick, Tools and Toys

What Is This?

An informal series of *lightning talks* taped as videos and supported by a few slides. Focused on a few little ticks and tricks, or tools, or toys, to make computing life just that little bit easier.

Schedule so far

with the [initial video](#) and [slides](#)

What Else?

Please use the [issue tracker](#) to provide feedback, corrections, ideas, ...

Who

Dirk Eddelbuettel

Source: <https://github.com/eddelbuettel/t4>

Thu, 07 May 2020

Rcpp Virtual Talk on June 5

We had to [cancel R/Finance 2020](#) due to what is happening all around us. But I plan to present the one-hour workshop I often give in the tutorial session preceding the first day—but this time online!

To keep it simple, we will stick with the same day, and possibly the same time: Friday morning at 8:00am! So that makes Friday, June 5, at 08:00h Central time.

[This YouTube! link](#) should then provide the stream, I reckon there may also be a recording afterwards.



I ILLINOIS

**INTRODUCTION TO RCPP:
FROM SIMPLE EXAMPLES TO MACHINE LEARNING**

(VIRTUAL) R/FINANCE PRE-CONFERENCE TUTORIAL

Dirk Eddelbuettel
5 June 2020

The talk / demo / presentation will be about an hour long, and material will be similar to the previous ones (of the same length) still available at the [talks](#) page (which also has longer talks all the way to the two-day workshops).

If you like this or other open-source work I do, you can now [sponsor me at GitHub](#). For the first year, [GitHub will match your contributions](#).

This post by Dirk Eddelbuettel originated on his [Thinking inside the box](#) blog. Please report excessive re-aggregation in third-party for-profit settings.

Source: Blog post at http://dirk.eddelbuettel.com/blog/2020/05/07#rcpp_announce_talk_20200605

THANK YOU!

slides <http://dirk.eddelbuettel.com/presentations/>

web <http://dirk.eddelbuettel.com/>

mail dirk@eddelbuettel.com

github [@eddelbuettel](https://github.com/eddelbuettel)

twitter [@eddelbuettel](https://twitter.com/eddelbuettel)

repo <https://github.com/eddelbuettel/t4>