

Neversearch

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Archiving

Always troubled me...

- ▶ What directory structure do I use?
- ▶ Year first? Class first? (2013/papers vs papers/2013)
- ▶ What if I want to add more classes? (mind=blown)

xattr

- ▶ Extended (file)Attributes
- ▶ Supported by ext3, ext4, btrfs, xfs, nfs4
- ▶ Size is either infinite or 4096 bytes

Tags

- ▶ Command line utility: “attr”
- ▶ Cumbersome to use; very basic
- ▶ Possible to work with xattrs using system calls. (getxattr)

Tags

- ▶ Command line utility: “attr”
- ▶ Cumbersome to use; very basic
- ▶ Possible to work with xattrs using system calls. (getxattr)
- ▶ Enter: neversearch

Neversearch

Usage is simple:

```
usage: tag [-h] [-v] [-a ADD] [-d DELETE] [-C] [-r]
          [-l] [-L] [-f FILTER] [-H]
          [-i]
          file [file ...]
```

Tagging files

```
$ tag -ra 2013 ~/photos
```

```
$ tag -a tst ~/photos/wizzup.png.tar.bz2.asc
```


Listing tags

```
$ tag -l ~/photos/wizzup.png.tar.bz2.asc  
~/photos/wizzup.png.tar.bz2.asc: 2013, tst
```

```
$ tag -rL ~
```

Deleting tags

```
$ tag -d tst ~/photos/wizzup.png.tar.bz2.asc  
$ tag -C ~/photos/wizzup.png.tar.bz2.asc
```

Finding and filtering

```
$ tag -rHf python /tmp/  
/tmp/foo (python)  
/tmp/foo/quux (python)  
/tmp/foo/bar (python)  
/tmp/foo/bar/wobble (python)  
/tmp/foo/bar/fred (python)
```

Finding and filtering II

Stdin also works as expected:

```
find /tmp/ | tag -f python
/tmp/bar/foo
/tmp/bar/foo/quux
/tmp/bar/foo/bar
/tmp/bar/foo/bar/wobble
/tmp/bar/foo/bar/fred
```

Finding and filtering III

Tags can be chained:

```
$ tag -rf python /tmp/foo | tag -f 2012 | tag -L  
/tmp/foo/quux: python, 2014, 2012  
/tmp/foo/bar: python, 2014, 2012  
/tmp/foo/bar/wobble: python, 2014, 2012  
/tmp/foo/bar/fred: python, 2014, 2012  
/tmp/foo: python, 2014, 2012
```

Database?

```
$ tag -rL /tmp > udb
```

```
$ grep python udb
```

```
/tmp/foo: python
```

```
/tmp/foo/quux: python
```

```
/tmp/foo/bar: python
```

```
/tmp/foo/bar/wobble: python, hello
```

```
/tmp/foo/bar/fred: python
```

Database? (Part 2)

- ▶ Patch mlocate to index xattrs as well
- ▶ And then use mlocate to find your files

Resources for Neversearch

- ▶ Authors:
 - ▶ Merlijn Wajer (Wizzup)
- ▶ Homepage: <http://hetgrotebos.org/wiki/neversearch>
- ▶ Source: <http://github.com/MerlijnWajer/neversearch>
- ▶ Package for Gentoo