

New to Linux...



zim desktop wiki

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Keep track of stuff you learn...



- Do it once, and remember.
- Learn, learn and learn again...
 - google every time you need something.
 - man every time you need something, then google.
 - keep everything in bash history.
 - keep the bits you need in documents
- Is there a shareable, searchable desktop wiki that uses directory structures and multiple text files so they can be stored in a source control system, and presents nice gui friendly documents?



zim



- <https://zim-wiki.org/>
 - This one works for me
 - Big on dog-fooding
- Works on linux, microsoft windows & apple mac
- Stores data in simple directories + text file
- Has oodles of plugins for many specific features
- Can be saved and shared via version control
- Use cases
 - Work journal
 - Web page creation
 - Mini, offline google, without the drivel.



equery depgraph zim-0.74.3

```
* Searching for zim0.74.3 ...
* dependency graph for x11-misc/zim-0.74.3
-- x11-misc/zim-0.74.3 [-gtk support]
-- dev-python/pygobject-3.42.0 (dev-python/pygobject) arm [python_targets_python3_8(-)]
-- dev-python/pyxdg-0.27 (dev-python/pyxdg) arm [python_targets_python3_8(-)]
-- x11-libs/gtk+-3.24.29 (x11-libs/gtk+) arm [introspection]
-- x11-misc/xdg-utils-1.1.3_p20200220-r5 (x11-misc/xdg-utils) arm
-- dev-util/desktop-file-utils-0.26-r1 (dev-util/desktop-file-utils) arm
-- x11-misc/shared-mime-info-2.1 (x11-misc/shared-mime-info) arm
-- dev-lang/python-3.8.12_p1 (dev-lang/python) arm [sqlite]
-- dev-lang/python-exec-2.4.8 (>=dev-lang/python-exec-2) arm [python_targets_python3_8]
-- dev-lang/python-3.9.9 (dev-lang/python) arm [sqlite]
-- dev-lang/python-3.10.0_p1 (dev-lang/python) arm [sqlite]
-- x11-base/xorg-server-1.20.14 (x11-base/xorg-server) arm [xvfb]
-- x11-apps/xhost-1.0.8 (x11-apps/xhost) arm
[ x11-misc/zim-0.74.3 stats: packages (13), max depth (1) ]
```

Basic features

- It is just a file browser
- Rename pages (text files)
- Move (drag and drop) pages
- Links to internal pages
- Links to external urls

Note: Yes I know I spelled "Recipes" wrong!

A nice GUI

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▼ Recipes

- Artichokes
- Barley Veg soup
- Beans and Barley
- Beets & Tatties
- Cabbage heads for Sarma
- Choco Noir
- Jelli pasta
- Mince-pies
- Mincemeat
- Neeps & Tatties**
- Pastry
- Sarma
- Safay sauce

Neeps & Tatties

Created Wednesday 22 December 2021

50/50 neep / spuds

- salt
- peel & dice neeps - boil for 20 minutes
- add spuds - boil extra 15 minutes
- butter - mash
- cream

Directory structure

```
ls -altr Recipes/*
-rw-r--r-- 1 tug tug 446 Dec  7 10:44 Recipes/Jeli_pasta.txt
-rw-r--r-- 1 tug tug 372 Dec  9 16:35 Recipes/Satay_sauce.txt
-rw-r--r-- 1 tug tug 300 Dec  9 16:35 Recipes/Beans_and_Barley.txt
-rw-r--r-- 1 tug tug 203 Dec 11 14:24 Recipes/Cabbage_heads_for_Sarma.txt
-rw-r--r-- 1 tug tug 589 Dec 13 21:26 Recipes/Sarma.txt
-rw-r--r-- 1 tug tug 288 Dec 22 10:19 'Recipes/Neeps_&_Tatties.txt'
-rw-r--r-- 1 tug tug 204 Dec 22 10:21 'Recipes/Beets_&_Tatties.txt'
-rw-r--r-- 1 tug tug 493 Dec 22 10:21 Recipes/Mincemeat.txt
-rw-r--r-- 1 tug tug 308 Dec 24 11:46 Recipes/Artichokes.txt
-rw-r--r-- 1 tug tug 455 Dec 24 11:48 Recipes/Pastry.txt
-rw-r--r-- 1 tug tug 305 Dec 24 11:49 Recipes/Mince-pies.txt
-rw-r--r-- 1 tug tug 510 Dec 24 11:52 Recipes/Choco_Noir.txt
-rw-r--r-- 1 tug tug 617 Dec 26 14:12 Recipes/Barley_Veg_soup.txt
```

Text file contents

Content-Type: text/x-zim-wiki

Wiki-Format: zim 0.6

Creation-Date: 2021-12-22T10:17:03-05:00

===== Neeps & Tatties =====

Created Wednesday 22 December 2021

50/50 neep / spuds

- * salt
- * peel & dice neeps - boil for 20 minutes
- * add spuds - boil extra 15 minutes
- * butter - mash
- * cream

My markdown is bigger than yours...

- Markdown is markup
- Lots of flavours of markdown
- Zim isn't markdown, but markup (their term)
- Plugins add specific functionality that 'pollute' any standard
- Self-contained, never need to know implementation
- Data comprehensible even if zim reaches EOL

Images

Si7021

Created Sunday 18 October 2020

WARNING - BAD i2c code can brickish this device! See Calibration sub page

Humidity and Temperature sensor



Can run on 3.3v or 5v? Tested on Pi, tobe tested on ArduinoUno

running on the command line in this order works

```
modprobe si7020
dtoverlay i2c-sensor si7020
iio name "1-0400"
```

Images (in directory structure)

```
Devices $ ls -altr Si7021*
```

```
-rw-r--r-- 1 tug tug 805 Sep 22 08:48 Si7021.txt
```

```
Si7021:
```

```
total 200
```

```
-rw-r--r-- 1 tug tug 149965 Sep 22 08:48 pasted_image.png
```

```
-rw-r--r-- 1 tug tug 2946 Sep 22 08:48 calibration.txt
```

```
drwxr-xr-x 2 tug tug 4096 Sep 22 08:48 .
```

```
-rw-r--r-- 1 tug tug 39928 Sep 22 08:48 pasted_image001.png
```

```
drwxr-xr-x 38 tug tug 4096 Nov 9 15:03 ..
```

Page contents (markdown)

Content-Type: text/x-zim-wiki
Wiki-Format: zim 0.6
Creation-Date: 2020-10-18T08:02:05-04:00

===== Si7021 =====

Created Sunday 18 October 2020

****WARNING - BAD i2c code can brickish this device! See Calibration sub page****

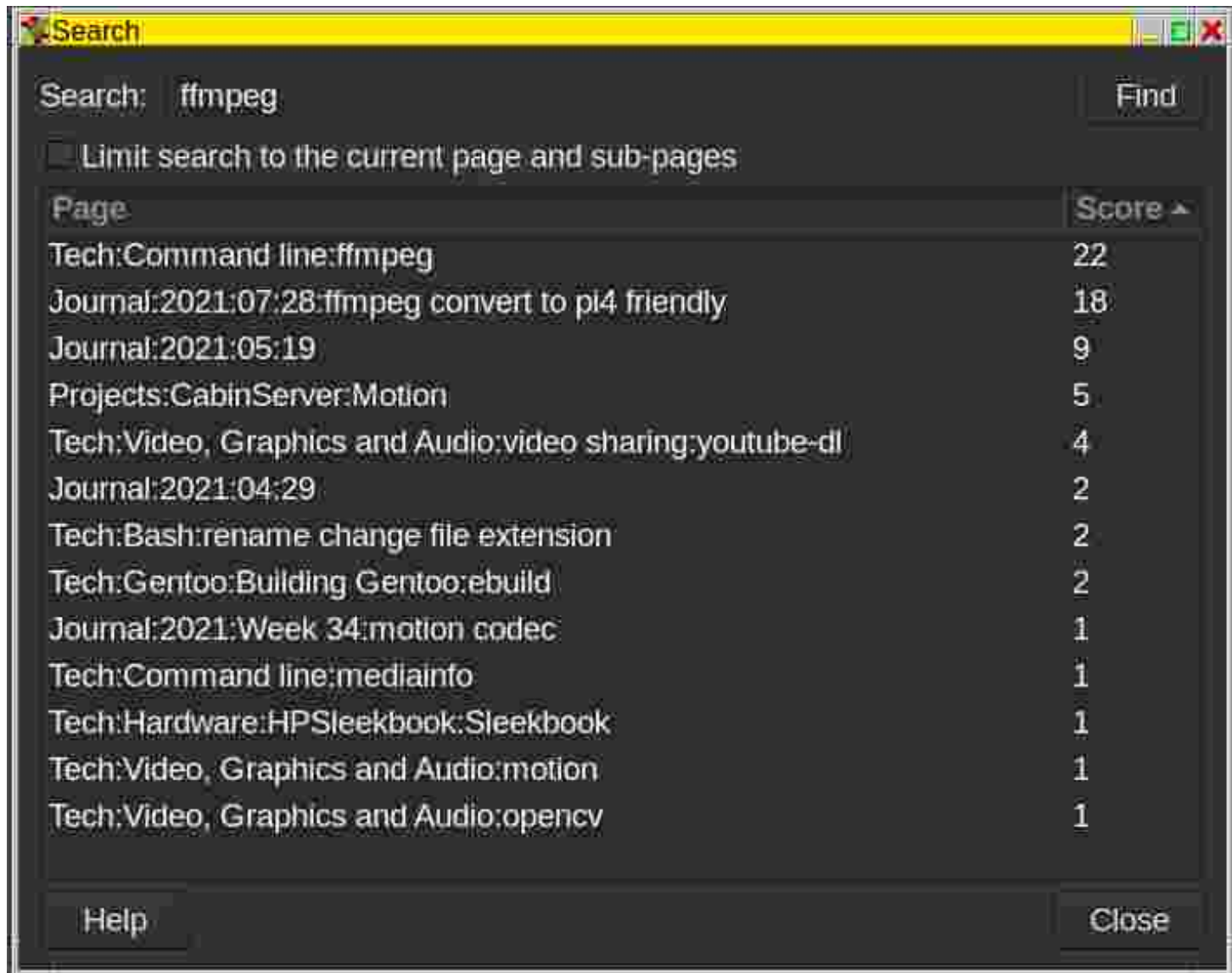
Humidity and Temperature sensor
{./pasted_image001.png}}

Can run on 3.3v or 5v? Tested on Pi, tobe tested on ArduinoUno

running on the command line in this order works

```
'modprobe si7020'  
'dtoverlay i2c-sensor si7020'  
'iio name "1-0400"'
```

Search ffmpeg



A screenshot of a search window titled "Search" with a yellow header. The search term "ffmpeg" is entered in the search field, and a "Find" button is visible. Below the search field is a checkbox labeled "Limit search to the current page and sub-pages" which is unchecked. The search results are displayed in a table with two columns: "Page" and "Score". The results are sorted by score in descending order. At the bottom of the window, there are "Help" and "Close" buttons.

Page	Score
Tech:Command line:ffmpeg	22
Journal:2021:07:28:ffmpeg convert to pi4 friendly	18
Journal:2021:05:19	9
Projects:CabinServer:Motion	5
Tech:Video, Graphics and Audio:video sharing:youtube-dl	4
Journal:2021:04:29	2
Tech:Bash:rename change file extension	2
Tech:Gentoo:Building Gentoo:ebuild	2
Journal:2021:Week 34:motion codec	1
Tech:Command line:mediainfo	1
Tech:Hardware:HPSleekbook:Sleekbook	1
Tech:Video, Graphics and Audio:motion	1
Tech:Video, Graphics and Audio:opency	1

ffmpeg

Created None

cut time frame from video

used to cut a video from start time to end time

```
ffmpeg -i input.wmv -ss 00:00:30.0 -c copy -t 00:00:10.0 output.wmv
```

```
ffmpeg -i input.wmv -ss 30 -c copy -t 10 output.wmv
```

```
ffmpeg -i input.wmv -ss 30 -c copy output.wmv
```

Note that -t is an output option and always needs to be specified after -i.

change format

```
ffmpeg -ss 0 -i Benedictus-Osanna-tenor-slow-raw.mkv -t 00:00:59.6 Benedictus-Osanna-tenor-slow.mp4
```

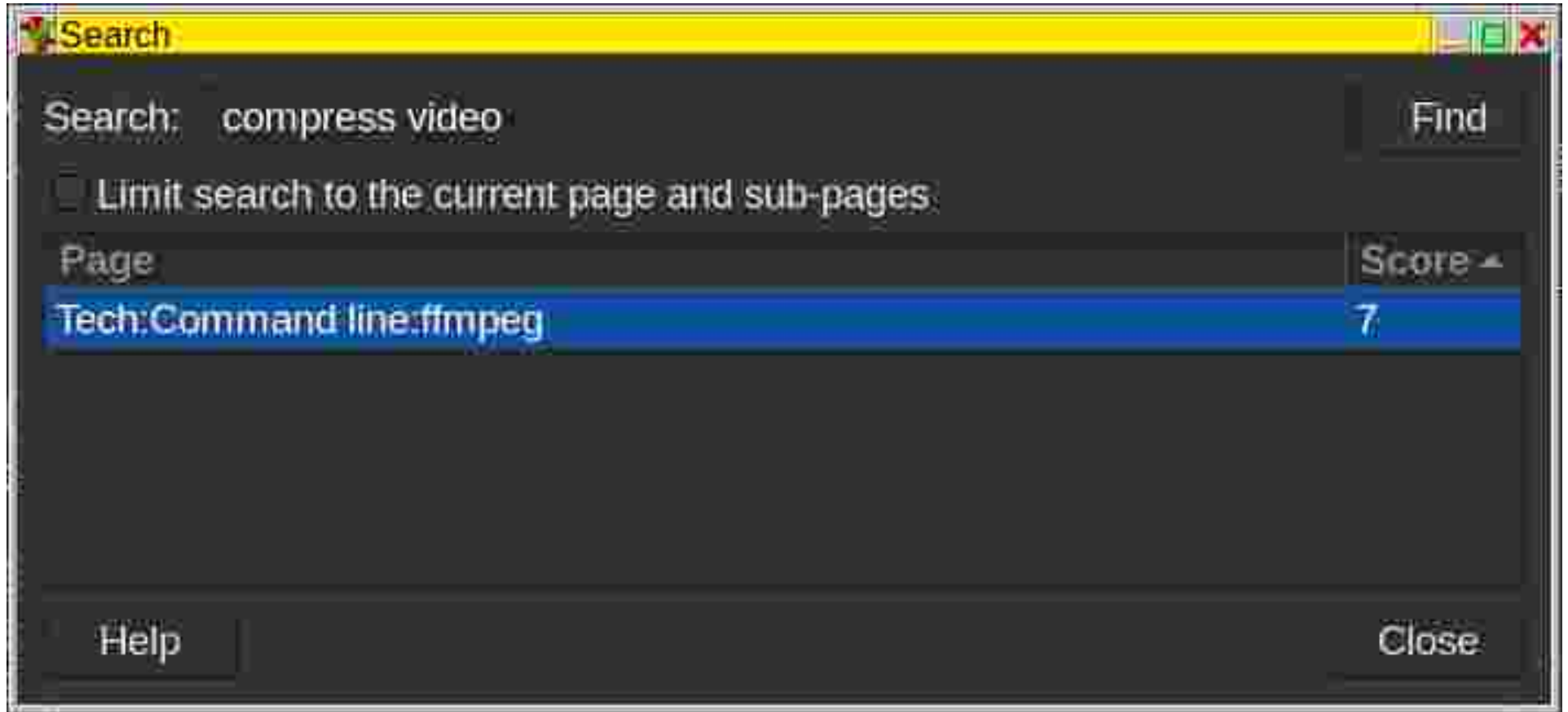
faster conversion of videos

```
ffmpeg -i Blah.mp4 -preset ultrafast Blah.mkv
```

compress unnecessarily large video

```
ffmpeg -i source.mkv -preset veryslow -c:v libx264 source_libx264.mkv
```

Search: compress video



plugins

- Zim can do lots of things
 - Journal (alt-D)
 - Images, plotters (gnuplot, R)
 - Flowcharts (ditaa, sequence diagrams)
 - Tables
- Best not in a single notebook
- Edit → Preferences → Plugins



That's all Folks!