hack your email with notmuch

David Bremner

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What is notmuch?

A library/command-line tool for
- indexing,
- tagging, and
- searching

a local email store, one message per file.
The notmuch “ecosystem”

Example tools
- afew
- nmbug
- nmbug_status

Bindings
- go
- python
- ruby

Mail user agents
- notmuch-vim
- alot
- mutt_kz
- bower
- notmuch-web
- notmuch-emacs
- notmuch-mutt

Mail user agents
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Bindings
- go
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notmuch CLI
- notmuch CLI

libnotmuch
- libnotmuch

gmime
- gmime

xapian
- xapian
Bus factor 5?

- Carl Worth
- David Bremner
- Austin Clements
- Sebastian Spaeth
- Jani Nikula
- David Edmondson
- Jameson Graef Rollins
- Justus Winter
- Dmitry Kurochkin
- Mark Walters
- Pieter Praet
- Michal Sojka
- Ali Polatel
- Felipe Contreras
- Peter Wang
- Bart Trojanowski
- 93 Others

Note: The pie chart illustrates the distribution of bus factor across a group of individuals, with Carl Worth having the largest segment, followed by David Bremner and Austin Clements.
# On the command line

<table>
<thead>
<tr>
<th>Commands</th>
</tr>
</thead>
<tbody>
<tr>
<td>notmuch count [options...] &lt;search-term&gt;...</td>
</tr>
<tr>
<td>notmuch dump [&lt;filename&gt;] [--] [ &lt;search-term&gt;...]</td>
</tr>
<tr>
<td>notmuch search [options...] &lt;search-term&gt;...</td>
</tr>
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<td>notmuch show [options...] &lt;search-term&gt;...</td>
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On the command line

**Commands**

notmuch count [options...] <search-term>...
notmuch dump [<filename>] [---] [ <search-term>...]
notmuch search [options...] <search-term>...
notmuch show [options...] <search-term>...
notmuch tag +<tag>|-<tag> [...] [---] <search-term>...

**Query Syntax**

from:<name-or-address>          to:<name-or-address>
subject:<word-or-quoted-phrase> attachment:<suffix>
tag:<tag> (or is:<tag>)       id:<message-id>
thread:<thread-id>                folder:<directory-path>
date:<since>..<until>
On the command line

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%%% notmuch search tag:inbox::notmuch and to:david
%%% notmuch search --output=files tag:deleted | xargs rm
Emacs Based MUA

- Talks to the CLI via sexp output
- Thread based UI
- Uses message mode to send mail
- Support for MIME and OpenPGP
Options for Emacs haters

- **alot** (python, curses)
- **notmuch-vim** (vim, ruby)
notmuch-mutt

- "exports" notmuch searches to symlink farms
- comes with configuration snippet to integrate with mutt
Web client

- Written in Haskell
  
  http://hackage.haskell.org/package/notmuch-web

- Communicates with the CLI via JSON output
**Perl/CLI**

```perl
my $notmuch = spawn ( '{}', ' − ', qw/ notmuch tag --batch /);
foreach my $pair (@{$status->{added}}) {
    print $notmuch
    pair_to_batch_line ($A_action, $pair);
}
```

**Python**

```python
notmuch = notmuch.Database(
    mode=notmuch.Database.MODE.READ_WRITE)
q = notmuch.Query(db, query_string)
q.set_sort(notmuch.Query.SORT.OLDEST_FIRST)
for m in q.search_messages():
    thread_id = m.get_thread_id()
```
Hack scripts

Python

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notmuch = notmuch.Database(
    mode=notmuch.Database.MODE.READ_WRITE)
q = notmuch.Query(db, query_string)
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for m in q.search_messages():
    thread_id = m.get_thread_id()
```

Ruby

```ruby
do_read do |db|
    q = db.query(get_cur_view)
    q.sort = 0
    msgs = q.search_messages
    msgs.each do |msg|
        m = Mail.read(msg.filename)
        part = m.find_first_text
```
Not much of a bug tracker
notmuch more info?

source/wiki http://notmuchmail.org
mailing list notmuch@notmuchmail.org
irc irc://chat.freenode.net/#notmuch