# Taskwarrior – What's next? Task management on the commandline

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OpenRheinRuhr 2011

November 2011





## Dirk Deimeke (that's me)

- Maried, two dogs
- ► Born in Wanne-Eickel
- ► Living in Grüt (2008 emigrated to Switzerland)
- ► Senior Unix Systems Administrator in Zürich
- ► More http://d5e.org/

## Dirk Deimeke (Taskwarrior)

- ► I first saw Taskwarrior at Ubucon 2009 in a lightning talk of Federico Hernandez, one of the core developers.
- ► Started to use it in the beginning of 2010.
- ► Still enthusiastic about it! ;-)
- ▶ In the middle of 2010 I joined the Taskwarrior Core Team
- ▶ I like working in an international team
  - ► Watertown (Massachusetts, USA)
  - Gothenburg (West Gothland, Sweden)
  - ► Braunschweig, (Lower Saxony, Germany)
  - Richmond (Virginia, USA)
  - ► Bonn (North Rhine-Westphalia, Germany)
  - ► Toronto (Ontario, Canada)
  - ► Gruet (Zurich, Switzerland)
- ► http://taskwarrior.org/
- ► http://d5e.org/taskwarrior (German) own blog-articles



## **About this session**

- ► What is this all about?
  - This is about Taskwarrior, an efficient tool for task management. Techniques for time management are not part of this session.
- ► Why do you use the beta-Version?
  With Taskwarrior 2.0.0 a new syntax will be introduced and it makes no sense to show the old commands.

#### Attention!

- ► Feel free to ask any questions!
- ▶ If you find any errors, please tell me.

## Project founder: Paul Beckingham

- ▶ I started out using Gina Trapani's todo.sh, which was great, but I soon wanted features that would have been difficult to implement in a shell script, so I wrote my own.
- ▶ It stemmed from the fact that a todo program needs to be simple to use, and unobtrusive, otherwise it's a hassle. But it can't be too simple.
- ▶ If you go to the trouble of capturing this information, it seems wasteful not to leverage it. So it has a lot of features, but tries to remain simple to use.
- ► There are many different methodologies people use for managing their work, and taskwarrior tries to walk a line through the middle of all that, with features for all the different approaches.
- ► Taskwarrior is intended to scale with the user, from very simple straightforward usage up to quite sophisticated task management.

## Reasons for Taskwarrior

#### **Taskwarrior**

- ▶ is easy to learn.
- ▶ grows along with the work.
- ▶ is unbelievably powerful.
- ▶ is very fast.
- ▶ is easily extensible.
- ▶ is platform independent:
  - ▶ Most flavours of Unix and Linux, including Mac OS X
  - ► Windows with Cygwin
  - ▶ via SSH from my mobile
  - ▶ http://taskwarrior.org/w/Platforms
- ► is actively developed.
- ► can be influenced by users (feature requests).
- ► has excellent and very friendly support.



## 5 steps to install from source

All you need to compile is gcc, cmake and make.

- 1. Download of recent version
- 2. tar xzf task-2.0.0.beta4.tar.gz
- 3. cmake . (not ./configure!)
- 4. make
- 5. sudo make install



\$ task version

## Test of your installation

A configuration file could not be found in /home/user

Would you like a sample /home/user/.taskrc created, so taskwarrior can proceed? (yes/no) yes

task 2.0.0.beta4 built for linux Copyright (C) 2006 — 2011 P. Beckingham, F. Hernandez.

Taskwarrior may be copied only under the terms of the MIT license, which may be found in the taskwarrior source kit.



## A simple example, part 1

```
Taskwarrior
 task add Pay rents # Our first task
Created task 1.
 task add Check Taskwarrior # and now the second one
Created task 2.
$ task list # lists all open tasks
<u>ID Project Pri Due Active Age Description</u>
                            5s Check Taskwarrior
                           10s Pay rents
2 tasks
 task 2 start
Started 2 'Check Taskwarrior'.
$ task list
<u>ID Project Pri Due Active Age Description</u>
                         * 16s Check Taskwarrior
                           21s Pay rents
2 tasks
```

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## A simple example, part 2

```
Taskwarrior
 task 2 stop
Stopped 2 'Check Taskwarrior'.
$ task 2 done
Completed 2 'Check Taskwarrior'.
Marked 1 task as done.
$ task list
<u>ID Project Pri Due Active Age Description</u>
                            56s Pay rents
 task
```



## Commands so far

- ► task add Adds a new task to the task list.
- task list Provides a standard listing of tasks.
- task start Marks the specified tasks as started.
- task stop Removes the start time from the specified task.
- task done
  Marks the specified task as done.



## That's it!

```
task 1 annotate Try the blue one first
Annotated 1 with 'Try the blue one first'
 task list
D Project Pri Started Due Recur Age Tags Description
                         8/26/2010 weekly 4wk
2 software High
                                           5wk www Visit http://taskwarrior.org
4 software
                                                   Try out latest FireFox beta
 tasks
 task list due.before:eow
ID Project Pri Started Due Recur Age Tags Description
                     8/26/2010 weekly 4wk
3 gtd
                                               Review task list
 ompleted 2 'Visit http://taskwarrior.org'.
'roject 'software' is 33% complete (2 of 3 tasks remaining).
    nave higher priority tasks
```

## Thanks for your attention!

dirk@deimeke.net

http://taskwarrior.org/

## Just kidding ...

### There is a lot more to explore.

Even the commands from the last section are more mighty than they seem.

- task add <mods>task <filter> list
- ► task <filter> start <mods>
- ► task <filter> stop <mods>
- ► task <filter> done <mods>

To get an overview, take a look at the cheat sheet (pdf, 145kB).

## task <filter> command <mods>

- ▶ Is the basic usage of all task related write commands.
- Write commands can operate on one task or a group of tasks or even on all tasks.
- Every command maybe abbreviated up to the minimum that is necessary to identify a single command.
- ► Filters can be anything from nothing to simple IDs further to regular expressions or Boolean constructs.
- Modifications can be either a change of description, a change of dates or anything else that changes a task.
- ► In our simple example we already used the write commands add, done, start and stop.

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## **Scripts**

```
Taskwarrior
$ ls $PWD/*
/usr/local/share/doc/task/scripts/add-ons:
export-csv.pl
               export-xml.pl export-yad.pl
                                                  import-yaml.pl
export-html.pl export-xml.py export-yaml.pl
                                                  update-holidays.pl
export-ical.pl export-xml.rb import-todo.sh.pl
/usr/local/share/doc/task/scripts/bash:
task completion.sh
/usr/local/share/doc/task/scripts/extensions:
command.lua dom.lua format.lua program hook.lua task hook.lua uda.lua
/usr/local/share/doc/task/scripts/fish:
task.fish
/usr/local/share/doc/task/scripts/vim:
ftdetect README syntax
/usr/local/share/doc/task/scripts/zsh:
task
 . /usr/local/share/doc/task/scripts/bash/task completion.sh
 cp -r /usr/local/share/doc/task/scripts/vim ~/.vim
```



## Most important commands

These are the most important commands, just because I use them most :-)

- ▶ task <filter> modify
  - The name says it, it modifies tasks according to the filter used.
- task <filter> edit

This starts your favourite editor with the tasks you want to change. (Remember the syntax highlighting for vim?)

- ▶ task undo
  - Reverts the most recent change to a task.
- task help
  - Gives an overview of implemented commands and custom reports.
- man task (taskrc, task-tutorial, task-color, task-fag, task-synch) Show the (almighty) man-page(s). Unlike the man-pages of many other programs they are extremely helpful and full of information and examples. Try them!

## Set dateformat (check "man taskrc")

```
Taskwarrior
 task show dateformat
Config Variable Value
dateformat
                      m/d/Y
dateformat.annotation m/d/Y
dateformat.holiday
                      YMD
dateformat.report
                      m/d/Y
Some of your .taskrc variables differ from the default values. These are highli
ghted in <mark>color</mark> above.
$ task config dateformat YMD
Are you sure you want to add 'dateformat' with a value of 'YMD'? (y/n) y
Config file /home/user/.taskrc modified.
$ task config dateformat.annotation YMD
Are you sure you want to add 'dateformat.annotation' with a value of 'YMD'? (y/n
Config file /home/user/.taskrc modified.
$ task config dateformat.report YMD
Are you sure you want to add 'dateformat.report' with a value of 'YMD'? (y/n) y
Config file /home/user/.taskrc modified.
 # mv dateformat is YMD-HN
```



### Set weekstart

```
Taskwarrior
 task show weekstart
Config Variable Value
weekstart
                Sunday
Some of your .taskrc variables differ from the default values.  These are highli
ghted in <mark>color</mark> above.
$ task config weekstart Monday
Are you sure you want to add 'weekstart' with a value of 'Monday'? (y/n) y
Config file /home/user/.taskrc modified.
$ task show | wc -l # nearly everything can be customized
$ # try it yourself without '| wc -l'
```



- ► Relative wording today, yesterday, tomorrow
- Day number with ordinal 23rd, 3wks, 1day, 9hrs
- ► At some point or later later, someday
- ▶ Start / end of (work) week, calendar week (according to settings of weekstart), month, quarter and year sow, eoww, socw, eom, soq, eoy
- Next occurring weekday mon, tue, ..., sat, sun



## Due and wait

```
Taskwarrior
 task add due:20111231 "Celebrate Sylvester"
Created task 2.
$ task add due:Sunday "Drive home"
Created task 3.
$ task list
<u>ID Project Pri Due Active Age Description</u>
              20111231 29s Celebrate Sylvester
                              21h Pay rents
3 tasks
$ task 2 modify wait:20111201
Modified 1 task.
$ task list
<u>ID Project Pri Due Active Age Description</u>
                        32s Drive home
                              21h Pay rents
2 tasks
```



### Recurrence

```
Taskwarrior
$ task waiting
20111201 8m Celebrate Sylvester
 task
task 1 modify due:eom recur:monthly
Modified 1 task.
$ task list
ID Project Pri Due Active Age Description
            20111016 8m Drive home
2 tasks
 task recurring
ID Project Pri Due Recur Active Age Description
 task
 # task id changed from 1 (task modify) to 4
 # trv task 1 edit
```

## Recurrence modifiers

- hourly
- ► daily, day, 1da, 2da, ...
- weekdays
- ► weekly, 1wk, 2wks, ...
- biweekly, fortnight
- monthly
- ► quarterly, 1qtr, 2qtrs, ...
- semiannual
- ► annual, yearly, 1yr, 2yrs, ...
- ► biannual, biyearly, 2yr



## **Until and entry**

```
Taskwarrior
 task add due:eom recur:monthly until:20121231 "Pay installment for credit"
Created task 9.
 task add "Prepare slides for workshop"
Created task 10.
$ task 10 modify entry:yesterday
Modified 1 task.
$ task list
ID Project Pri Due Active Age Description
                                1h Drive home
                                1d Prepare slides for workshop
4 tasks
```



## Starting and stopping

```
Taskwarrior
 task list
ID Project Pri Due Active Age Description
                               1h Drive home
                                1d Prepare slides for workshop
4 tasks
 task 10 start
Started 10 'Prepare slides for workshop'.
 task list
                       Active Age Description
ID Project Pri Due
              20111016
                               1h Drive home
                                1d Prepare slides for workshop
 tasks
 task 10 stop
Stopped 10 'Prepare slides for workshop'.
```



### Attention!

Holiday has nothing in common with the German words "Ferien" or "Urlaub" (this would be vacation). (Public) Holiday means "Feiertag".

You can add holidays by either adding them via "task config" on the commandline or by adding them directly to the "/.taskrc-File or by including an external holiday definition.

On holidata.net you find a growing list of holiday dates, licensed CC-BY and offered by volunteers. Service was introduced by the Taskwarrior team, who is responsible for hosting and conversion to different formats.

## Add holiday

```
$ task config holiday.carnivalstart.name Carnival Start
Are you sure you want to add 'holiday.carnivalstart.name' with a value of 'Carni
val Start'? (v/n) v
Config file /home/user/.taskrc modified.
$ task config holiday.carnivalstart.date 20111111
Are you sure you want to add 'holiday.carnivalstart.date' with a value of '20111
111'? (y/n) y
Config file /home/user/.taskrc modified.
$ task cal
       October 2011
                                  November 2011
                                                              December 2011
     Mo Tu We Th Fr Sa Su
                                Mo Tu We Th Fr Sa Su
                                                            Mo Tu We Th Fr Sa Su
                             45 7 8 9 10 11 12 13 49 5 6
  41 10 11 12 13 14 15
                           46 14 15 16 17 18 19 20 50 12 13 14 15 16
  42 17 18 19 20 21 22 23
                            47 21 22 23 24 25 26 27 51 19 20 21 22 23
  43 24 25 26 27 28 29 30
                            48 28 29 30
                                                         52 26 27 28 29 30
_egend: <mark>today</mark>, <mark>due</mark>, <mark>due-today</mark>, <mark>overdue</mark>, weekend, <mark>holiday</mark>, weeknumber.
 # Holiday ist not highlighted by default
```

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## Calendar config with holiday

```
Taskwarrior
 task show calendar
Config Variable
                          Value
alias.export.vcalendar
                          export.ical
calendar details
                          sparse
calendar.details.report
                          list
calendar.holidavs
                          none
calendar.legend
                          yes
calendar offset
calendar.offset.value
color.calendar.due
                          color0 on color1
color.calendar.due.today
                          color15 on color1
color.calendar.holidav
                          color0 on color11
color.calendar.overdue
                          color0 on color9
color.calendar.today
                          color15 on rgb013
color.calendar.weekend
                          color235
color.calendar.weeknumber rab013
Some of your .taskrc variables differ from the default values.  These are highli
ghted in <mark>color</mark> above.
$ task config calendar.holidays full
Are you sure you want to add 'calendar.holidays' with a value of 'full'? (y/n) y
Config file /home/user/.taskrc modified.
```



## Calendar with holiday

```
Taskwarrior
 task cal
                                   November 2011
                                                                December 2011
       October 2011
     <u>Mo Tu We Th Fr Sa Su</u>
                                 Mo Tu We Th Fr Sa Su
                                                              Mo Tu We Th Fr Sa Su
                                     8 9 10 11 12 13
 41 10 11 12 13 14 15 16
                            46 14 15 16 17 18 19 20 50 12 13 14 15 16
 42 17 18 19 20 21 22 23 47 21 22 23 24 25 26 27 51 19 20 21 22 23 24 25
 43 24 25 26 27 28 29 30 48 28 29 30
                                                          52 26 27 28 29 30 31
Legend: <mark>today</mark>, <mark>due</mark>, <mark>due-today, overdue</mark>, weekend, <mark>holiday</mark>, weeknumber.
         Holiday
Date
20111111 Carnival Start
```



### Calendar with due tasks

```
Taskwarrior
$ task config calendar.details full
Are you sure you want to add 'calendar.details' with a value of 'full'? (y/n) y
Config file /home/user/.taskrc modified.
$ task cal
      October 2011
                               November 2011
                                                   December 2011
    <u>Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su</u>
                                                       Mo Tu We Th Fr Sa Su
                                  1 2 3 4 5 6 48
     3 4 5 6 7 8 9 45 7 8 9 10 11 12 13 49 5 6
 41 10 11 12 13 14 15 16 46 14 15 16 17 18 19 20 50 12 13 14 15 16
 42 17 18 19 20 21 22 23
                         47 21 22 23 24 25 26 27 51 19 20 21 22 23
 43 24 25 26 27 28 29 30 48 28 29 30
                                                    52 26 27 28 29 30 31
 44 31
.egend: today, <mark>due, due-today, overdue</mark>, weekend, <mark>holiday</mark>, weeknumber.
ID Project Pri Due Active Age Description
 tasks
 # did a 'task config calendar.holidays sparse' before
```

## Project and subproject

```
Taskwarrior
$ task 3 modify pro:ubucon
Modified 1 task.
The project 'ubucon' has changed. Project 'ubucon' is 0% complete (1 of 1 tasks
 remaining).
$ task 10 modify pro:ubucon.workshop
Modified 1 task.
The project 'ubucon.workshop' has changed. Project 'ubucon.workshop' is 0% comp
lete (1 of 1 tasks remaining).
$ task 4 modify pro:private
Modified 1 task.
The project 'private' has changed. Project 'private' is 0% complete (1 of 1 tas
ks remaining).
$ task list
ID Project
                   Pri Due Active Age Description
                                     * 5d Prepare slides for workshop
10 ubucon.workshop
3 tasks
```

## List of Projects

```
Taskwarrior
 task projects
Project Tasks Pri:None Pri:H Pri:M Pri:L
(none)
private
ubucon
ubucon.workshop
3 projects (10 tasks)
 task pro:ubucon ls
<u>ID Project</u>
                   Pri Description
10 ubucon.workshop
                       Prepare slides for workshop
2 tasks
 task 10 done
Completed 10 'Prepare slides for workshop'.
Marked 1 task as done.
Project 'ubucon.workshop' is 100% complete (0 of 1 tasks remaining).
```



```
Taskwarrior
$ task 3 modify +leipzig
Modified 1 task.
$ task 4 modify +banking
Modified 1 task.
$ task list
<u>ID Project Pri Due Active Age Description</u>
 4 private 20111031 3d Pay rents
2 tasks
 task +leipzig list
ID Project Pri Due Active Age Description
 task
```



### **Annotations**

```
Taskwarrior
 task list
ID Project Pri Due Active Age Description
2 tasks
 task 3 annotate "Do not forget your head"
Annotated 3 'Drive home'
Annotated 1 task.
$ task 4 annotate "Use wifes account"
Annotated 4 'Pay rents'
Annotated 1 task.
$ task list
ID Project Pri Due Active Age Description
  20111013 Use wifes account
2 tasks
 task 4 denotate "Use wifes account"
Found annotation '' and deleted it.
```



## Dependency, part 1

```
Taskwarrior
 task add "Send letter to Fritz"
Created task 10.
 task add "Write letter"
Created task 11.
$ task 10 modify depends:11
Modified 1 task.
$ task blocked
<u>ID Deps Project Pri Due Active Age Description</u>
                                 1m Send letter to Fritz
 task
 task unblocked
ID Deps Project Pri Due Active Age Description
                                     54s Write letter
 tasks
```



## Dependency, part 2

```
task 10 done
Task 10 is blocked by:
 11 Write letter
Completed 10 'Send letter to Fritz'.
Marked 1 task as done.
You have more urgent tasks.
 task undo
The last modification was made 10/13/2011
            Prior Values
                                               Current Values
            e3ba5a87-06a2-483a-ac33-a66c6bf- e3ba5a87-06a2-483a-ac33-a66c6bfb
depends
            b6a75
                                               6a75
description Send letter to Fritz
                                               Send letter to Fritz
entry
status
uuid
            39c5le45-7696-4712-8le1-cb88cab- 39c5le45-7696-4712-8le1-cb88cab6
end
The undo command is not reversible. Are you sure you want to revert to the prev
ious state? (v/n) v
Modified task reverted.
```



## Dependency, part 3

```
Taskwarrior
$ task 10,11 done
Task 10 is blocked by:
 11 Write letter
Completed 10 'Send letter to Fritz'.
Completed 11 'Write letter'.
Marked 2 tasks as done.
You have more urgent tasks.
 task blocked
No matches.
```



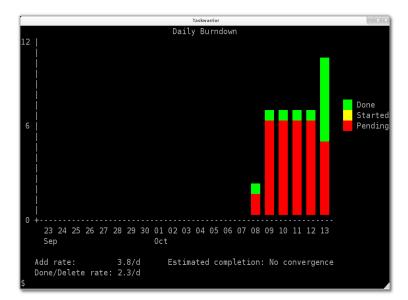
## Some predefined reports

See task reports for a full list (26 reports).

- ► active Lists active tasks matching the specified criteria
- all Lists all tasks matching the specified criteria, including parents of recurring tasks
- completed Lists completed tasks matching the specified criteria
- ▶ **information** Shows all data and metadata for specified tasks
- newest Shows the newest tasks
- ► next Lists the most urgent tasks
- ▶ **oldest** Shows the oldest tasks
- ▶ overdue Lists overdue tasks matching the specified criteria
- ▶ summary Shows a report of task status by project
- ▶ tags Shows a list of all tags used



### burndown.daily





## ghistory, history





# Report definitions

Taskwarrior		
<pre>\$ task show report.minim</pre>	al	
Config Variable report.minimal.columns report.minimal.descripti report.minimal.filter report.minimal.labels report.minimal.sort		
ghted in <mark>color</mark> above. \$ task show report.list	iables differ from the default values. These are highli	
report.list.columns	id,project,priority,due,start.active,entry.age,descript- ion	
report.list.description report.list.filter report.list.labels	Lists all tasks matching the specified criteria status:pending ID,Project,Pri,Due,Active,Age,Description due+,priority-,start-,project+,description+	
ghted in <mark>color</mark> above.	iables differ from the default values. These are highli	

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#### Dirks task list

```
Taskwarrior
 echo "
 report.ll.description=Dirks task list
 report.ll.columns=id,project,priority,due,due.countdown,tags,description
 report.ll.labels=ID,Project,Pri,Due,Countdown,Tags,Description
 report.ll.sort=due+,priority-,project+,description+
 report.ll.filter=status:pending
  " >> ~/.taskrc
 task ll
<u> ID Project Pri Due     Countdown Tags   Description  </u>
4 private H 20111031 -2 wks banking Pay rents
2 tasks
```





#### Set default command

```
Taskwarrior
 task show default
Config Variable Value
default.command next
defaultheight 24
defaultwidth
               80
Some of your .taskrc variables differ from the default values.  These are highli
ghted in <mark>color</mark> above.
$ task config default.command ll
Are you sure you want to add 'default.command' with a value of 'll'? (y/n) y
Config file /home/user/.taskrc modified.
 task
[task ll]
ID Project Pri Due Countdown Tags Description
4 private H 20111031 -2 wks banking Pay rents
 tasks
```



# **Filtering in general**

You can filter for any modifier. If you don't use a modifier description is searched for the term, which may be a regular expression, on the command line. Filters may be combined.

The following attribute modifiers maybe applied as well. Names in brackets can be used alternatively.

So a filter can look like "attribute.modifier:value".

- before, after
- none, any
- ► is (equals), isnt (not)
- ► has (contains), hasnt
- ► startswith (left), endswith (right)
- ▶ word, noword



#### **Searches**

```
Taskwarrior
 task
[task ll]
<u> ID Project Pri Due     Countdown Tags   Description</u>
4 private H 20111031 -2 wks banking Pay rents
                                          five
                                          four
                                          one
12
                                          three
                                          two
 tasks
 task pay
[task ll pay]
No matches.
 task /[Pp]ay/
[task ll /[Pp]ay/]
ID Project Pri Due Countdown Tags Description
4 private H 20111031 -2 wks banking Pay rents
1 task
```

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#### Attribute modifiers

```
Taskwarrior
 task due.before:20111020
[task ll due.before:20111020]
ID <u>Project Pri Due</u>
                       Countdown Tags Description
 task
 task project.not:ubucon
[task ll project.not:ubucon]
ID Project Pri Due Countdown Tags
                                         Description
4 private H 20111031
                          -2 wks banking Pay rents
                                          five
                                          four
                                         one
                                         three
                                         two
 tasks
```

Taskwarrior - What's next?

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# Combining

Taskwarrior	. a x
\$ task project:ubucon +banking [task ll project:ubucon +banking] No matches. \$ task project:ubucon -banking [task ll project:ubucon -banking]	
ID Project Pri Due Countdown Tags Description  3 ubucon 20111016 -2 days leipzig Drive home 20111013 Do not forget your hear	d
1 task \$ task status:completed project:ubucon [task ll status:completed project:ubucon] No matches. \$ task status:completed project:ubucon completed	
Complete Project Pri Age Description 20111013 ubucon.workshop 5d Prepare slides for workshop	
1 task \$ task show report.ll.filter	
Config Variable Value report.ll.filter status:pending	



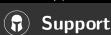
# This is by far not all

- task log for logging a task after it is already done.
- task diag to help support for diagnostic purpose.
- ► task shell
  a simple shell to get rid of the necessity to type "task" all the time.
- ► ... and many more!

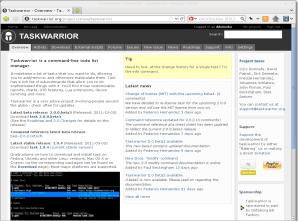
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#### taskwarrior.org



#### support@taskwarrior.org

#taskwarrior on freenode.net - @taskwarrior on Twitter or identi.ca

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Dirk Deimeke, Taskwarrior-Team, 2011, CC-BY dirk@deimeke.net d5e.org - dirk.deimeke.net