

# Manage All Your Tasks With TaskWarrior

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My story...

I procrastinate



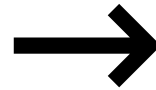
Terrible  
memory

# Task management

## \*essential\*

Tried dozens  
of systems

"Simple and Easy"



Missing features



Proprietary



I can't add features

I can hack  
things in



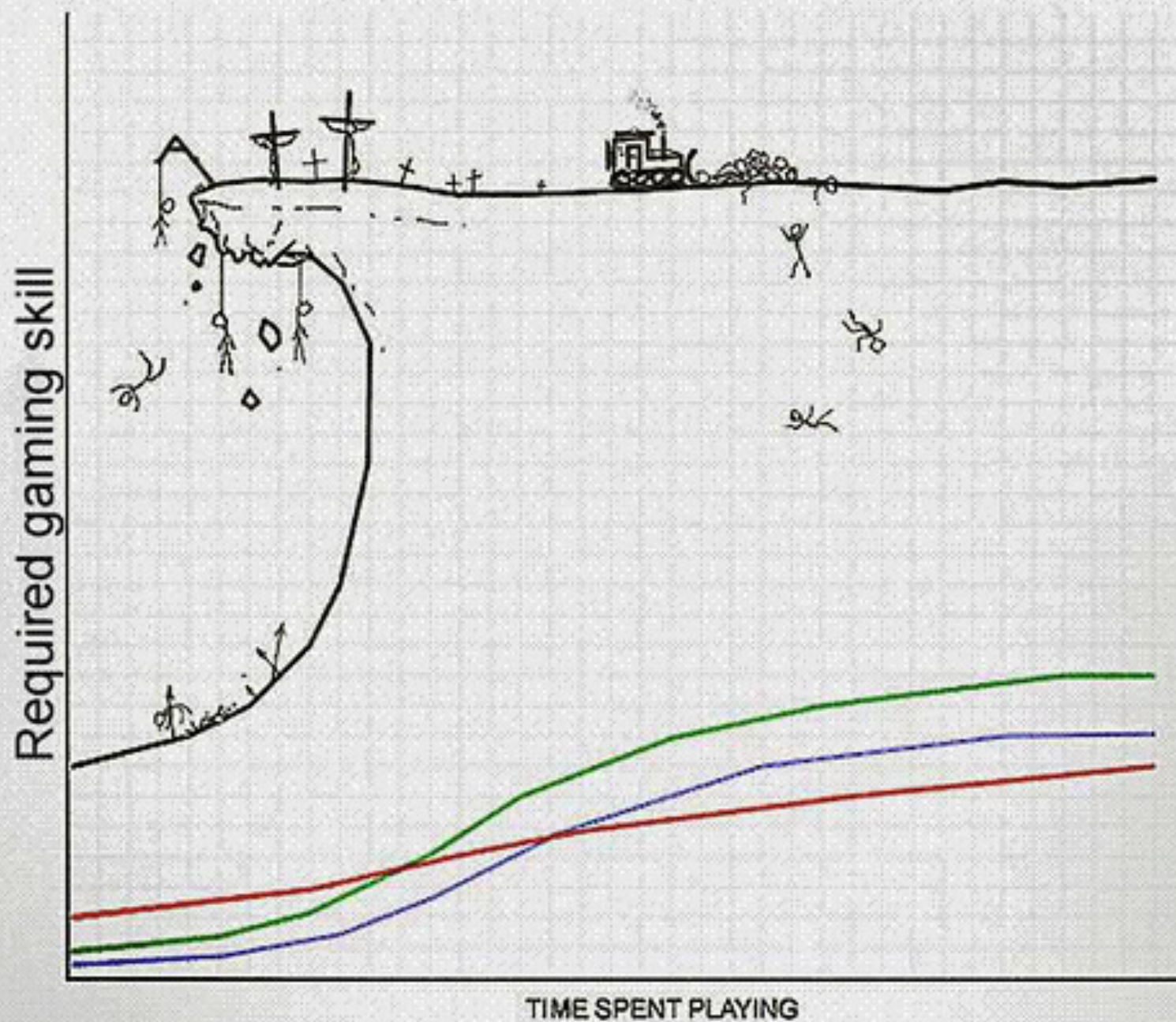
~\$



Shell-based  
Text-oriented

# Task Management System

# Learning curve of popular games



■ Halo

■ Starcraft

■ World of Warcraft

■ Dwarf Fortress



Most task systems  
do not work  
for most people

TaskWarrior is  
workflow agnostic

TaskWarrior may  
not be for you



Tour of features  
I use the most



## TASKWARRIOR 2.6.0

### Command Reference

#### Docs

<http://taskwarrior.org>

#### Q&A

<http://answers.tasktools.org>

#### Support

[support@taskwarrior.org](mailto:support@taskwarrior.org)

#taskwarrior on freenode

#### Help

task help  
man task  
man taskrc  
man task-color  
man task-sync

#### Basic Usage

```
task add Pay the bills
task add Call the bank
task list
task 1 modify due:Friday
task 1 done
task 2 delete
```

#### Escape shell characters:

```
task add John's birthday
```

#### Quote shell characters:

```
task add "John's birthday"
```

#### Escape These:

```
$ ! ' " ( ) ; \ ' * ?
{ } [ ] < > | & % # ~
```

#### Debugging

```
task rc.debug=1
task diagnostics
task rc.debug.tls=<level>
task rc.debug.parser=<level>
task rc.debug.hooks=<level>
task rc.hooks=0|1 ...
```

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P Beckingham  
F Hernandez  
D Deimeke

Revised 2016-11-25

### Syntax:

### task

### <override>

### <filter>

### <command>

### <modifications>

#### Runtime Override

```
rc.<variable>=<value>
```

#### Config File Override

```
rc:<file>
```

#### Parser Override

```
task <parsed> — <unparsed>
```

#### Configuration

```
task show [<var>]
task config <var> <value>
task config <var>
task config <var> ''
```

#### UDA Configuration

```
uda.NAME.type=TYPE
uda.NAME.label=LABEL
uda.NAME.value=VAL, VAL, ...
```

#### TYPE:

string, date, duration,  
numeric

#### Sync Configuration

```
taskd.server
taskd.ca or taskd.trust
taskd.certificate
taskd.key
taskd.credentials
taskd.ciphers
```

#### Date Formats

##### With Time

```
rc.dateformat=YMD_HNS
```

##### Just Date

```
rc.dateformat=YMD
```

#### Annotations

```
Add: task <id> annotate foo
Remove: task <id> denotate foo
```

#### Annotation en-passant

```
task <id> done Finished it
task <id> delete Not needed
```

#### Synchronize

```
task sync init (first time)
task sync
```

#### Import/Export

```
task [<filter>] export
task import <file>
```

Used for writing extensions, wrappers.

#### Filter

Expression of terms with values,  
operators.

```
<term> [<op> <term> ...]
```

#### Terms

```
<attr>:<value>
<attr>.<modifier>:<value>
<DOM>
<ID range>
<UUID list>
```

#### ID Ranges - use ID or UUID

```
task 1 info
task 1-10 info
task 1,3,5,6-10,13 info
task 1 2 3 info
```

#### Searching for text

```
task desc.contains:foo
task /foo/
task description ~ foo
```

#### Operators

and	conjunction
or	disjunction
xor	exclusive or
+	add
-	subtract
*	multiply
/	divide
%	modulus
^	exponent
~	regex match
!~	regex non-match
<	less than
<=	less than or equal
=	exact equal
!=	exact unequal
=	partial equal
!=	partial unequal
>=	greater or equal
>	greater than
_hashtag_	has tag
_notag_	hasn't tag
( )	precedence

#### Attribute Modifiers

```
task urgency.under:4 list
task proj.endswith:work list
```

before (under, below)

after (over, above)

none

any

is (equals)

isn't (not)

has (contains)

hasnt

startswith (left)

endswith (right)

word

nonword

#### Report Commands

(Run 'task reports')

```
active
all
blocked
blocking
burndown.daily
burndown.monthly
burndown.weekly
completed
ghistory.annual
ghistory.monthly
history.annual
history.monthly
information
list
long
ls
minimal
newest
next
oldest
overdue
projects
ready
recurring
summary
tags
timesheet
unblocked
waiting
```

#### Write Commands

```
add
annotate, denotate
append
config
delete
done
duplicate
edit
import
log
modify
prepend
start, stop
synchronize
undo
```

#### Read Commands

```
<report>
info
count
export
```

#### Misc Read Commands

```
calendar
colors
columns
count
diagnostics
execute
export
help
ids, uuids
logo
report
show
stats
udas
version
```

#### Modifications

##### Set

```
<attribute>:<value>
```

##### Remove

```
<attribute>:
```

##### Substitute

```
/from/to/g
/from/to/
```

##### Add Dependency

```
depends:<id>[,...]
```

##### Remove Dependency

```
depends:-<id>[,...]
```

##### Tag

```
+foo
```

##### Untag

```
-foo
```

#### Date Symbols

```
yesterday
today
now
tomorrow
someday
easter
tuesday
23rd
```

#### Period Symbols

hourly	1hr
daily	5days
weekly	2wks
monthly	3months
quarterly	1q
annual	2years

#### Document Object Model (DOM)

```
<id|uuid>.<attribute>
rc.<name>
system.<version|os>
```

#### Examples

```
task _get 123.description
task add ... due:123.due
task _get rc.dateformat
task _get 123.uuid
```

#### Examples

```
Stop parsing: task add - pro:a /from/to/ +foo
Rename proj: task project:OLD modify project:NEW
Correction: task <id> modify /incorrect/correct/g
Hide until: task <id> modify wait:<date>
Expire task: task <id> modify until:<date>
Just data: task rc.verbose=nothing ...
```

```
Filter: task \( pro:Home or pro:Garden \) and +weekend
Filter: task \( pro:Home or pro:Garden \) +weekend
```

#### Abbreviations

```
task project:Home list
task project:Home lis
task pro:Home li
```

#### Task Attributes

ID	unmodifiable
UUID	unmodifiable
urgency	unmodifiable

description  
project  
priority  
tags  
status

depends  
recur

entry	created
wait	hide until
scheduled	ready
start	started
due	due
end	done/delete
until	
modified	last mod

UDAs (Try: task uda)

#### Special Tags

```
+next
+nonag
+nocal
+nocolor
```

#### Virtual Tags

+DUE	+OVERDUE
+DUETODAY	+TODAY
+YESTERDAY	+TOMORROW
+WEEK	
+MONTH	
+YEAR	
+BLOCKED	+UNBLOCKED
+BLOCKING	
+ACTIVE	+SCHEDULED
+READY	+UNTIL
+WAITING	
+ANNOTATED	+TAGGED
+PARENT	+CHILD
+PENDING	+COMPLETED
+DELETED	

I'll teach  
what I know

Let's see  
examples!



```
$ task add Buy plane tickets  
Created task 1.
```

```
$ task add Book hotel  
Created task 2.
```

```
$ task add Write talk on TaskWarrior  
Created task 3.
```

\$ task

ID	Age	Description	Urg
==	====	=====	=====
1	2min	Buy plane tickets	1.8
2	2min	Book hotel	1.8
3	1min	Write talk on TaskWarrior	1.8

3 tasks

```
$ task 1 done
Completed task 1 'Buy plane tickets'.
Completed 1 task.
```

```
$ task
```

ID	Age	Description	Urg
==	====	=====	=====
1	7min	Book hotel	1.8
2	6min	Write talk on TaskWarrior	1.8

```
2 tasks
```

# Tasks

# renumber

Keeping things  
organised

Tags

Unstructured  
Many-to-many



```
$ task add Buy mini-screwdriver set  
    +shopping
```

```
$ task add Ping client on invoice payment  
    +phone +cyberdyne
```

```
$ task +LATEST modify -cyberdyne +shinra
```

Great for  
searching!

\$ task +phone

I use for:

- Resource needed (phone/location)
- People involved
- "Costly" tasks (more urgent)

Automatic  
meta-tags

\$ task +YEAR

\$ task +QUARTER

\$ task +MONTH

\$ task +WEEK

\$ task +TOMORROW

\$ task +TODAY

\$ task +OVERDUE

\$ task - SCHEDULED  
\$ task - PROJECT  
\$ task - UNTIL



# Projects

# Hierarchical

```
$ task add Book Mordor transport  
    project:travel.mordor.logistics
```

```
$ task add Book Mordor accommodation  
    project:travel.mordor.logistics
```

```
$ task add Renew Visa  
    project:travel.mordor.legal
```

```
$ task /Mordor transort/ done
```

```
Completed task f08d6fe7 'Book MordorCon transport'
```

```
Completed 1 task.
```

```
Project 'travel.mordor.logistics' is now 50% complete (1 of 2 tasks remaining)
```

Great for  
multi-step  
tasks

```
$ task projects
```

Project	Tasks
=====	=====
travel	40
confoo	3
yvr17	3
lca18	2
nz17	15
shopping	5
oscon17	11
tryswift17	6

```
$ task project:travel
```

```
$ task project:travel.conf
```

Moving house?  
Use a project!



# Contexts!

```
$ task context define work  
    project:work
```

```
$ task context define cyberdyne  
    project:work.cyberdyne
```

```
$ task context define personal  
    project.not:work project.not:fun -fun
```

```
$ task context define fun  
    project:fun or +fun
```

# Focus on cyberdyne tasks  
\$ task context cyberdyne

# Get some personal work done  
\$ task context personal

# Relaxation time!  
\$ task context fun

```
# List available contexts  
$ task context list
```

```
# Show current context  
$ task context show
```

```
# Clear current context  
$ task context none
```

# Taking Notes

# Annotations

```
$ task 31 annotate "Don't forget to discuss annotations"
```

```
Annotating task c7318895 'Write full-length talk on using taskwarrior'.  
Annotated 1 task.
```

```
Project 'speaking.new' is 50% complete (1 of 2 tasks remaining).
```

\$ task

ID	Age	P	Project	Tags	Description	Urg
==	====	=	=====	=====	=====	=====
31	5mo	H	speaking.new	confoo	Write full-length talk on using taskwarrior 2017-12-03 Don't forget to discuss annotations	18.3



Auto  
timestamp

Show  
by default

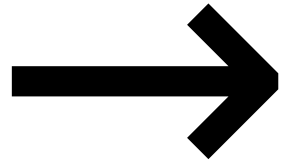
I prefer  
description.count

ID	Age	P	Project	Tag	Description	Urg
31	5mo	H	speaking.new	confoo	Write full-length talk on using taskwarrior [2]	18.3

# Working with dates

```
$ task add Send Dad birthday card  
    wait:2017-12-12
```

Wait



Hide until

\$ task waiting

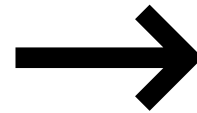


```
$ task 42 modify wait:tomorrow
```

```
$ task 42 modify wait:+5d
```

```
$ task add Send Dad birthday card  
    wait:2017-12-12  
    schedule:2017-12-15
```

# Schedule



Urgency boost  
after this date

Scheduled

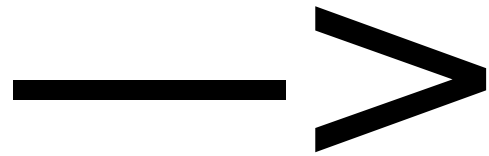
*hides*

tasks on

`task ready`

```
$ task add Send Dad birthday card  
    wait:2017-12-12  
    schedule:2017-12-15  
    until:2017-12-25
```

Until



Delete after  
this date

Relative dates!



```
$ task add Send Dad birthday card  
    due:2017-12-18  
    schedule:"due - 3d"  
    wait:"due - 6d"  
    until:"due + 3d"
```

Relative to  
other tasks

```
$ t /conference/ ids  
8
```

```
$ task add Book flights  
    schedule: "8.due - 30d"  
    until: "8.due"
```

Amazing for  
scripting!

Urgency?

Some tasks  
more important

```
$ task 2 modify due:+7d
```

```
Modifying task 2 'Write talk on TaskWarrior'.  
Modified 1 task.
```

\$ task

ID	Age	Due	Description	Urg
==	=====	=====	=====	=====
2	17min	6d	Write talk on TaskWarrior	7.4
1	17min		Book hotel	1.8

2 tasks



Urgency is  
calculated

Tags, Projects,  
Deadlines, Priorities



More Urgency

Highly  
configurable

```
~/ .taskrc
```

```
urgency.user.tag.costly.coefficient = 3.0
```

```
urgency.user.project.leisure.coefficient = 0
```

\$ task 31

Name	Value
=====	=====
ID	31
Description	Write full-length talk on using taskwarrior 2017-12-03 09:55:54 Sample annotation
Status	Pending
Project	speaking.new
Entered	2017-07-06 00:09:01 (5mo)
Due	2017-12-04 10:56:05
Last modified	2017-12-03 09:55:54 (11h)
Tags	confoo
Virtual tags	ANNOTATED DUE MONTH PENDING READY TAGGED TOMORROW UDA UNBLOCKED YEAR PROJECT PRIORITY
UUID	c7318895-be3e-4f4d-adcc-c7db95684ad7
Urgency	17.97
Priority	H

project	1 *	1 =	1
annotations	0.8 *	1 =	0.8
tags	0.8 *	1 =	0.8
due	0.712 *	12 =	8.54
age	0.411 *	2 =	0.822
UDA priority.H	1 *	6 =	6
		=====	
			17.97

# Priority?

```
$ task 42 modify priority:H
```



```
$ task 42 modify pri:H
```

# Priority:

- High
- Medium
- Low
- None (default)

# But I like:

- High
- Medium
- None (default)
- Low

```
uda.priority.values = H,M,,L
```

```
urgency.uda.priority.L.coefficient=0
```

```
urgency.uda.priority..coefficient=1.8
```

# Tools and Plugins

Taskopen

Opens  
resources  
in annotations

```
$ task add Track tooth-flossing on Beeminder  
Created task 12.
```

```
$ task 12 annotate https://beeminder.com/  
Annotated 1 task.
```



\$ taskopen 12

# Track It, Back It

Your goals can be anything quantifiable – weight, pushups, minutes spent on Facebook, points on Duolingo. Answer with your number when Beeminder asks – or connect a device/app below to auto-report – and we'll show your progress and a Yellow Brick Road to follow to stay on track. If you go off track, you pledge money to stay on the road the next time. If you go off track again, we charge you.

[START YOUR GOAL](#) [LEARN MORE](#)



Automatically (bee)mind data from:















































```
$ task add Finish report  
Created task 13.
```

```
$ task 13 annotate ~/report.xlsx  
Annotated 1 task.
```

```
$ taskopen 13
```

LibreOffice!

```
$ task annotate 42 Notes  
$ taskopen 42
```

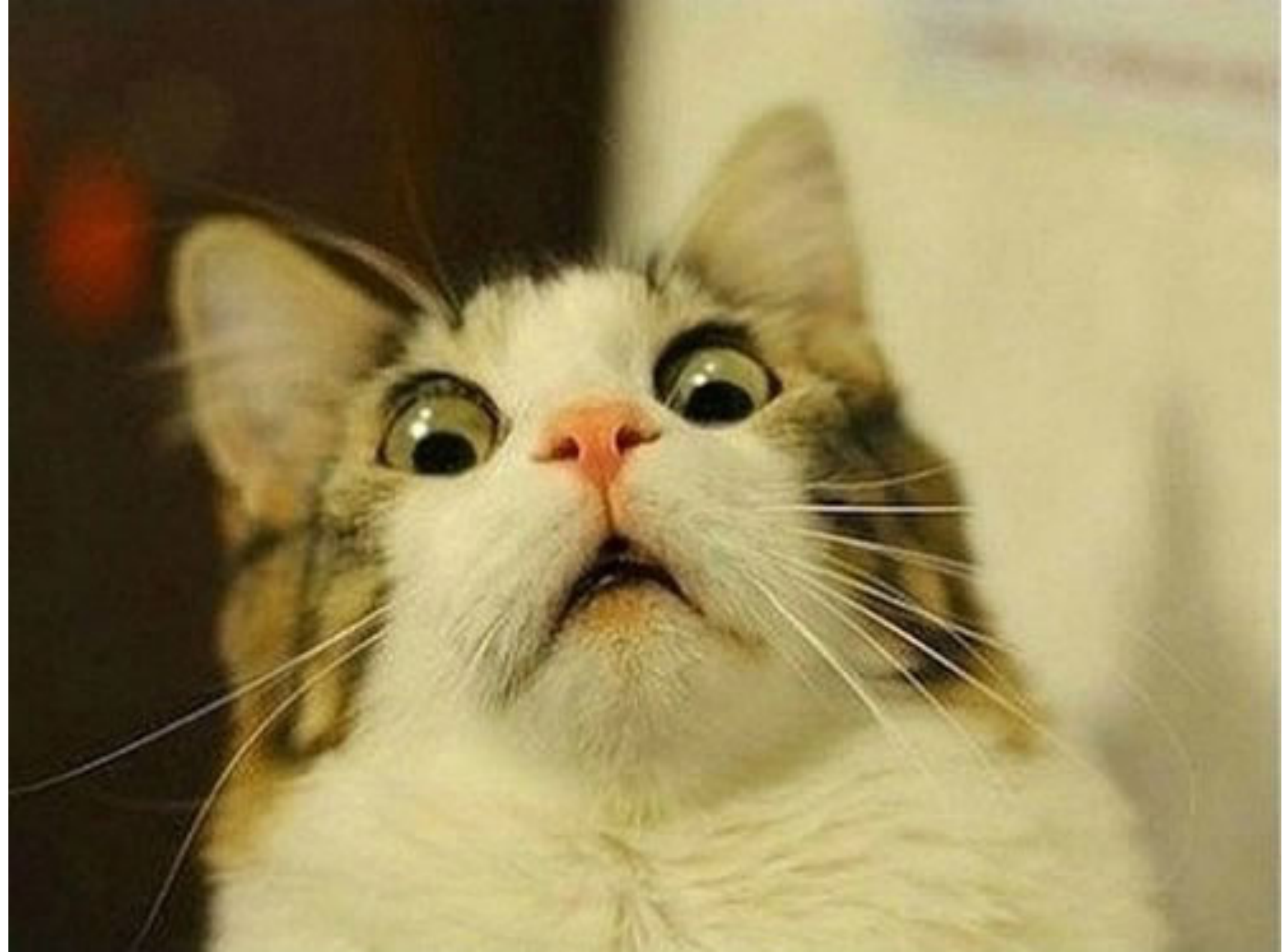
Vim!

Has lots  
of options

Working  
with others



BugWarrior



Sync remote  
issue trackers  
to bugwarrior

Github

Trello

Gmail

JIRA

Gitlab  
Bitbucket  
Pagure  
Bugzilla  
Trac  
Megaplan  
Teamlab  
Redmine  
Taiga  
Gerrit  
Activecollab  
Phabricator  
VersionOne  
YouTrack

All my  
tasks in  
one place

~/ .bugwarriorrc

```
[github]  
service = github  
github.login = pjf  
github.token = secret
```



Use Trello  
with  
my partner

```
[trello-kate]
service = trello
trello.api_key = secret
trello.token = secret
trello.exclude_lists = Done
trello.include_boards = secret-specific-board
```

Only tasks  
assigned to me

```
trellio.only_if_assigned = pfenwick
```

Customise title  
and project

```
trello.description_template = {{trellocard}}  
trello.project_template = kate.trello
```

Per-board  
settings

Done in Trello



Done in TaskWarrior



```
[gmail]  
service = gmail  
gmail.login_name = paul.j.fenwick@gmail.com  
gmail.query = in:pinned
```

Description  
manipulation

```
gmail.description_template = Gmail: {{gmailsubject}}  
gmail.static_fields = description
```

# Enable/Disable Services

```
[general]  
targets = trello-kate, trello-work, gmail
```

I ignore  
my todo  
lists

I can't ignore  
my shell

Shell prompt  
integration



~/ .bashrc

URGENT=" ! "

DUETOMORROW="  "

DUETODAY="🙊"

OVERDUE="☠"

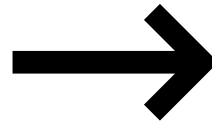
```
function task_indicator {  
    TASK="task"
```

```
if [ ` $TASK +READY +OVERDUE count ` -gt "0" ]; then  
    echo "$OVERDUE"
```

```
elif [ ` $TASK +READY +DUETODAY count` -gt "0" ]; then
    echo "$DUETODAY"
elif [ ` $TASK +READY +TOMORROW count` -gt "0" ]; then
    echo "$DUETOMORROW"
elif [ ` $TASK +READY urgency > 10 count` -gt "0" ]; then
    echo "$URGENT"
else
    echo '$'
fi
```



+READY

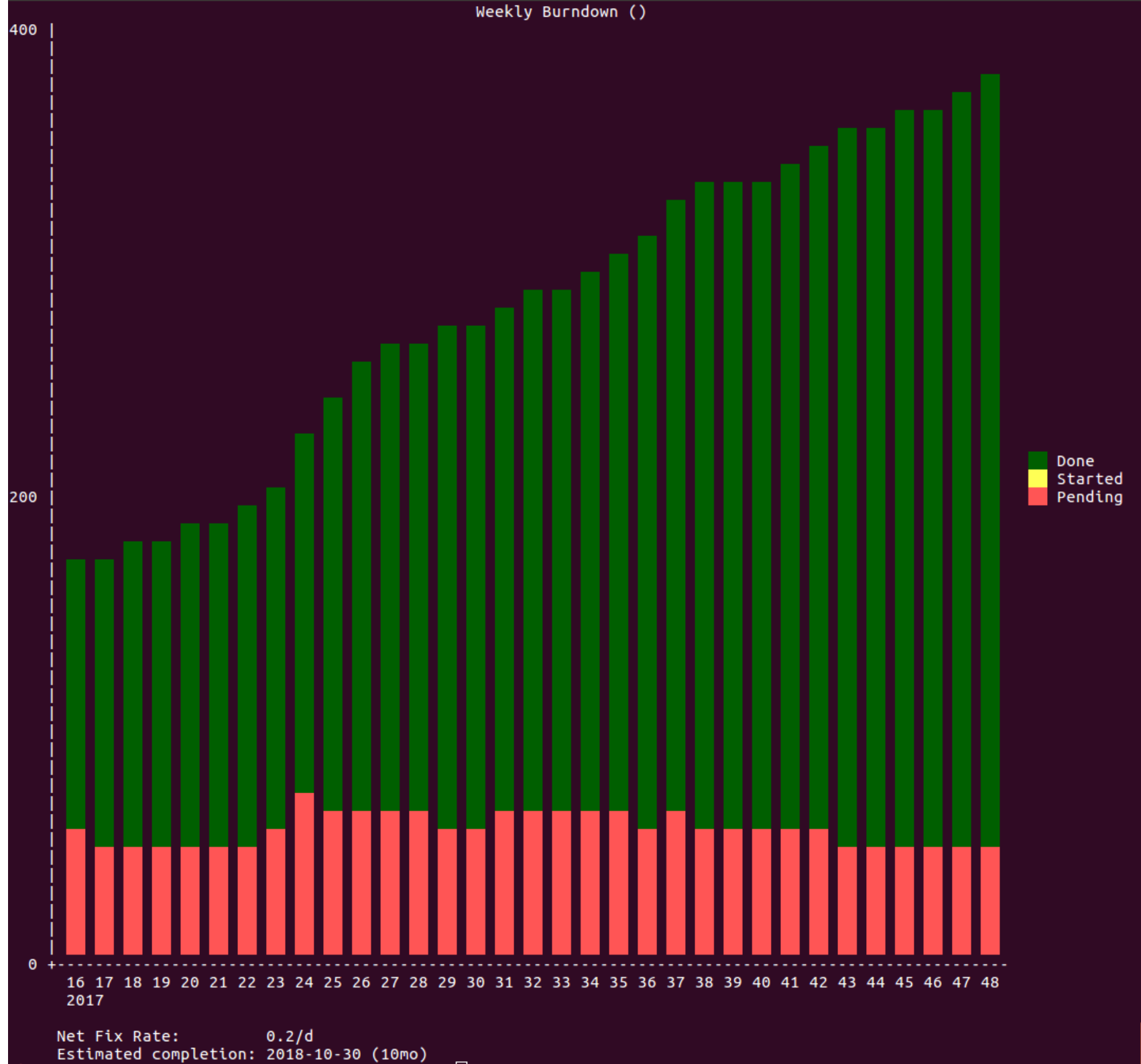


Hidden tasks  
don't count

```
PS1="... $(task_indicator) ..."
```

```
PS1="[e]0;u@h: wa]"'$(BRANCH=`git rev-parse --abbrev-ref HEAD 2> /dev/null`;
if [ -n "$BRANCH" ]; then DIRTY=`git status --porcelain --untracked-files=no 2> /dev/null`;
if [ -n "$DIRTY" ]; then echo "'$BRed'$CROSS "; else echo "'$BGreen'$TICK "; fi; fi;)' "
$Color_Off${debian_chroot:+($debian_chroot)}w$BYellow$(__git_ps1)$(task_indicator) $Color_Off"
```

Graphical  
reports





Legend: Added, Completed, Deleted

December 2017							January 2018							February 2018							March 2018										
	Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su		Mo	Tu	We	Th	Fr	Sa	Su
48					1	2	3	1	1	2	3	4	5	6	7	5				1	2	3	4	9				1	2	3	4
49	4	5	6	7	8	9	10	2	8	9	10	11	12	13	14	6	5	6	7	8	9	10	11	10	5	6	7	8	9	10	11
50	11	12	13	14	15	16	17	3	15	16	17	18	19	20	21	7	12	13	14	15	16	17	18	11	12	13	14	15	16	17	18
51	18	19	20	21	22	23	24	4	22	23	24	25	26	27	28	8	19	20	21	22	23	24	25	12	19	20	21	22	23	24	25
52	25	26	27	28	29	30	31	5	29	30	31					9	26	27	28					13	26	27	28	29	30	31	

Legend: today, due, due-today, overdue, weekend, holiday, weeknumber.

YAML

Exports



# Build Your Own Reports

# Hooks

# Recurring Tasks

# Advanced Filters

# Online Sync

inthe.am

Only covered  
a fraction

Expect learning  
to take time

TaskWarrior  
grows with you



Thank you!

@pjf

<https://github.com/pjf/talks/tree/master/taskwarrior>

Questions?

<https://github.com/pjf/talks/tree/master/taskwarrior>

# Bonus Section

UDA?

User Defined  
Attribute

Add unstructured  
data to tasks

~/ .taskrc

```
uda.customer.type = string  
uda.customer.label = Customer
```

```
task add Bake cake customer:'Aperture Science' due:Sunday
```



Protect against  
typos?

```
uda.customer.string = Tyrell,Cyberdyne,Aperture Science,Shinra,Umbrella
```

# Types:

- string
- date
- duration
- numeric

Super-useful  
for extensions!

**Tips!**

Hard deadlines  
due:

Soft deadlines  
scheduled:

Generously use  
until:



Delete  
generously

\$ task 31 done Presented talk at ConFoo  
\$ task 23 delete No longer relevant

Review tasks  
regularly!



