Byobu - Multiple windows in Terminal

Byobu is a light, powerful, text-based window manager based on GNU Screen. Using Byobu, you can quickly create and move between different windows over a single SSH connection or TTY terminal, monitor dozens of important statistics about your system, detach and reattach to sessions later while your programs continue to run in the background.

#linux

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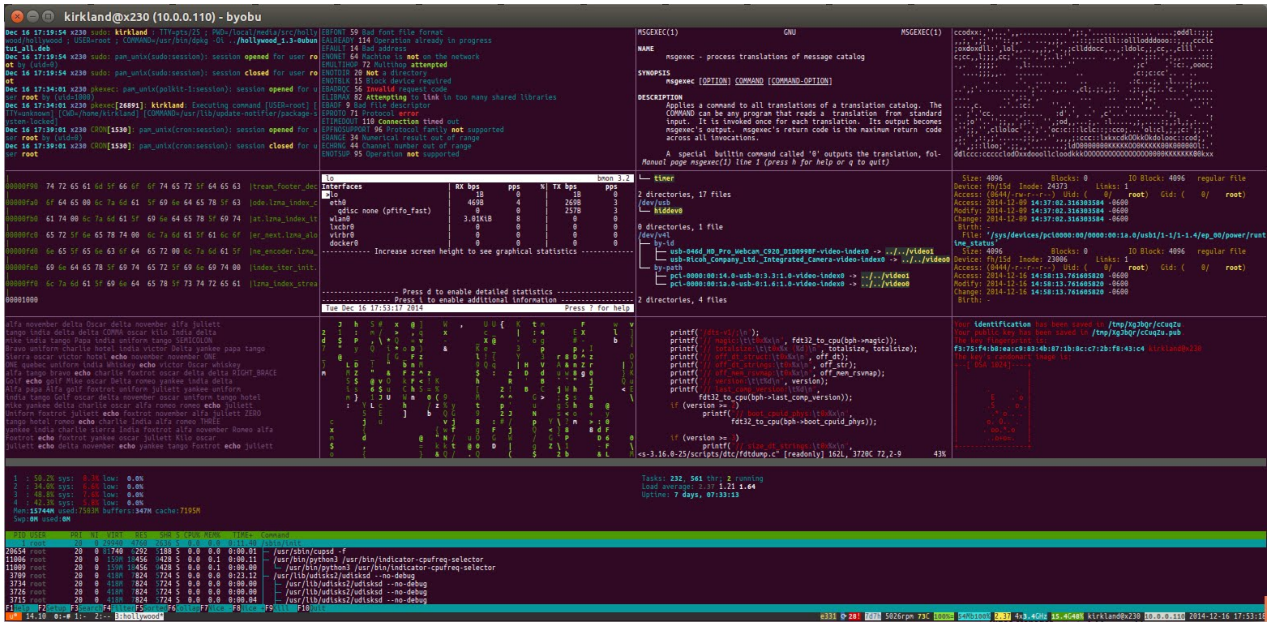
Table of Content

1. Install

Byobu is an easy-to-use wrapper around the `tmux` (or `screen`) terminal multiplexer. Byobu's primary features include multiple console windows, split panes within each window, notifications and status badges to display the status of the host, and persistent sessions across multiple connections.



Byobu

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Ubuntu should come with Byobu installed by default. To check that Byobu is installed, try running this command to output its version.

```
byobu --version
```

If it is not installed, install it with a simple command:

```
sudo apt install byobu
```

Byobu can be configured to run by default at every text login (SSH or TTY). That behavior can be toggled with the `byobu-enable` and `byobu-disable` commands.

Insert below line to the end of `~/.bashrc` will run Byobu whenever a local terminal is run:

```
_byobu_sourced=1 . /usr/bin/byobu-launch 2>/dev/null || true
```

When running byobu for the first time, it will start with just in a single window. The bottom of the screen has the status bar, which displays OS and version, a list of open windows, and various system metrics like pending updates, RAM usage and time and date.

A session is simply a running instance of Byobu. A session consists of a collection of windows, which are basically shell sessions, and panes, which are windows split into multiple sections.

Press `Ctrl-F6` or type `exit` to end a session.

2. Key Bindings

Byobu is a configuration layer on top of GNU Screen. As such, all of GNU Screen's keybindings work in Byobu exactly as in Screen. Moreover, Byobu provides a comprehensive, advanced set of commands bound to the F-keys on most keyboards.

Windows Management

key	description
F2	Create a new window
Shift-F2	Split the screen horizontally
Ctrl-F2	Split the screen vertically
F3	Move to the previous window
Shift-F3	Move focus to the next split
F4	Move to the next window
Shift-F4	Move focus to the previous split
Shift-Arrows	Move focus

Session management

key	description
Ctrl-D	Exit the session
F6	Detach from the session and logout
Shift-F6	Detach from the session, but do not logout
Ctrl-F5	Reconnect any SSH/GPG sockets or agents

Misc.

key	description
F5	Refresh all status notifications
F7	Enter scroll back/search mode
F8	Rename the current window
F9	Launch the Byobu Configuration Menu
F12	GNU Screen's Escape Key
Alt-PageUp	Scroll back through this window's history
Alt-PageDown	Scroll forward through this window's history
Shift-F5	Collapse all splits
Shift-F12	Toggle all of Byobu's keybindings on or off

3. Scroll back, Copy & Paste, Search

Each window in Byobu has up to 10000 lines of scroll back history, so an user can enter and navigate using the `Alt-PageUp` and `Alt-PageDown` keys. Exit this scroll back mode by hitting `Enter`.

Copy and paste text from scroll back mode:

- Press the `Space bar` to start highlighting text
- Use `up` / `down` / `left` / `right` / `pgup` / `pgdn` to select the text
- Press `Enter` to copy the text
- Paste the text using `alt-insert` or `ctrl-a-]`

Search up and down in scroll back mode:

- Press `/` to search down
- Press `?` to search up

Actually, in scroll back mode, Byobu support `vi` -like commands:

```
h - # Move the cursor left by one character
j - # Move the cursor down by one line
k - # Move the cursor up by one line
l - # Move the cursor right by one character
0 - # Move to the beginning of the current line
$ - # Move to the end of the current line
```

```
G - # Moves to the specified line (defaults to the end of the buffer)
ctrl + b - # Page up
ctrl + f - # Page down

/ - # Search forward
? - # Search backward

n - # Moves to the next match, either forward or backward
```

4. Mouse mode

Type `F12`, then `:` (to enable the internal terminal), then enter the command

```
set mouse on
```

> for other commands, run `list-commands`

Or press `Alt-F12` to togglel mouse.

Actions in the mouse mode:

- Switch between active panes and windows. Click on a window name or pane to switch.
- Scroll, with the mouse wheel or track pad
- Resize panes by dragging and dropping

To enable mouse support by default for all these operations, add these lines to `~/.byobu/profile.tmux`:

```
set -g mouse on
set -g mouse-select-pane on
set -g mouse-select-window on
set -g mouse-resize-pane on
set -g mouse-utf8 on
```

5. The Backend Multiplexer

By default, Byobu will use `tmux` as the backend multiplexer. However, if an user prefers to use screen, they can easily change the enabled backend.

```
byobu-select-backend
```

```
Select the byobu backend:
1. tmux
2. screen
```

6. Tweaks

Byobu uses default border characters from `tmux` which shows bold border lines.

Those border lines are made up of rows and columns in the console and they are indivisible. In a text-based terminal there is no structural element smaller than one character “cell” (which is about the size of that block cursor). The only way to reduce the size of the borders is to reduce the size of all rows/columns.

Fortunately, we can manipulate the colors to give the appearance of a thinner border: set the foreground to the desired color and set the background to the background color of panes. For the latter `default` value is often sufficient.

For example, change the border line to orange, add these lines to `~/.byobu/profile.tmux` :

```
set -g pane-active-border-style fg=colour208,bg=default
```