

# Taskwarrior

## Philosophy and Ecosystem

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Taskwarrior Academy @ TNG Technology Consulting GmbH

# Prolog

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**Dirk Deimeke – d5e.org**

# Very Simple Rules

- No “Sie” – please use “**Du**”!
- Questions? Ask!

**The right tool.**

**The right tool is reliable.**

**The right tool is methodology agnostic.**

**The right tool does not stand in your way.**



**The right tool for task management  
helps you focus on only a few tasks to do.**

The right tool is the tool you want to use.

# Taskwarrior

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# It is as easy as this example ...

```
> task add Prepare Talk
```

```
> task list
```

```
> task 1 done
```

## But it can be more ...

```
> task add \  
  project:private.birthdays \  
  +anniversary \  
  due:2017-01-11T10:00:00Z \  
  scheduled:2016-12-24 \  
  wait:soq \  
  until:due+7days \  
  Send birthday card to Alice
```

```
> task add \  
  project:tngtech.administration \  
  due:eom \  
  priority:M \  
  +boring \  
  +important \  
  recurr:monthly \  
  Prepare Meeting
```

**More sophisticated usage in the workshop this afternoon.**

# Background

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.*

# Motivation

Project founder Paul Beckingham:

*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.***

## History – Some milestones

**2006-11-29, v0.0.1**

Project began as enhancement to todo.txt.

**2014-01-15, v2.3.0**

Task Server support.

**2015-10-21, v2.5.0**

Improved command line parser.

**2016-02-24, v2.5.1**

bug fix, code cleanup, performance release – no features.

**near future, v2.6.0**

overhaul recurrence and add more flavors of recurring tasks.

<https://taskwarrior.org/docs/history.html>



**Taskwarrior is developed using a philosophy that explains a lot about why certain decisions have been made, and will continue to be made.**

# Openness

The source code, plans, bugs, testing, docs, website are all free and open source.

Your data is kept as plain text, and never held hostage by a proprietary format.

## Low Friction

There should be no login authentication, lengthy launch, or interactivity getting in the way of simply capturing information.

## No Penalty

There should be no penalty for features that exist, but you don't use.

But that also means the features are there if you need them.

## Methodology Agnostic

While methodologies are important, Taskwarrior doesn't impose or prefer any methodology, and instead acknowledges that everyone works differently, placing different emphasis on things like priorities, due dates, dependence and so on.

Supporting all methodologies and workflows means there are a lot of features, but you are not expected to use them all.

Think of Taskwarrior as a toolkit that lets you follow any methodology you choose, and any methodology will only use a subset of the features.

There is a fine line between  
“richly-featured” and “bloated”.  
There may not be a line at all.

## Extension Friendly

Import/export using industry-standard JSON allows you to move data into and out of Taskwarrior, so you can provide a front end, or higher-order feature.




Taskwarrior carefully limits the features it supports, in order to focus on doing one thing well.

It does not offer reminders and time tracking, because there is other software dedicated to implementing those features well.

**If a feature improves the way we manage task lists, then it belongs in Taskwarrior, otherwise it belongs in some other software.**

**What you keep out of a project  
is just as important as  
what you allow in to a project.**

*Everybody wants it,  
noone wants to write it,  
most of the people don't read it ...*

 TASKWARRIOR

[News](#)

[Docs](#)

[Download](#)

[Support](#)

[Tools](#)

Here is the complete set of Taskwarrior and Taskserver documentation.

### Getting Started

- [Introduction](#) - What to do first
- [Configuration](#) - Creating a `.taskrc` file
- [30-Second Tutorial](#) - all you need to begin using Taskwarrior
- [Getting Help](#)

### Basic Usage

- [Command Line Syntax](#)
- [Best Practices](#)
- [Example Commands](#) - Commonly asked questions
- [Example Workflows](#) - Everyone uses Taskwarrior differently
- [All the Commands](#)
- [Using Dates Effectively](#)
- [Unicode](#) **2.5.0**
- [Searching](#)
- [Reports](#)
- [Filters](#)
- [Priority](#) **2.4.3**
- [Tags & Virtual Tags](#)
- [Date & Time](#) **2.4.0**
- [Named Dates](#) **2.4.0**
- [Duration Values](#) **2.4.0**
- #### Configuring Taskwarrior

  - [Configuration](#)
  - [Verbosity](#)
  - [Color Themes](#)
  - [Terminology](#) - a glossary of terms

### Advanced Topics

- [Urgency](#)
- [ID Numbers](#)

- [Getting Started](#)
- [Basic](#)
- [Advanced](#)
- [Tasksh](#)
- [Taskserver](#)
- [Timewarrior](#)
- [Clog](#)
- [Translators](#)
- [Developers](#)
- [Feedback](#)
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```
> man task          # 1187 lines
```

```
> man taskrc        # 1182 lines
```

```
> man task-color    # 330 lines
```

```
> man task-sync     # 164 lines
```

```
# total:            2863 lines of information  
#                   (close to 50 printed pages)
```

# task help

```
> task help
```

```
Usage: task                                Runs rc.default.command, if specified.
```

```
    task <filter> active                  Active tasks
```

```
    task          add <mods>             Adds a new task
```

```
    task <filter> all                     All tasks
```

```
...
```

```
# 241 lines of adhoc-help
```

## Guides – easier to read

Lesson learned:

*Man pages are too densely crammed with information,  
and too lengthy, for most modern humans to ingest.*

We offer PDF guides and presentations:

<https://git.tasktools.org/projects/ST/repos/guides/browse>

# The need!

With people running Taskwarrior on several machine the need rises to sync the task data between machines.



**Taskserver synchronises Taskwarrior data.**

# Why Do I Need a Taskserver?

You may not need a Taskserver.

You may be content with using Taskwarrior on a single device.

But if you wish to share tasks between several clients,  
the Taskserver is the **only** option that properly syncs data.

## One feature does it all

With a Taskserver, you can share tasks between clients/devices, eliminating the need to keep your data up to date on multiple clients, reducing data entry.

One nice side effect of using a Taskserver is an automatic backup of your tasks.

## Short history, long time

**2010-09-22**

Project began.

**2012-09-26**

Project restarted using GnuTLS.

**2014-01-15, v1.0.0**

Sync Protocol v1. Compatibility with Taskwarrior 2.3.0.

**2015-05-10, v1.1.0**

Improved security, logging, portability, documentation, quality, setup, PKI scripts. IPv4/IPv6 support. Many bug fixes.

Short: Everything is better now.

[https://taskwarrior.org/docs/history\\_td.html](https://taskwarrior.org/docs/history_td.html)

## Time tracking

People – at least some – like to use Taskwarrior for time tracking.

This does not match our philosophy “improves the way we manage task lists”, so it has to be another software.

**Timewarrior tracks and reports time.**

# What does Timewarrior do?

Timewarrior is a command line time tracking application, which allows you to record time spent on activities.

At its simplest, you tell it to start and stop tracking time:

```
> timew start  
...  
> timew stop
```

## Why do I need Timewarrior?

You will be able to track your time intelligently,  
then generate useful visual or tabular reports of that time.

An extension API lets you do anything you want with your data.



## Example

Suppose you start the clock at noon on a Friday,  
then you stop the clock at noon on Tuesday.

Did you really just spend 96 hours on a task?

More likely you only spent 16 hours,  
or perhaps 8 hours if Monday was a national holiday.

Timewarrior supports you in solving that riddle.

## How does Timewarrior work?

Timewarrior records time, and associates blocks of time with tags.

The recorded data can be exposed as JSON for any app to consume.

Built-in reports, as well as a set of extension reports will give you plenty of options.

A Taskwarrior hook script provides integration with the matching start and stop commands, thereby enabling proper time tracking for Taskwarrior users.

**2016-08-21, v1.0.0**

Project released the time it was presented at FrOSCon.

# Ecosystem

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## What is tasktools.org?

This is a toolshed, or workshop, for our software development. This is the infrastructure that supports the worldwide distributed development team that brings you [Taskwarrior](#).

Tasktools gives you access to:

- Project status - below
- [Answers](#) - Q & A for all projects
- [Jira](#) - Issue tracking
- [Stash](#) - repository management and browsing
- [Tinderbox](#) - Flod-based CI testing
- [Piwik](#) - traffic analysis

### Taskwarrior

**2.5.1** Released [task-2.5.1.tar.gz](#)  
**2.6.0** Development

```
git clone https://git.tasktools.org/scm/tm/task. git clone --recursive
```

```
brew install task
```

Taskwarrior is a command-line todo list manager. It maintains a task list, allowing you to add/remove, and otherwise manipulate your tasks. Task has a rich set of subcommands that allow you to do sophisticated things. You'll find it has customizable reports, charts, GTD features, device synching, documentation, extensions, themes, holiday files and much more.

### Taskserver

**1.1.0** Released [taskd-1.1.0.tar.gz](#)  
**1.2.0** Development

```
https://git.tasktools.org/scm/tm/taskd.git
```

```
brew install taskd
```

The Taskserver is a lightweight, secure server providing multi-user, multi-client access to task data. This allows true syncing between desktop and mobile clients.

### VIT

**1.2** Released [vit-1.2.tar.gz](#)  
**1.3** Development

```
git clone https://git.tasktools.org/scm/es/vit
```

```
brew install vit
```

Vit is a lightweight, fast, curses-based front end to Taskwarrior.


Tasksh is a shell command that wraps Taskwarrior commands. It is intended to provide simpler Taskwarrior access.

Tasksh implements a review feature, and integrates libreadline. It is on it's own release schedule that is unhampered by lengthy Taskwarrior development cycles.

Future Tasksh releases are being planned now. Features currently being designed include:

- Pomodoro Timer
- Notifications

# 3rd Party Apps – <https://taskwarrior.org/tools/>

 TASKWARRIOR

[News](#) [Docs](#) [Download](#) [Support](#) **[Tools](#)**

The Taskwarrior distribution contains the essential core components. The open source community provides many non-core components, distributed separately, and listed below.

Do you have a taskwarrior extension you'd like to see listed here? Do you have any corrections to suggest? Please tell us about it.

There are 325 tools / extensions.

### Search

### Category

- ☒ All
- ☐ Front Ends
- ☐ Services
- ☐ Libraries
- ☐ Hook Scripts
- ☐ Extensions
- ☐ Unknown

### Theme

- ☒ All
- ☐ OSX
- ☐ Vim
- ☐ Web

Name	Description	Compatibility / License
<a href="#">vim-taskwarrior</a> Unknown Rating: 242 ☆	vim interface for taskwarrior  By <a href="#">zc_</a> <a href="#">he (blindFS)</a> , <a href="#">David J Patrick (linuxcafe)</a> , <a href="#">harciga</a> , <a href="#">Tomas Babej (tbabej)</a> , <a href="#">Bitdeli Chef (bitdeli-chef)</a> , <a href="#">Casey Robinson (rampantmonkey)</a> , <a href="#">theRemix (theRemix)</a> , <a href="#">Benjamin Lipp (blippi)</a> , <a href="#">noctux (noctux)</a> <a href="#">Source</a> (VimL) Last update: 2016-11-03	2.4.1+
<a href="#">bugwarrior</a> Extensions Rating: 226 ☆	Pull github, bittbucket, and trac issues into taskwarrior  By <a href="#">Ralph Bean (ralphbean)</a> , <a href="#">Adam Coddington (coddingtonbear)</a> , <a href="#">ryneeverett</a> , <a href="#">Kosta Harlan (kostajh)</a> , <a href="#">Grégoire Détéz (gdetez)</a> , <a href="#">Ben Boeckel (mathstuf)</a> , <a href="#">Iain Learmonth (irl)</a> , <a href="#">Dustin J. Mitchell (djmitchel)</a> , <a href="#">Ryan Brown (ryansb)</a> , <a href="#">Justin Forest (umonkey)</a> , <a href="#">Sam Kleinman (tychoish)</a> , <a href="#">Sven Bender (ubuntudroid)</a> , <a href="#">Ivan Čukić (ivan-cukic)</a> , <a href="#">jenlps</a> , <a href="#">Jakub Wilk (jwilk)</a> , <a href="#">Matthew</a>	Unknown GPLv3

Taskopen allows you to link almost any file, webpage or command to a Taskwarrior task by adding a filepath, web-link or uri as an annotation.

Text notes, images, PDF files, web addresses, spreadsheets and many other types of links can then be filtered, listed and opened by using taskopen.

Some actions are sane defaults, others can be custom-configured, and everything else will use your systems mime-types to open the link.

Arbitrary commands can be used with taskopen at the CLI, acting on the link targets, enhancing listings and even executing annotations as commands.



VIT (Visual Interactive Taskwarrior) is a lightweight, curses-based front end for Taskwarrior that provides a convenient way to quickly navigate and process tasks.

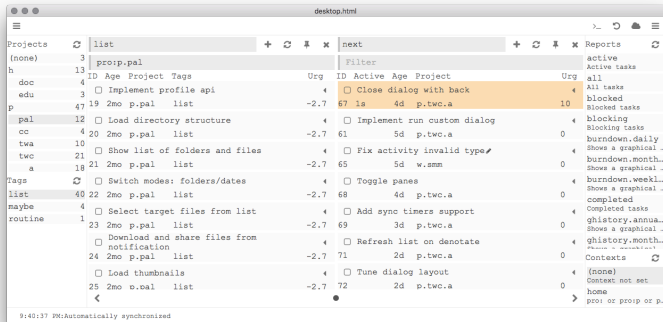
VIT allows you to interact with tasks in a Vi-intuitive way.

A goal of VIT is to allow you to customize the way in which you use Taskwarrior's core commands as well as to provide a framework for easily dispatching external commands (both user scripts and Taskwarrior's many External Scripts).

- Because Android application uses task binary for all manipulations with tasks, in general, you can expect exactly same behaviour with original Taskwarrior
- Synchronisation with taskd server works!
- Features below are unique to Android version:
  - Create shortcuts to reports and new task templates to Home screen
  - Multiple profiles support
  - Auto-synchronisation by configurable intervals
- Following features are not implemented at present moment:
  - UDAs
  - Dependencies

<https://play.google.com/store/apps/details?id=kvj.taskw>

# GUI Client – <https://bitbucket.org/kvorobyev/taskwarriorc2>



Linux, macOS and Android,

<https://play.google.com/store/apps/details?id=com.taskwc2>

# Contribute to Taskwarrior

Want to contribute? – <https://taskwarrior.org/docs/contribute.html>

## How to become an Open Source Contributor

We have some information for you on how to become an Open Source Contributor for the first time ([http://taskwarrior.org/docs/first\\_time.html](http://taskwarrior.org/docs/first_time.html) – applies to the second and third contribution as well).

# Questions and Answers – <https://answers.tasktools.org/>

answers.tasktools.org Questions

Log in Sign-Up

What do you want to know?

Ask question

Questions Topics Experts

Filters: Popular Recent Unanswered

Watch all

1

vote

2 answers • Andras Novoszath • Dec 03, 2016

import todo.txt json

How to import todo.txt

1

vote

1 answer • Roland Maio • Sep 28, 2016

methodology

Tasks that will not be done but should be remembered

2

votes

3 answers • Andreas Grau • Jul 05, 2014

taskserver

How to go back in time? Or: Reverting your messed up database!

0

votes

0 answers • David Patrick • yesterday at 19:03

answers

how do I search for previous questions/ answers on answers.tasktools.org?

1

vote

1 answer • Eric Hymowitz • Nov 29, 2016

configuration

alias for options?

1

vote

1 answer • elo • Nov 20, 2016

uda taskrc

Can I add an indicator for the UDA value?

TOP EXPERT

Paul Beckingham

2,470 points

OTHER EXPERTS

Renato Alves

715 points

Dirk Deimeke

485 points



Benjamin Weber

345 points

Rick Cogley

330 points

# Issue Tracking – <https://bug.tasktools.org/>

 bug.tasktools.org

Dashboards ▾

Projects ▾

Issues ▾

Agile ▾

Quick Search

?

Log In











Welcome to the Tasktools bug system.

## System Dashboard

### Introduction

This is the bug and feature tracking system used by Taskwarrior, Taskserver, Vit and other tools. If you have a bug, problem or request, please tell us. Continuous improvement is a high priority. Note: By creating an account here, you gain access to <https://answers.tasktools.org>

### Projects

<div> Clog (CL)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>	<div> Extension (EX)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>
<div> Flood (FD)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>	<div> Taskd (TD)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>
<div> Tasksh (TS)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>	<div> Taskwarrior (TW)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>
<div> Timewarrior (TI)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>	<div> Vit (VT)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Scott Kostyshak</div> <div><div><div></div></div></div>
<div> Vramsteg (VRAM)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>	<div> WWW (WWW)</div> <div><div>Lead</div><div>Open Issues</div><div>(by priority)</div></div> <div>Paul Beckingham</div> <div><div><div></div></div></div>

### Login

Username

Password

☐ Remember my login on this computer

Not a member? [Sign Up](#) for an account.


Log In

Can't access your account?

### Activity Stream

#### Tasktools bug system

Friday



Leon Feng

commented on TW-1872 - Project names beginning with "startR" fail to evaluate

Oh and task mod has the same issue. Can't test the other commands since I can't create a task with a problematic project name.


Friday at 16:49



Leon Feng

created TW-1872 - Project names beginning with "startR" fail to evaluate
















This is a head scratcher. It seems any project name in the form of "startR.\*" causes task add to fail (see screenshot). Replace "start"

# Repository Management – <https://git.tasktools.org/>

 **Bitbucket** Projects Repositories ▾

Search for code or repositories...   Log In

## Public Repositories

Name
 Extensions / tasksh
 Extensions / vit
 Sites / guides
 Sites / holidata.net
 Sites / ti.net
 Sites / tt.org
 Sites / tw.org
 Task Management / ernie
 Task Management / libshared
 Task Management / task
 Task Management / taskd
 Task Management / timew
 Testing / fiold
 Utilities / anomaly
 Utilities / ...

# Continuous Integration – <http://central.tasktools.org>

central.tasktools.org flod.us




Grid Testing - taskd.git 1.2.0




	Arch 2016 64 (GBF)	Debian 8 64 (GBF)	Fedora 24 64 (GBF)	OSX 10.12 64 (GBF)	Ubuntu 16.04 64 (GBF)
2016-11-22 15:46:51 a015237a Paul Beckingham	100.00% 40/40 6 files. Warn 16.3 sec	100.00% 40/40 6 files. Warn 19.4 sec	100.00% 40/40 6 files. Warn 17.2 sec	100.00% 40/40 6 files. Warn 14.6 sec	100.00% 40/40 6 files. Warn 19.9 sec
2016-11-22 15:45:03 142a6de4 Paul Beckingham	100.00% 40/40 29 skipped. 6 files. Warn 15.7 sec	100.00% 40/40 29 skipped. 6 files. Warn 18.5 sec	100.00% 40/40 29 skipped. 6 files. Warn 16.5 sec	70.00% 28/40 6 files. Fail 14.6 sec	100.00% 40/40 29 skipped. 6 files. Warn 19.5 sec
2016-11-22 15:44:43 a661a534 Paul Beckingham	100.00% 40/40 29 skipped. 6 files. Warn 15.7 sec	100.00% 40/40 29 skipped. 6 files. Warn 18.6 sec	100.00% 40/40 29 skipped. 6 files. Warn 17.2 sec	70.00% 28/40 6 files. Fail 14.9 sec	100.00% 40/40 29 skipped. 6 files. Warn 19.3 sec
2016-11-22 15:38:57 ae0a784e Paul Beckingham	100.00% 56/56 29 skipped. 7 files. Warn 16.4 sec	100.00% 56/56 29 skipped. 7 files. Warn 19.0 sec	100.00% 56/56 29 skipped. 7 files. Warn 18.0 sec	78.57% 44/56 7 files. Fail 16.1 sec	100.00% 56/56 29 skipped. 7 files. Warn 19.6 sec
2016-11-22 15:06:47 9d5c721e Paul Beckingham	100.00% 56/56 29 skipped. 7 files. Warn 16.5 sec	100.00% 56/56 29 skipped. 7 files. Warn 19.2 sec	100.00% 56/56 29 skipped. 7 files. Warn 17.4 sec	78.57% 44/56 7 files. Fail 15.0 sec	100.00% 56/56 29 skipped. 7 files. Warn 20.2 sec
2016-11-22 15:06:39 b633df60 Paul Beckingham	100.00% 56/56 29 skipped. 7 files. Warn 16.4 sec	100.00% 56/56 29 skipped. 7 files. Warn 19.3 sec	100.00% 56/56 29 skipped. 7 files. Warn 17.2 sec	87.50% 49/56 7 files. Fail 15.2 sec	100.00% 56/56 29 skipped. 7 files. Warn 19.7 sec




# IRC channel logger – <https://botbot.me/freenode/taskwarrior/>



#taskwarrior / December 6th 2016

 Kudos  Channel Docs  Hide Joins/parts

 Search

gour

:

12:12 pm

coddingtonbear

you would maybe be proud of me, pbeckingham

2:11 pm

pbeckingham

coddingtonbear: I'm proud.

2:11 pm

coddingtonbear

I had forgotten how nice type safety was

2:11 pm

pbeckingham

:)

2:11 pm

coddingtonbear

well; now that I've refreshed my memory, maybe you might see some PRs or bugfixes from me someday in the future

2:12 pm

pbeckingham

coddingtonbear: Now where did you find free time? That's unlike you.

3:45 pm

coddingtonbear

well, I technically have some "free time"; I just base my priorities on things closer to "what do I want to work on" more than "what do other people want me to work on"

3:46 pm

tbabej

coddingtonbear: You're a hero.

4:08 pm

coddingtonbear

The only thing I'm saving day-to-day is my own sanity, tbabej: is that really heroism?

4:10 pm

2015

2016

January

February

March

April

May

June

July

August

September

October

November


December


Last Week


This Week


Current


December 7th, 2016

 #lincolnloop

 @BotBotme

 beep@botbot.me

 Patreon

 Source

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## Getting Help

There are several ways of getting help:

- Submit your details to our **Q & A site**, then wait patiently for the community to respond.
- **Email** us at support@taskwarrior.org, then wait patiently for a volunteer to respond.
- Join us **IRC** in the #taskwarrior channel on Freenode.net, and get a quick response from the community.
- Even though **Twitter** is no means of support, you can get in touch with @taskwarrior.
- We have a **User Mailinglist** which you can join anytime to discuss about Taskwarrior and techniques.
- The **Developer Mailinglist** is focussing on a more technical oriented audience.

# Epilog

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## Taskwarrior is platform independent

- Most flavours of Unix and Linux, including macOS
- Windows 10 Linux Subsystem  
(Other Windows versions with Cygwin – unsupported, but known to work)
- Android with Termux
- Third-Party Apps (Android-Client, GUI based on NodeJS, ...)

# Conclusion

Taskwarrior ...

... is easy to learn.

... grows along with the work.

... is unbelievably powerful.

... is very fast.

... is easily extensible.

... is actively developed.

... can be influenced by users (feature requests).

... has excellent and very friendly support.



# Thank you!

Dirk Deimeke, 2016, CC-BY

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[d5e.org](http://d5e.org) – [speakerdeck.com/ddeimeke](http://speakerdeck.com/ddeimeke)

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