

# The Advantages of File Name Conventions and Tagging



[www.linuxtage.at](http://www.linuxtage.at)

Karl-Voit.at  
<https://mastodon.social/@publicvoit>  
<http://twitter.com/novoid>



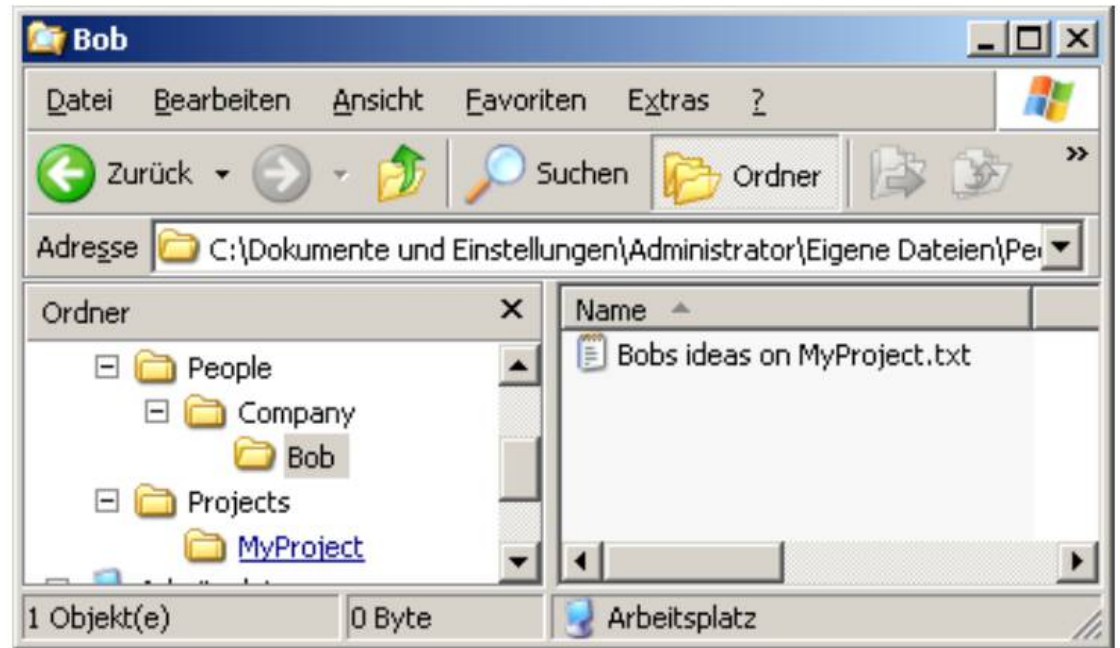
# My File Name Convention

```
$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf
```

# Why Using a File Name Convention?

# Why Using a File Name Convention?

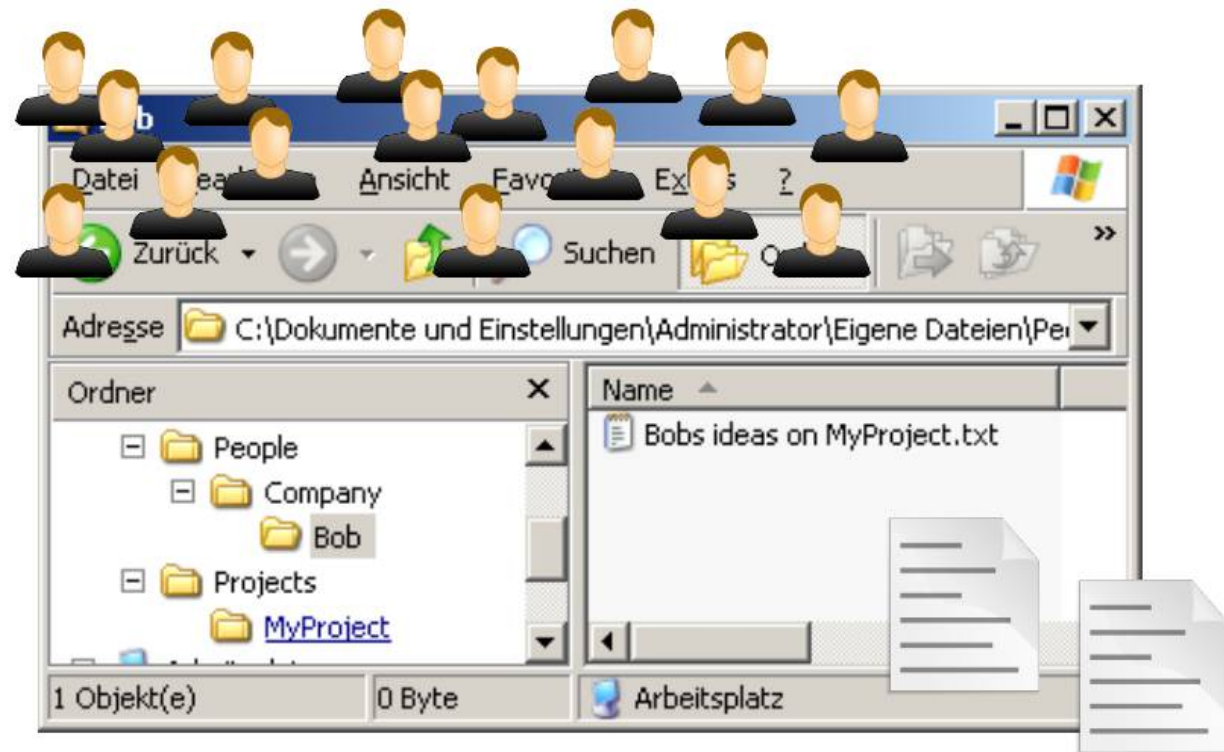
To support **re-finding**



**browsing/navigation**



**search/teleporting**



**browsing/navigation**



**search/teleporting**





**minimal task effort**

**compatible with existing apps**



**browsing retrieval method**

**transparency**



PIM2009

Voit et al.

Why Personal Information Management (PIM) Technologies Are Not Widespread

# File Name Convention

`$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf`



# File Name Convention



# Tools Involved

```
$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf  
m2a  
guesstargetfolder  
date2name --withtime  
appendfilename  
date2name  
guessfilename  
filetags
```

No “All-or-nothing Approach”



A set of tools I find enormous  
useful for my digital life.

Listen and then take what fits your requirements

# File Name Convention - Examples

2018-02-25T17.35.42 My new bicycle -- bicycle hardware.jpeg

2018-04-28 Advantages of File Name Conventions -- GLT18 draft.odp

2018-04-28 Advantages of File Name Conventions -- GLT18 final.pdf

2018-04-28T16.00 Org-mode demo -- emacs presentations.mp4

2018-01-31T15.14 Home to office -- bicycle.gpx

2018-04-28 14,50EUR T-Shirt -- GLT18 scan bill.pdf

2018-02-14 Project Report -- restricted clientX draft.pdf

Map of Berlin.pdf

# File Name Convention - Examples

**2018-02-25T17.35.42** My new bicycle -- bicycle hardware.jpeg

**2018-04-28** Advantages of File Name Conventions -- GLT18 draft.odp

**2018-04-28** Advantages of File Name Conventions -- GLT18 final.pdf

**2018-04-28T16.00** Org-mode demo -- emacs presentations.mp4

**2018-01-31T15.14** Home to office -- bicycle.gpx

**2018-04-28** 14,50EUR T-Shirt -- GLT18 scan bill.pdf

**2018-02-14** Project Report -- restricted clientX draft.pdf

Map of Berlin.pdf



# date2name



Options:

|                   |                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------|
| -h, --help        | show this help message and exit                                                         |
| -d, --directories | modify only directory names                                                             |
| -f, --files       | modify only file names                                                                  |
| -C, --compact     | use compact datestamp (YYYYMMDD)                                                        |
| -M, --month       | use datestamp with year and month (YYYY-MM)                                             |
| -w, --withtime    | use datestamp including seconds (YYYY-MM-DDThh.mm.ss)                                   |
| -m, --mtime       | take modification time for datestamp [default]                                          |
| -c, --ctime       | take creation time for datestamp                                                        |
| -q, --quiet       | do not output anything but just errors on console                                       |
| -v, --verbose     | enable verbose mode                                                                     |
| --nocorrections   | do not convert existing datestamps to new format                                        |
| -s, --dryrun      | enable dryrun mode: just simulate what would happen, do not modify files or directories |
| --version         | display version and exit                                                                |

# Adding a date-stamp or a time-stamp to one or more files

# File Name Convention - Examples

**2018-02-25T17.35.42** My new bicycle -- bicycle hardware.jpeg

**2018-04-28** Advantages of File Name Conventions -- GLT18 draft.odp

**2018-04-28** Advantages of File Name Conventions -- GLT18 final.pdf

**2018-04-28T17.35.42** Emacs in Emacs-mode demo -- emacs presentations.mp4

**2018-02-14** Home to office -- bicycle.gpx

**2018-04-28** 14,50EUR T-Shirt -- GLT18 scan bill.pdf

**2018-02-14** Project Report -- restricted clientX draft.pdf

Map of Berlin.pdf



# File Name Convention - Examples

2018-02-25T17.35.42 My new bicycle -- bicycle hardware.jpeg

2018-04-28 Advantages of File Name Conventions -- GLT18 draft.odp

2018-04-28 Advantages of File Name Conventions -- GLT18 final.pdf

2018-04-28T16.00 Org-mode demo -- emacs presentations.mp4

2018-01-31T15.14 Home to office -- bicycle.gpx

2018-04-28 14,50EUR T-Shirt -- GLT18 scan bill.pdf

2018-02-14 Project Report -- restricted clientX draft.pdf

Map of Berlin.pdf

# File Name Convention - Examples

2018-02-25T17.35.42 **My new bicycle** -- bicycle hardware.jpeg

2018-04-28 **Advantages of File Name Conventions** -- GLT18 draft.odp

2018-04-28 **Advantages of File Name Conventions** -- GLT18 final.pdf

2018-04-28T16.00 **Org-mode demo** -- emacs presentations.mp4

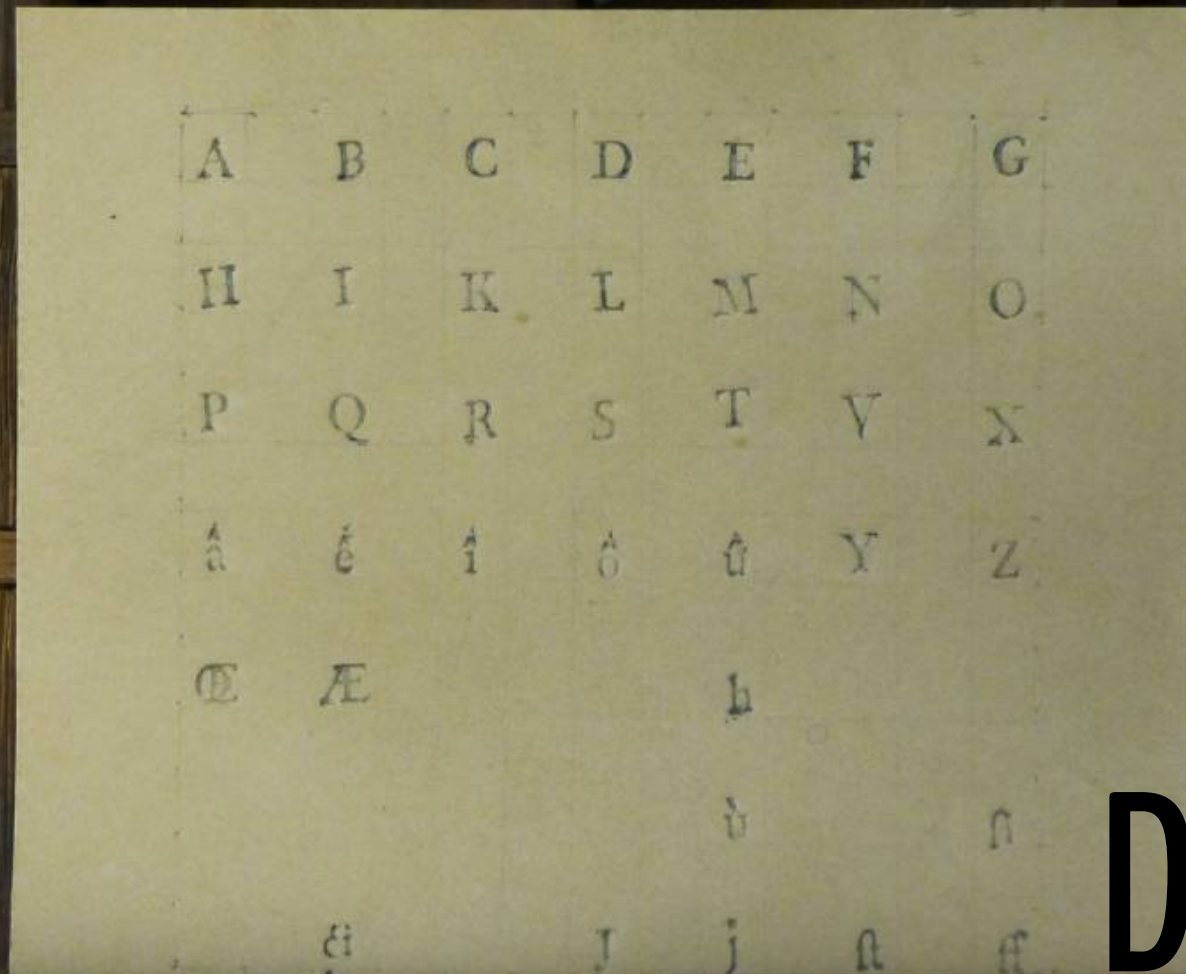
2018-01-31T15.14 **Home to office** -- bicycle.gpx

2018-04-28 **14,50EUR T-Shirt** -- GLT18 scan bill.pdf

2018-02-14 **Project Report** -- restricted clientX draft.pdf

**Map of Berlin**.pdf

# appendfilename



Demo...

Appending to the file name (before any filetags)

# File Name Convention - Examples

2018-02-25T17.35.42 **My new bicycle** -- bicycle hardware.jpeg

2018-04-28 **Advantages of File Name Conventions** -- GLT18 draft.odp

2018-04-28 **Advantages of File Name Conventions** -- GLT18 final.pdf

2018-04-28 **Org-mode** -- emacs presentations.mp4

2018-01-31 **Office** -- bicycle.gpx

2018-04-28 **Shirt** -- GLT18 scan bill.pdf

2018-02-14 **Project Report** -- restricted clientX draft.pdf

**Map of Berlin**.pdf

# File Name Convention - Examples

2018-02-25T17.35.42 My new bicycle -- **bicycle hardware.jpeg**

2018-04-28 Advantages of File Name Conventions -- **GLT18 draft.odp**

2018-04-28 Advantages of File Name Conventions -- **GLT18 final.pdf**

2018-04-28T16.00 Org-mode demo -- **emacs presentations.mp4**

2018-01-31T15.14 Home to office -- **bicycle.gpx**

2018-04-28 14,50EUR T-Shirt -- **GLT18 scan bill.pdf**

2018-02-14 Project Report -- **restricted clientX draft.pdf**

Map of Berlin.pdf



# filetags

Demo...

<https://github.com/novoid/filetags/>

Managing tags within file-names





# Tagging - Best Practice

- Use a controlled vocabulary and TAB-completion `.filetags`
- Not more than 100 tags maximum `the fewer, the better`
- Tags are always in plural `manual` → `manuals` `book` → `books`
- Keep tags general `volleyball` → `sports`
- No tags which can be derived from file extension
  - Bad examples: `images`, `spreadsheets`, `photographs`
- Use mutually exclusive tags or timestamps instead of version numbers
  - Bad examples: `almost-final`, `final`, `really-final`, `finished`, `last-minute-changes`, ...
  - Recommended: `draft|final`
- Other useful tags `taxes`, `bill`, `acquisition|scrap`, `cliparts`, `heritage`, `ideas`, `manuals`, `linked`, `scan|screenshots`, `confidential|internal|public`

# File Name Convention - Examples

2018-02-25T17.35.42 My new bicycle -- **bicycle hardware.jpeg**

2018-04-28 Advantages of File Name Conventions -- **GLT18 draft.pdf**

2018-04-28 Advantages of File Name Conventions -- **GLT18 draft.pdf**

2018-04-28T16.00 Org-mode demo -- **org-mode presentation.pdf**

2018-01-31T15.14 Home to office -- **home to office.pdf**

2018-04-28 14,50EUR T-Shirt -- **GLT18 draft.pdf**

2018-02-14 Project Report -- **restricted clientX draft.pdf**

Map of Berlin.pdf

# File Name Convention - Examples

2018-02-25T17.35.42 My new bicycle -- bicycle hardware.jpeg

2018-04-28 Advantages of File Name Conventions -- GLT18 draft.odp

2018-04-28 Advantages of File Name Conventions -- GLT18 final.pdf

2018-04-28T16.00 Org-mode demo -- emacs presentations.mp4

2018-01-31T15.14 Home to office -- bicycle.gpx

2018-04-28 14,50EUR T-Shirt -- GLT18 scan bill.pdf

2018-02-14 Project Report -- restricted clientX draft.pdf

Map of Berlin.pdf

# Tools Involved

```
$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf
```

date2name --withtime  
appendfilename  
date2name  
filetags

# Tools Involved

```
$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf  
m2a  
guesstargetfolder  
date2name --withtime  
date2name  
appendfilename  
guessfilename  
filetags
```

# guess-filename



Guessing a new file name from:

- current file name and
- (PDF) file content

(Has to be adapted by you for your rule-set.)



# guess-filename - Examples

|                                    |                                                                       |
|------------------------------------|-----------------------------------------------------------------------|
| IMG_20161014_214404.jpg            | 2016-10-14T21.44.04.jpg                                               |
| Screenshot_2013-03-05-08-14-09.png | 2013-03-05T08.14.09 -- android screenshots.png                        |
| 2015-05-27T09;00;15.gpx            | 2015-05-27T09.00.15.gpx                                               |
| rec_20171129-0902.wav              | 2017-11-29T09.02.wav                                                  |
| 2017-08-16-2017-09-23 hipster.png  | 2017-08-16--2017-09-23 Hipster-PDA -- scan notes.png                  |
| 2018-03-30 salary.pdf              | 2018-03-31 Salary from my employer - 2452,62€ -- income finance.pdf   |
| 2016-03-05 acme.pdf                | 2016-03-05 Monthly fees from Acme - 12,34€ -- bill provider taxes.pdf |

# Tools Involved

```
$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf  
m2a  
guesstargetfolder  
date2name --withtime  
appendfilename  
date2name  
guessfilename  
filetags
```

move2archive



Moves selected files  
to a (new) folder  
structure like:

`$HOME/archive/2018/2018-04-27 GLT18 Event/`

# move2archive

Offers three possible destinations:

1) Empty input for archive folder

`$HOME/archive/2018/`

2) Number for an existing folder

`$HOME/archive/2018/2018-04-27 GLT18 Event/`

3) Any other input for creating a new folder

`$HOME/archive/2018/2018-04-27 New Event/`



# guess-targetfolder.sh

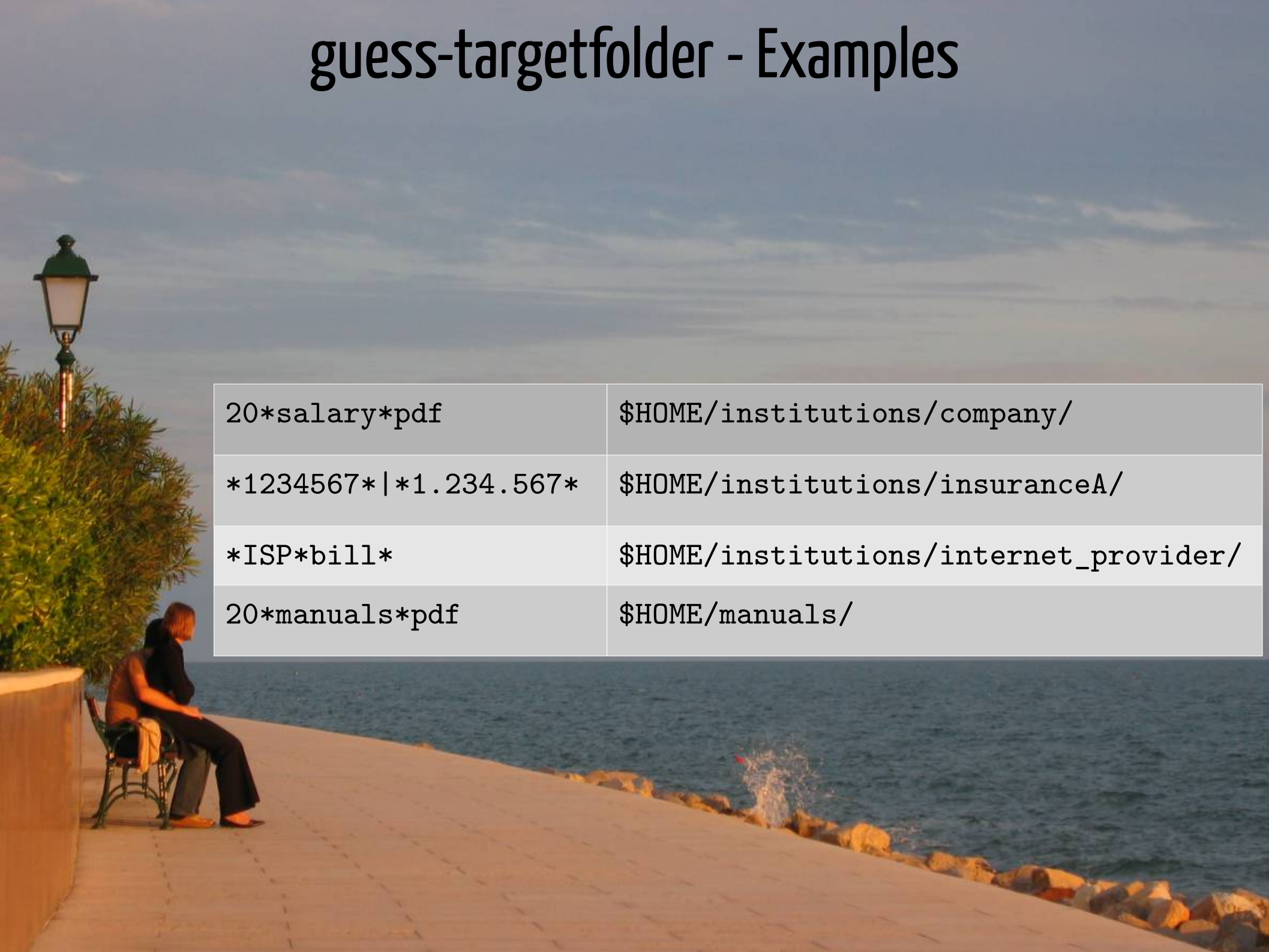
Move selected files to folders

(not using a \$HOME/archive/2018/... structure)

(Has to be adapted by you for your rule-set.)



# guess-targetfolder - Examples

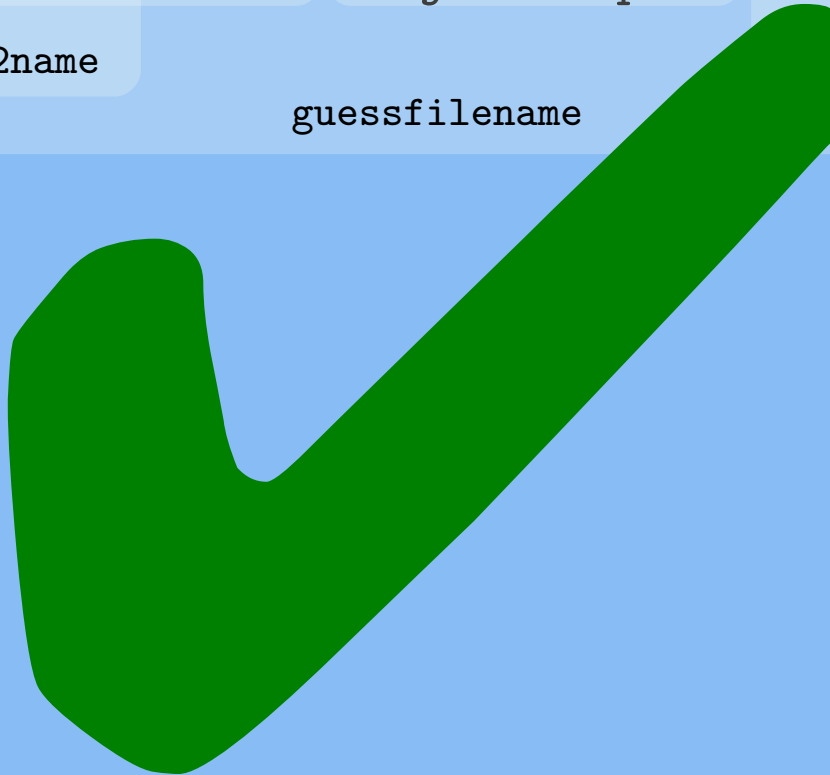


|                       |                                        |
|-----------------------|----------------------------------------|
| 20*salary*pdf         | \$HOME/institutions/company/           |
| *1234567* *1.234.567* | \$HOME/institutions/insuranceA/        |
| *ISP*bill*            | \$HOME/institutions/internet_provider/ |
| 20*manuals*pdf        | \$HOME/manuals/                        |



# Tools Involved

```
$HOME/archive/2018/2018-02-14T15.14 Project Report -- clientX draft.pdf  
m2a  
guesstargetfolder  
date2name --withtime  
date2name  
appendfilename  
guessfilename  
filetags
```



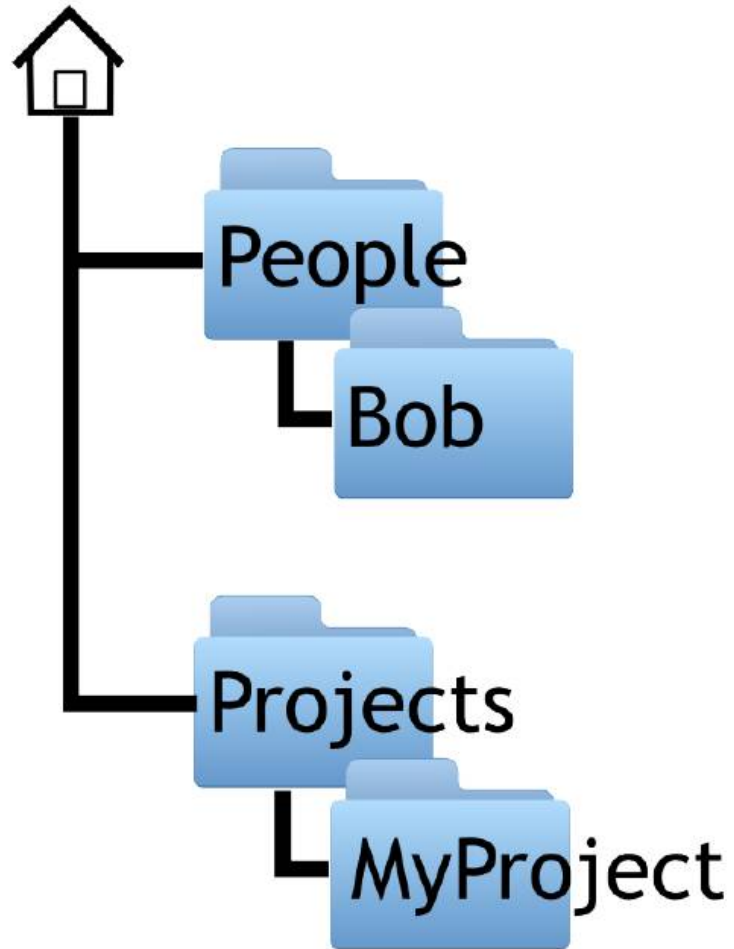


# TagTrees

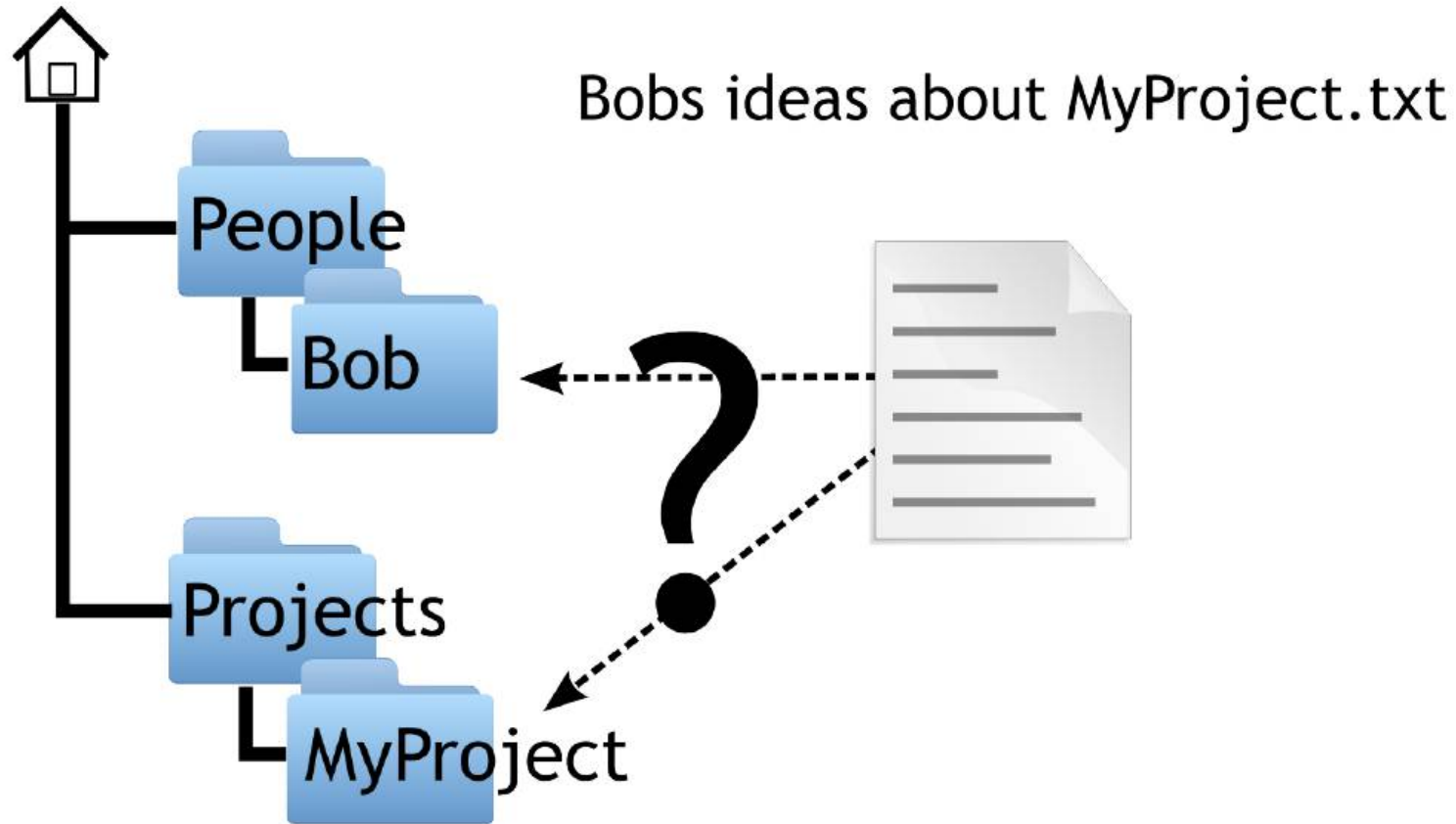
... getting the **most** out of tags

## The Concept

# storing files



# the problem





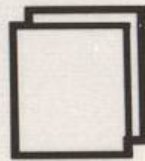
# desktop metaphor

## Decision 3

**Simplified**

vs

**Detailed**



*Simplified version without detailed lines to indicate text.*



*Additional elements of lines added to define the object features.*

## Decision 4

**Two Dimensional**

vs

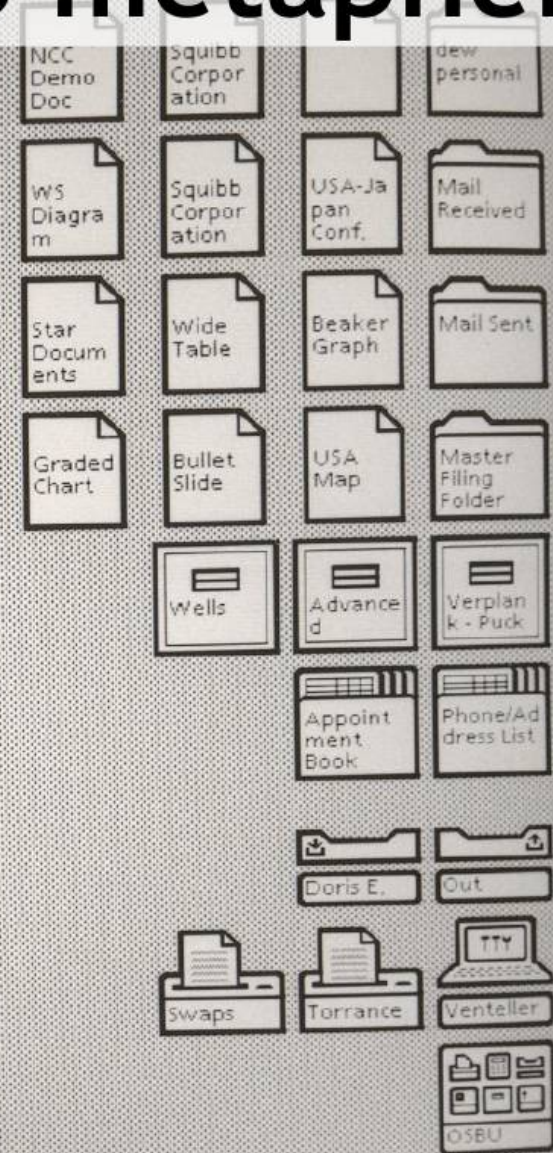
**Three Dimensional**



*Single plane depiction showing height and width only.*



*Single plane depiction showing height, width and implied depth.*



Alan Kay at Xerox PARC (1970)



desktop metaphor:



**one** thing at **one** place

desktop metaphor:



**one** thing at **one** place

without limitations:



**each** thing at **its** places

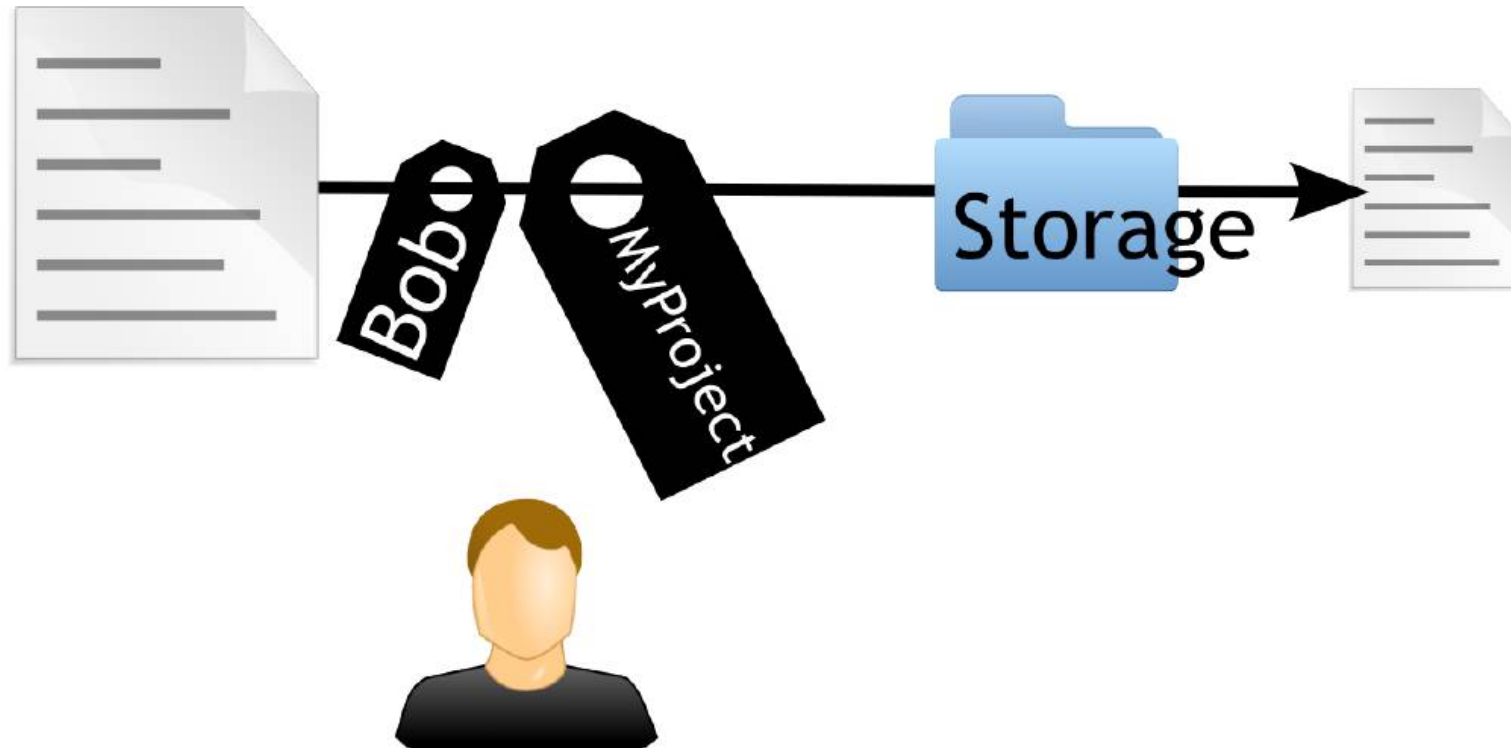
groundbreaking idea

(Re-)Presentation of information should  
**not** depend on **storage** method

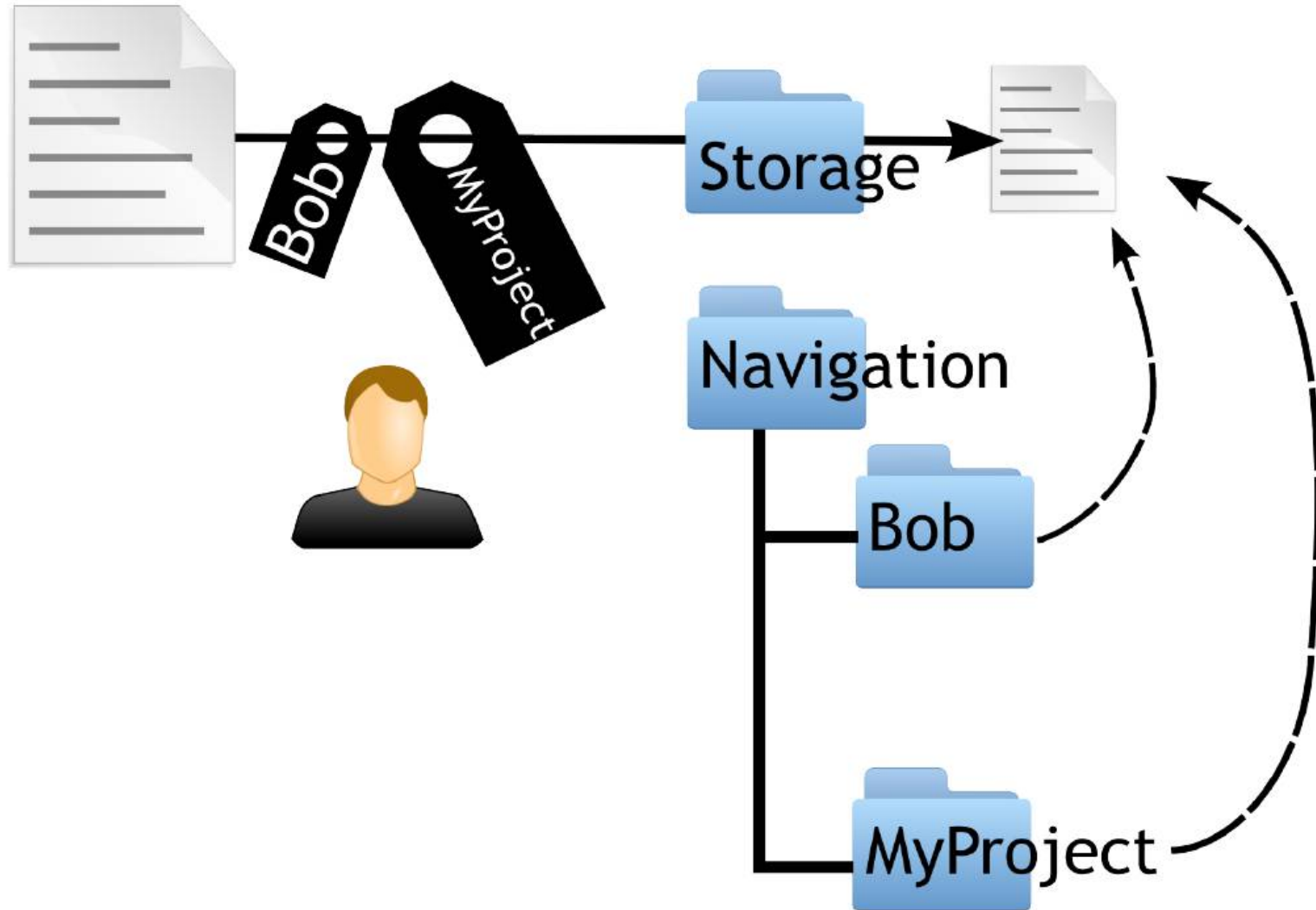
*but*

**only** depend on **retrieval** method!

# storing

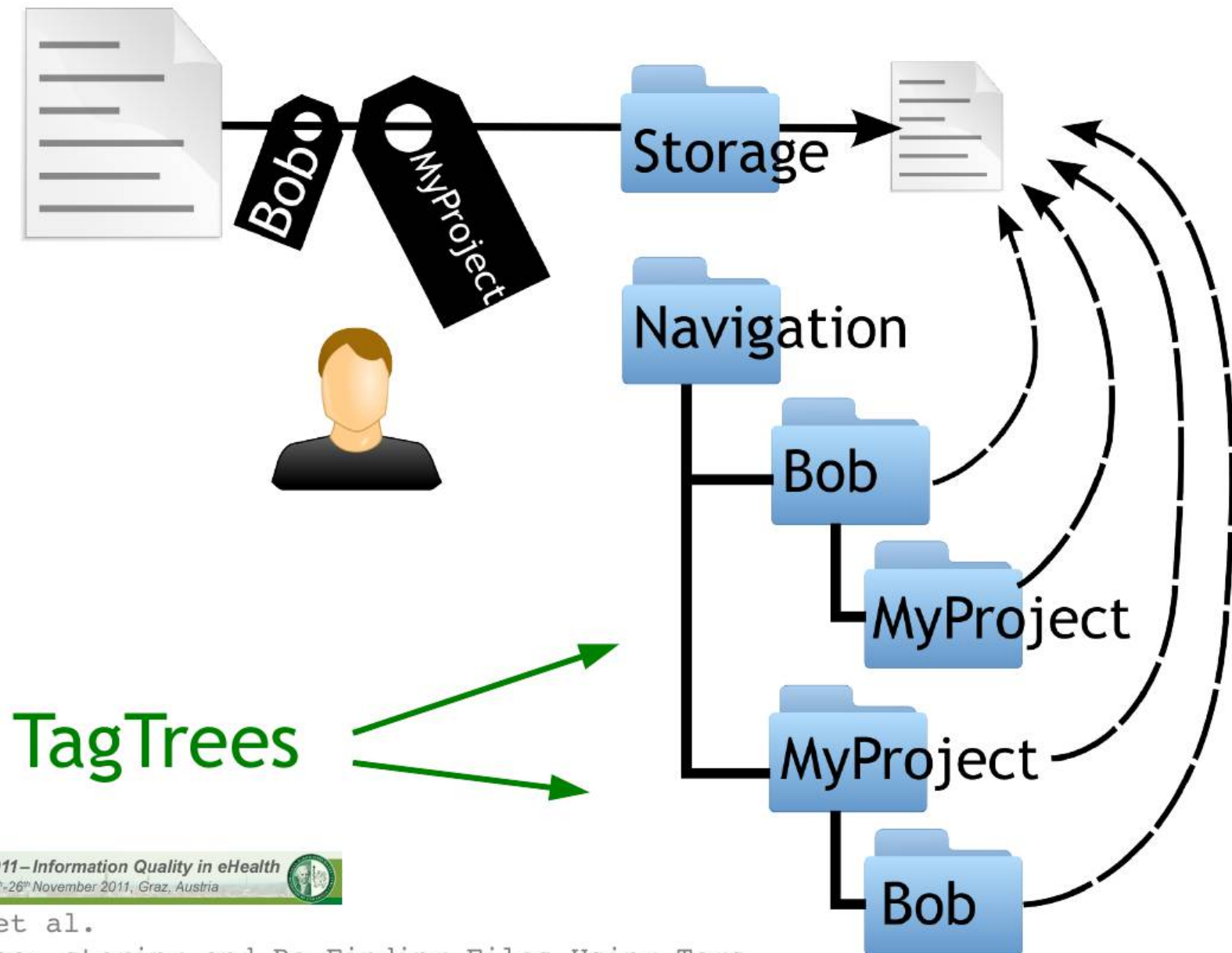


# background action





# background action



tagtrees

Getting the most out of tags

Demo







# Thank you!

Learn how to automate repetitive tasks

Define and use your personal controlled vocabulary

Learn to use an RSS/Atom feed solution and follow interesting sources

## Karl-Voit.at

[Karl-Voit.at/tags/pim/](https://Karl-Voit.at/tags/pim/)

[@publicvoit@Mastodon.social](https://Mastodon.social/@publicvoit)

Twitter [@novoid](https://twitter.com/novoid)

### A summary of this talk with all links:

<http://Karl-Voit.at/managing-digital-photographs/>