

Free Software: From Spreadsheets to GIS

**Anthony DeBarros, *USA TODAY* (@anthonydb)
Jacob Fenton, *Investigative Reporting Workshop***

IRE CAR, Raleigh, N.C., 2011

Free == Good

Free != Good

Operating Systems

Linux distributions:

- Ubuntu (desktop, netbook, server)
- Fedora
- OpenSUSE

distrowatch.com

Link to Ubuntu 10.10

Ubuntu Software Center

File Edit View Help

Get Software

Departments

- Accessories
- Developer Tools
- Fonts
- Education
- Games
- Internet
- Science & Engineering
- System
- Universal Access

Installed Software

- Provided by Ubuntu
- Canonical Partners
- For Purchase
- Dropbox Ubuntu Rep...
- Google
- Other
- History

Buddy List

Buddies Accounts Tools Help

Gawker

- Adam Pash
Away
- Brian Lam
Idle 4h 47m - Away
- How-To Geek
Sleeping, possibly.
- Jason Fitzpatrick

Post message...

- Available
- Away
- Busy
- Invisible
- Offline

Chat Accounts...

Broadcast Accounts...

Ubuntu One...

About Me...

Lifehacker, tips and downloads for getting things done - Google Chrome

lifehacker.com

Quick Submit Why Alcohol Is G... Lifehacker Video ... Lifehacker Random Other Bookmarks

What Whole Wheat Really Means #health #wholewheat

Skype Now Available for Android Phones #downloads #skype

How Can I Move an Individual Application and Its Settings to Another Mac? #asklifehacker #migration

iSync Syncs Your Android Device with iTunes Over USB or Wi-Fi #downloads #synchronization

Google TV Looks Like the Real Deal in Bridging the Web-TV Divide #streamingtelevisio #googletv

lifehacker

Got a tip? Share

FAQ, Include #openthread

#downloads

Basenji Tracks the Contents of All Your CDs, DVDs, and USB Storage 07:30 AM By Kevin Pur

Windows/Linux: For those who back up to DVD, multiple USB drives, or just have a lot of storage devices around, there probably aren't enough labels or markers to keep everything in order. That's where storage tracker Basenji comes in. More »

#health

Most Store-Bought Multivitamins Are the Same, So Buy the Cheapest 07:00 AM By Maxine Pur



Text Editing

- Notepad++ (notepad-plus-plus.org)
- Vim (gVim, MacVim) (www.vim.org)
- Emacs (www.gnu.org/software/emacs/)
- jEdit (www.jedit.org)

```
models.py (~/djangodev/coltrane) - GVIM
File Edit Tools Syntax Buffers Window Help
1 import datetime
2 from django.conf import settings
3 from django.contrib.auth.models import User
4 from django.db import models
5 from markdown import markdown
6 from tagging.fields import TagField, Tag
7 import tagging
8
9 class Category(models.Model):
10     title = models.CharField(max_length=250, help_text='Maximum 250 characters.')
11     slug = models.SlugField(unique=True, help_text="Suggested value automatically generated from title. Must be
unique.")
12     description = models.TextField()
13
14     def live_entry_set(self):
15         from coltrane.models import Entry
16         return self.entry_set.filter(status=Entry.LIVE_STATUS)
17
18     class Meta:
19         ordering = ['title']
20         verbose_name_plural = "Categories"
21
22     def __unicode__(self):
23         return self.title
24
25     @models.permalink
26     def get_absolute_url(self):
27         return ('coltrane_category_detail', (), { 'slug': self.slug })
28
29
30 class LiveEntryManager(models.Manager):
31     def get_query_set(self):
32         return super(LiveEntryManager, self).get_query_set().filter(status=self.model.LIVE_STATUS)
33
34
35 class Entry(models.Model):
36     LIVE_STATUS = 1
37     DRAFT_STATUS = 2
38     HIDDEN_STATUS = 3
39     STATUS_CHOICES = (
40         (LIVE_STATUS, 'Live'),
41         (DRAFT_STATUS, 'Draft'),
42         (HIDDEN_STATUS, 'Hidden'),
```

1,1 Top

Office Productivity

Open Office (openoffice.org):

- Writer
- Calc
- Impress
- Draw
- Base

NST-EST2008-01.xls - OpenOffice.org Calc

File Edit View Insert Format Tools Data Window Help

MS Sans Serif 10

A5 f(x) Σ = United States

Table 1: Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2008										
Population Estimates										
Geographic Area	July 1, 2008	July 1, 2007	July 1, 2006	July 1, 2005	July 1, 2004	July 1, 2003	July 1, 2002	July 1, 2001	July 1, 2000	July 1, 1999
United States	304,059,724	301,290,332	298,362,973	295,560,549	292,892,127	290,210,914	287,726,647	285,039,803	282,171,900	279,280,000
Northeast	54,924,779	54,761,693	54,627,987	54,531,266	54,459,795	54,319,451	54,134,361	53,910,648	53,666,800	53,410,000
Midwest	66,561,448	66,312,562	66,047,830	65,785,263	65,566,340	65,299,248	65,058,431	64,805,832	64,492,000	64,170,000
South	111,718,549	110,335,133	108,716,622	107,244,182	105,745,280	104,339,107	103,125,430	101,838,852	100,558,000	99,280,000
West	70,854,948	69,880,944	68,970,534	67,999,838	67,120,712	66,253,108	65,408,425	64,484,471	63,454,000	62,330,000
Alabama	4,661,900	4,626,595	4,587,564	4,537,299	4,506,574	4,486,598	4,469,906	4,462,832	4,451,000	4,440,000
Alaska	686,293	681,111	676,301	668,625	660,975	650,426	642,391	633,160	627,000	620,000
Arizona	6,500,180	6,353,421	6,178,251	5,961,239	5,750,475	5,585,512	5,449,195	5,303,632	5,166,000	5,030,000
Arkansas	2,855,390	2,830,557	2,804,199	2,768,918	2,740,191	2,717,909	2,701,889	2,689,601	2,678,000	2,666,000
California	36,756,666	36,377,534	36,121,296	35,885,415	35,629,666	35,307,398	34,916,495	34,507,030	33,998,000	33,470,000
Colorado	4,939,456	4,842,770	4,751,474	4,662,734	4,600,050	4,548,339	4,503,156	4,431,918	4,327,000	4,210,000
Connecticut	3,501,252	3,489,868	3,487,896	3,478,714	3,475,351	3,467,932	3,448,261	3,428,208	3,411,000	3,394,000
Delaware	873,092	861,953	850,366	838,519	825,682	814,262	803,774	794,498	786,000	777,000
District of Columbia	591,833	587,868	585,419	582,049	579,521	577,371	579,112	577,678	571,000	569,000
Florida	18,328,340	18,199,526	18,019,093	17,702,476	17,313,811	16,937,337	16,652,679	16,340,734	16,047,000	15,760,000
Georgia	9,685,744	9,523,297	9,318,715	9,093,958	8,910,741	8,732,924	8,583,674	8,418,592	8,230,000	8,040,000
Hawaii	1,288,198	1,277,356	1,275,264	1,264,468	1,251,532	1,238,333	1,227,391	1,217,955	1,211,000	1,204,000
Idaho	1,523,816	1,496,145	1,461,183	1,424,127	1,390,329	1,363,010	1,341,408	1,320,732	1,299,000	1,278,000
Illinois	12,901,563	12,825,809	12,759,673	12,704,063	12,665,718	12,611,047	12,565,228	12,510,596	12,437,000	12,360,000
Indiana	6,376,792	6,335,862	6,294,124	6,248,569	6,210,801	6,178,828	6,146,974	6,123,942	6,091,000	6,059,000
Iowa	3,002,555	2,983,360	2,967,270	2,951,775	2,942,739	2,933,407	2,929,395	2,929,294	2,928,000	2,927,000
Kansas	2,802,134	2,777,382	2,756,267	2,742,204	2,731,069	2,722,070	2,712,561	2,701,346	2,692,000	2,683,000
Kentucky	4,269,245	4,236,308	4,199,440	4,165,958	4,135,567	4,110,922	4,086,754	4,066,442	4,048,000	4,030,000
Louisiana	4,410,796	4,373,310	4,243,634	4,495,627	4,487,830	4,473,558	4,465,215	4,460,395	4,468,000	4,476,000
Maine	1,316,456	1,315,398	1,313,355	1,311,044	1,307,904	1,302,729	1,293,667	1,284,663	1,277,000	1,270,000
Maryland	5,633,597	5,618,899	5,602,258	5,575,552	5,538,989	5,495,009	5,439,327	5,375,659	5,310,000	5,245,000
Massachusetts	6,497,967	6,467,915	6,443,424	6,434,343	6,437,414	6,441,440	6,433,043	6,407,269	6,362,000	6,317,000
Michigan	10,003,422	10,049,790	10,083,878	10,093,266	10,090,280	10,065,881	10,037,303	10,004,341	9,955,000	9,906,000
Minnesota	5,220,393	5,182,360	5,143,134	5,104,890	5,078,014	5,046,708	5,016,643	4,982,339	4,933,000	4,884,000
Mississippi	2,938,618	2,921,030	2,896,713	2,898,209	2,884,596	2,866,711	2,858,013	2,853,061	2,848,000	2,843,000
Missouri	5,911,605	5,878,399	5,832,977	5,785,130	5,742,650	5,704,639	5,675,641	5,641,994	5,605,000	5,569,000
Montana	967,440	956,624	945,428	934,888	925,969	916,754	909,859	905,854	903,000	900,000
Nebraska	1,783,432	1,769,473	1,759,779	1,751,069	1,741,450	1,732,873	1,724,236	1,717,705	1,713,000	1,708,000
Nevada	2,600,167	2,554,344	2,484,196	2,401,671	2,323,875	2,233,830	2,164,518	2,093,973	2,018,000	1,943,000

Sheet 1 / 1 PageStyle_NST01 STD Sum=0 100%

Audio, Photo, Video

Audio

- Audacity (audacity.sourceforge.net)

Photo

- Gimp (www.gimp.org)
- F-Spot (f-spot.org)

Video

- Open Movie Editor (www.openmovieeditor.org)

01-Tranewreck [Window Controls]

File Edit View Transport Tracks Generate Effect Analyze Help

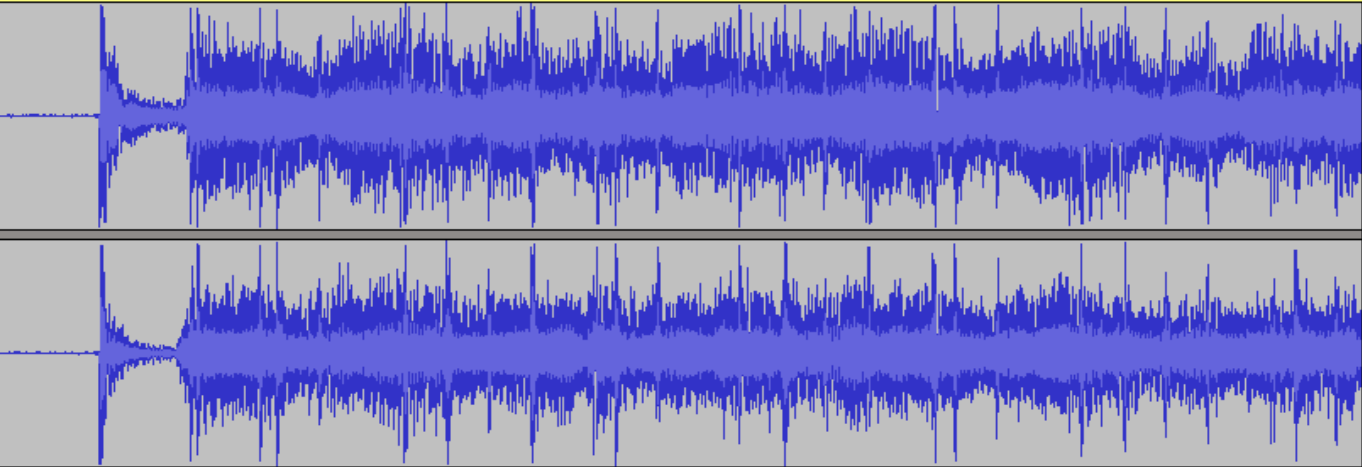
[Transport Controls: Play, Stop, Previous, Next, Record]

[Editing Tools: Undo, Redo, Copy, Paste, Delete, Select All, Select None]

[Meters: L, R, -24, 0, -24, 0]

[Timeline: -1.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0]

01-Tranewr 1.0
Stereo, 44100Hz
32-bit float
Mute Solo
+
-
L R
-0.5
-1.0



1.0
0.5
0.0
-0.5
-1.0

1.0
0.5
0.0
-0.5
-1.0

Project Rate (Hz): 44100 Selection Start: End Length Audio Position:
Snap To 00 h 00 m 00 s 00 h 01 m 36 s 00 h 00 m 00 s

Disk space remains for recording 304 hours and 31 minutes. Actual Rate: 44100

cat.jpg-7.0 (RGB, 1 layer) 485x336 - GIMP
File Edit Select View Image Layer Colors Tools Filters Windows Help

Layers, Channels, Palettes

cat.jpg-7 Auto

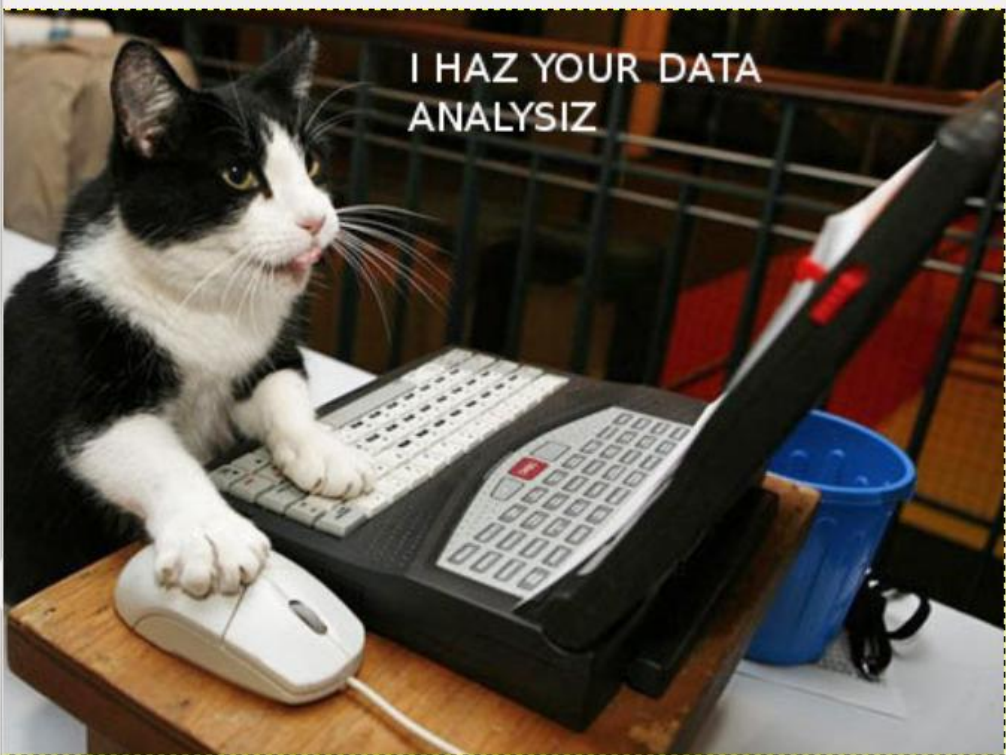
Layers

Mode: Normal

Opacity: 100.0

Lock:

Background



Brushes

Circle (11) (13 x 13)

Spacing: 20.0

Toolbox

Move

Move:

Tool Toggle (Shift)

Pick a layer or guide

Move the active layer

150 % Background (1.6 MB)

Database Managers, GUIs

SQLite

- Firefox: SQLite Manager

MySQL

- MySQL Workbench
- PhpMyAdmin

PostgreSQL

- PgAdmin

SQL Server Express

- SQL Server Management Studio Express

Web Frameworks/CMS

Python-based

- Django
- Pylons

Ruby-based

- Ruby on Rails

PHP-based

- Wordpress
- Drupal

And many, many more ...