

Alfred 2 Top Process Workflow

The initial motive of this workflow is to avoid frequent visits to the Activity Monitor when the fan goes loud. Now it has been evolved with two major features:

- 1) List/Kill Top Processes by Memory/CPU/IO Usage



- 2) (*working in progress*) Get a glance of system status including internal battery, fan speed, CPU/GPU Temperature, bluetooth battery, disk capacity, etc.

Usage


0. Show Help

Just type `-?`, `-h`, or `--help` after the keyword to show help.

glance

 Fully Charged, On AC Power
●●●●●●●●●● 100%




 Fan Speed: Normal
Left 3289 ↔ Right 3289 RPM


⌘2

 CPU/GPU Temperature
CPU: 72° C / GPU: 61° C


⌘3

 Root: 81G free
84%, 419G used of 500G total


⌘4

 zhaocai's Mouse
●●●●●●●●●● 73%


⌘5

 zhaocai's Keyboard
●●●●●●●●●● 30%

⌘6


 Libra: 14G free
78%, 46G used of 60G total

⌘7

 Earthlifter: 192G free
94%, 2.8T used of 3.0T total

⌘8


top -h

 README.pdf
/Users/zhaocai/Developer/Productivity/Alfred/Project/Top/top/README.pdf


⌘1

 -c, --cpu [query]
Sort top processes based on cpu usage.




 -m, --memory [query]
Sort top processes based on memory usage.


⌘3

 -i, --io [query]
Sort top processes based on io usage.


⌘4

 Homepage
<http://zhaocai.github.io/alfred2-top-workflow/>

⌘5

 -?, -h, --help [Show Workflow Usage Help]
Other feedbacks are blocked.

⌘6

 MacInside – Apple Mac Process & Security Information
<http://www.macinside.info/>

⌘7

 Know your Mac OS X processes – Information about your Mac syste...
<http://triviaware.com/macprocess/all>

⌘8

1. Top Processes

A. Keywords:

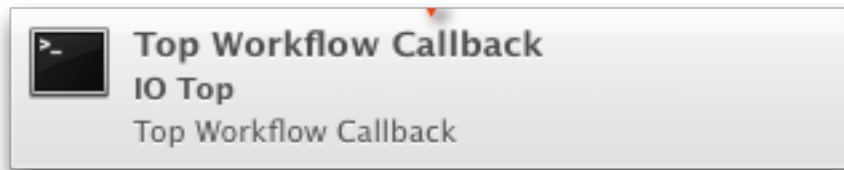
1.) **top**: Show a mixed processes list based on top cpu/memory usage.

1. `top -m`, `top --memory` to show processes ranked by memory usage

2. `top -c`, `top --cpu`, to show processes ranked by cpu usage

3. `top -i`, `top --io`, to show processes ranked by io usage with **callback** from top io trace collector.

Top IO requires [DTrace](#) and it would take a while to finish. The new **callback** design is to run the job in the background and post a notification (OSX 10.8+) using notification center. Click on the notification to show the result in alfred.



Modifier Key

- **none** : The default action is to list files opened by process ID
- **control** : Kill the selected process
- **command** : kill forcefully (`kill -9`)
- **alt** : Nice (lower) the selected process's cpu priority
- **shift** : Search web for process information

2.) **kill**: Filter process to kill. **Modifier Key**

- **none**: The default action is to kill by process ID
- **command** : kill forcefully (`kill -9`)

3.) **lsOf**: List files opened by process id **Modifier Key**

- **none**: The default action is to reveal file in Finder

B. Filter by Query

1.) Type process name to filter

top Sa



3: Safari

cpu: 0.0%, memory: 3.0%, state: sleep



top :sleep



5/3: WindowServer

cpu: 13.2%, memory: 1.7%, nice: 0, state:{ 129 } :sleep: session leader



6/77: BetterTouchTool

cpu: 6.9%, memory: 0.1%, nice: 0, state:{ 26095 } :sleep

⌘2



7/39: Keyboard Maestro Engine

cpu: 2.1%, memory: 0.4%, nice: 0, state:{ 1529 } :sleep

⌘3



8/58: Bartender

cpu: 1.9%, memory: 0.2%, nice: 0, state:{ 304 } :sleep

⌘4



9/6: prl_client_app

cpu: 1.7%, memory: 1.4%, nice: 0, state:{ 29855 } :sleep

⌘5



10/269: Adobe Photoshop CS6

cpu: 1.1%, memory: 13.0%, nice: 0, state:{ 43419 } :sleep

⌘6



13/123: WinAppHelper

cpu: 1.0%, memory: 0.1%, nice: 0, state:{ 30263 } :sleep

⌘7



14/7: Finder

cpu: 0.9%, memory: 1.3%, nice: 0, state:{ 201 } :sleep

⌘8



16/203: launchd

cpu: 0.7%, memory: 0.0%, nice: 0, state:{ 185 } :sleep: session leader

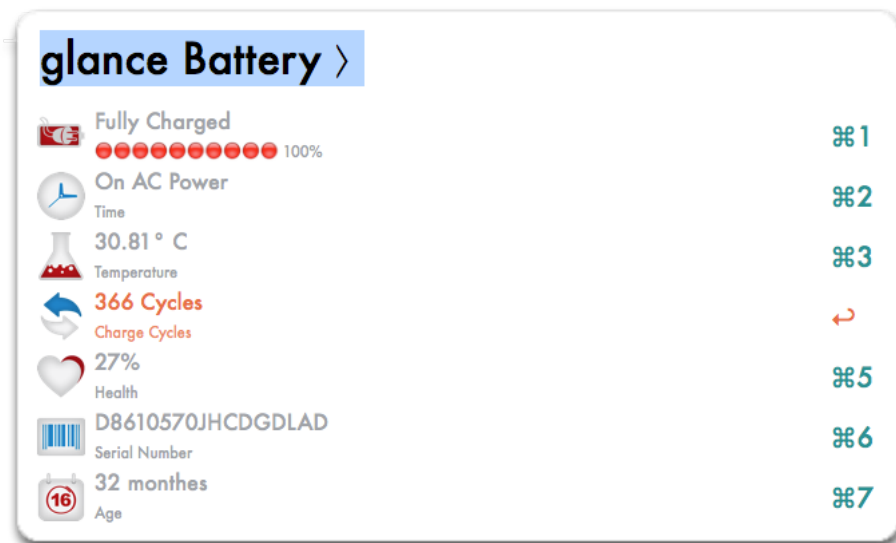
⌘9

2.) To search for process state, use :idle, :sleep, :stopped, :zombie, :uninterruptible, :runnable, etc.

2. Glance an Eye on your system

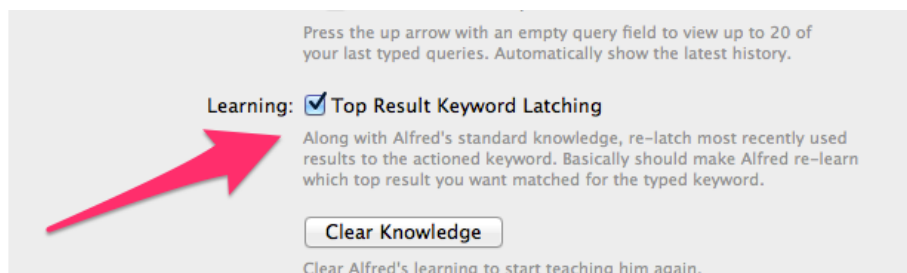
A. Keywords:

1. **glance**: Show system information including internal battery, bluetooth battery, disk capacity, etc.



B. Change Display Order

1. Activate Alfred Preferences → Advanced → Top Result Keyword Latching



2. Hit **Enter** for the feedback item you wish to show up on the top.

Installation

Two ways are provided:

1. You can download the [Top Processes.alfredworkflow](#) and import to Alfred
2. This method is suitable for **regular users**.
2. You can `git clone` or `fork` this repository and use `rake install` and `rake uninstall` to install. Check `rake -T` for available tasks. This method create a symlink to the alfred workflow directory: “~/Library/Application Support/Alfred 2/Alfred.alfredpreferences/workflows”. This method is suitable for **developers**.

Troubleshooting

1. Does not work in Mac OSX 10.9 (Maverick)

In OSX 10.9, the system ruby is upgraded to 2.0.0. You need to download the new version of this workflow which packs the ruby gems for 2.0.0 inside.

If the downloaded version does not work, try

- 1.) open `Terminal.app`. If you use `rvm` or `rvm`, switch to the system ruby.
2. run `cd "$HOME/Library/Application Support/Alfred 2/Alfred.alfredpreferences/workflows/me.zhaowu.top" && rake bundle:update`

2. iotop causes mouse lagging

This issue is not caused by this workflow but by [DTrace](#). The related system log message is `IOHIDSystem cursor update overdue. Resending..`. In my Macbook Pro, any [DTrace](#) based program will introduce this issue including the mac built-in `/usr/bin/iotop`, and `/Applications/Xcode.app/Contents/Applications/Instruments.app`.

I upgrade to OS X 10.9 and this issue is resolved.

3. Encoding::CompatibilityError: incompatible character encodings: ASCII-8BIT and UTF-8

Add the following contents to `/etc/launchd.conf`. Restart is required.

```
setenv LANG en_US.UTF-8
setenv LC_ALL en_US.UTF-8
```

Copyright

Copyright (c) 2013 Zhao Cai caizhaoff@gmail.com

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.