Task Report v0.5

Geraldo Xexéo

Wednesday 2^{nd} June, 2021 - 11:28

Contents

1	Introduction	2
2	How to use task-report 2.1 Using from Overleaf	2
3	Package Options 3.1 General behavior	3
4	Version	3
5	Usage 5.1 Configuration Options 5.1.1 Configuring Colors 5.2 Changing Field Names 5.3 Modifying the Header 5.4 Creating New States	3 6 6 8 9 10
6	The List of Tasks	11
7	Warnings	11
8	Implementation8.1 Required Packages8.2 Access to the current version8.3 Color Management for States8.4 Defining States Through a Simulated List8.5 Standard Colors8.6 Managing The Fields Names8.7 Standard Field Names	11 11 12 12 12 13 13
9	List of Tasks 9.1 Declaring Tasks	14

9.1.1	Helpers													14
912	Main task macro													15

1 Introduction

This package supports the maintenance and report of a task list..

2 How to use task-report

task-report is available as open source at https://github.com/xexeo/task-report. The stable distribution is in the folder dist, while the lastest, and unstable, will be in the root folder.

The only file you really need, besides this manual, is task-report.sty. This should be in your LATEX path, such as in the same folder that your main .tex file.

You can make suggestions, complain about bugs, and request features using GitHub's "Issues" feature, in https://github.com/xexeo/task-report/issues (you must be signed in).

2.1 Using from Overleaf

The best way to use task-report inside Overleaf is to link the distributed style file through its URL. To do that, inside your project, select first "Upload". An "Add files" window will appear, then select "From Externa URL" and enter https://raw.githubusercontent.com/xexeo/task-report/main/dist/task-report.sty as "URL to fetch the file from" and "task-report" as "File Name in This Project", as in Figure 1.

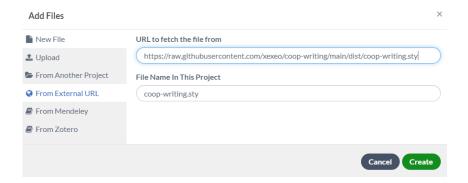


Figure 1: How to link a task-report.sty file in your project folder in Overleaf to the official distribution.

3 Package Options

There are no package options up to now

3.1 General behavior

4 Version

It is possible that the user wants to know the version being used. We provide two commands for it.

\taskreportversion \printtaskreportversion

Provides the current version

Provides name and version

 $\$ taskreportversion was used in the title of this article. The current version is v0.5.

If needed, the second macro prints also the name of the package:

\printtaskreportversion

will result in:

task-report v0.5

Please state the version when reporting bugs.

5 Usage

\trtask

This is the main macro for the package. $\track[\langle status \rangle] {\langle uhedate \rangle} {\langle when-assigned \rangle} {\langle who-assigned \rangle} {\langle who-assigned \rangle} {\langle why \rangle} {\langle when-done \rangle} {\langle extra-text \rangle}$

Altough it has 8 arguments parameters, all of them can be empty. It has 9 arguments because this is the standard LATEX maximum.

There are 5 possible standard states that are associated with a color (default color): todo (red), doing(yellow), tocheck (cyan), checking (blue), and done(green). There is a pseudo-state other (black) that will be the color of any other word used of a state. Colors belong to the xcolor package and are configurable, as explained in section 5.1.

The example:

 $\label{today} $$ \operatorname{In 5 days}_{June, 1st 2021}_{The Boss}_{The Worker}_{}_{Trtask[check]_{Please do the coffe strong with the beef}_{June, 1st 2021}_{The Boss}_{The Worker}_{}_{Trtask[checking]_{Drink another beer}_{}_{June, 1st 2021}_{The Boss}_{The Worker}_{}_{Trtask[checking]_{Drink another beer}_{}_{June, 1st 2021}_{The Boss}_{The Worker}_{}_{Trtask[checking]_{Drink another beer}_{}_{Trtask[checking]_{Drink another beer}_{}_{Trtask[checking]_{Trtask[ch$

generates:

Make coffe

Status: todo Due date: Soon

Assigned in: Wednesday 2nd June, 2021

From: Geraldo Xexéo

Please do the coffe strong

Drink a coffe

Status: doing

Due date: In 5 days

Assigned in: June, 1st 2021

From: The Boss
To: The Worker

Roast the beef

Status: tocheck

Assigned in: June, 1st 2021

From: The Boss
To: The Worker

Done in: Wednesday 2nd June, 2021

Rare, plese

Drink another beer

Status: checking

Assigned in: June, 1st 2021

From: The Boss To: The Worker

Done in: Wednesday 2nd June, 2021

Please check if you have age to drink in your country. If not, drink orange-

juice.

Drink a beer

Status: done

Assigned in: Wednesday 2nd June, 2021

From: The Boss
To: The Worker

Rationale: Because I want

Done in: Wednesday 2^{nd} June, 2021

Task without a name

Task without a name

Status: done

arg 2

Status: arg 1 Due date: arg 3 Assigned in: arg 4

From: arg 5 To: arg 6

Rationale: arg 7 Done in: arg 8

 ${\rm arg}\ 9$

5.1 Configuration Options

5.1.1 Configuring Colors

\trsetboxcolors

Set the colors for the 6 types of standard states Black otherwise.

 $\trsetboxcolors{\langle todo-color\rangle} {\langle doing-color\rangle} {\langle tocheck-color\rangle} {\langle checking-color\rangle} {\langle done-color\rangle} {\langle checking-color\rangle}$

The example:

%\trsetboxcolors{magenta}{purple}{orange}{pink}{lime}{pink}

%\trtask[todo]{Drink a coffe}{next day}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask[doing]{Drink a coffe}{next day}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask[tocheck]{Drink a coffe}{next day}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask[checking]{Drink a coffe}{next day}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask[done]{Drink a coffe}{next day}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask{Drink a coffe}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask{Drink a coffe}{\today}{next day}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask{Drink a coffe}{\today}{next day}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask{Drink a coffe}{\today}{Coffe must be strong and add 1 spoon of sugar}
%

generates:

Drink a coffe

Status: todo

Due date: next day

Assigned in: Wednesday 2nd June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: doing

Due date: next day

Assigned in: Wednesday 2nd June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: tocheck
Due date: next day

Assigned in: Wednesday 2nd June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2^{nd} June, 2021

Coffe must be strong and add 1 spoon of sugar $\,$

Drink a coffe

Status: checking

Due date: next day

Assigned in: Wednesday 2nd June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: done

Due date: next day

Assigned in: Wednesday 2nd June, 2021

From: The Boss **To**: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Due date: Wednesday 2nd June, 2021

Assigned in: next day From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

5.2 Changing Field Names

\trsetfieldsnames

You can change all field names with command . This command can be used to internationalization or to make these box used by any other reason.

```
\label{eq:constraints} $$\operatorname{duedate}_{{\langle status\rangle}}_{{\langle duedate\rangle}}_{{\langle status\rangle}}_{{\langle done\rangle}}_{{\langle done\rangle
```

%\trsetfieldsnames{Stage}{Must be ready in}{Demand date}{Who asked for}{To who}{Ready in %\trtask[done]{Drink a coffe}{5 days}{\today}{The Boss}{The Worker}% %{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar} %

generates:

Drink a coffe

Stage: done

Must be ready in: 5 days

Demand date: Wednesday 2nd June, 2021

Who asked for: The Boss To who: The Worker Reasons: To keep awake

Ready in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

5.3 Modifying the Header

\trsettitlelabel

Sets the label for the header.

 $\verb|\trsettitlelabel|{\langle label-for-header\rangle}|$

```
% \trsettitlelabel{Task}
%
%\trtask[done]{Drink a coffe}{5 days}{\today}{The Boss}{The Worker}
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%
%
```

Task: Drink a coffe

Status: done Due date: 5 days

Assigned in: Wednesday 2nd June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

Back to normal:

```
% \trsettitlelabel{}
%
%\trtask[done]{Drink a coffe}{5 days}{\today}{The Boss}{The Worker}
```

%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}%

Drink a coffe

Status: done Due date: 5 days

Assigned in: Wednesday 2nd June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

5.4 Creating New States

\traddstatecolor

Users can create their own state using

 $\traddstatecolor{\langle state \rangle} {\langle color \rangle}$

For example:

%\traddstatecolor{waiting}{teal}

generates:

Drink a coffe

Status: waiting
Due date: ASAP

Assigned in: Wednesday 2nd June, 2021

 $\begin{array}{ll} \textbf{From:} \ \ \text{The Boss} \\ \textbf{To:} \ \ \text{The Worker} \end{array}$

Rationale: To keep awake

Done in: Wednesday 2nd June, 2021

Coffe must be strong and add 1 spoon of sugar

The List of Tasks 6

\listoftasks

A list of tasks can be generated with the command:

\listoftasks

Its title can be changed with the command:

The command:

\setlength{\cfttasksnumwidth}{25pt}

from package tocloft can be used to set the space used by the section indicator.

Warnings

This package uses another package that changes LATEX's standard behavior for summary and lists. When you use it, you must explicitly change pages with \newpage before \tableofcontents or similar commands.

Implementation 8

8.1 Required Packages

- mdframed makes the frame aroung tasks
- etoolbox command ifstringempty
- tocloft create the list of tasks
- 1 \RequirePackage{tcolorbox}%
- 2 \RequirePackage{etoolbox}%
- 3 \RequirePackage{tocloft}

8.2 Access to the current version

We provide some macros for the user to know the version being used.

\taskreportversion Provides current version of coop-writing

 ${\tt 4 \ lowcommand{\taskreportversion}{\tt tr@version}},\\$

\printtaskreportversion Provides package name and version

 $\label{lem:command} $$ \ensuremath{\mathbb{K} in wcommand{\displaystyle \operatorname{\mathbf{Lask-report} \taskreportversion}}$$ $$$

8.3 Color Management for States

8.4 Defining States Through a Simulated List

```
Inserts states and their colors in a simulated list and uses them
\traddstatecolor
  \usestatecolor
                     6 \newcommand{\traddstatecolor}[2]{%
                            \@ifundefined{\string\color@#2}%
                                 \message{#2 not defined}%
                     9
                     10
                                 \expandafter\ERROR%
                            }%
                     11
                            {%
                     12
                                \expandafter\gdef\csname tr@astate@\detokenize{#1}\endcsname{#2}%
                     13
                     14 }%
                     15 }%
                     16 %
                     17 \def\tr@usestatecolor#1{%
                            \ifcsname tr@astate@\detokenize{#1}\endcsname%
                     18
                     19
                            \csname tr@astate@\detokenize{#1}\expandafter\endcsname%
                     20
                            \else%
                     21 \tr@astate@other%
                            \fi%
                     23 }%
                    Set the colors for the 6 types of standard states Black otherwise.
 \trsetboxcolors
                        \trsetboxcolors{\langle todo-color\rangle}{\langle doing-color\rangle}{\langle tocheck-color\rangle}{\langle checking-color\rangle}
                     \{\langle done\text{-}color \rangle\}\{\langle other\text{-}color \rangle\}
                     24 \newcommand{\trsetboxcolors}[6]{%
                     25 \traddstatecolor{todo}{#1}
                     26 \traddstatecolor{doing}{#2}
                     27 \traddstatecolor{tocheck}{#3}
                     28 \traddstatecolor{checking}{#4}
                     29 \traddstatecolor{done}{#5}
                     30 \traddstatecolor{other}{#6}
```

8.5 Standard Colors

31 }%

Sets the standard colors for the standard states

```
32 \trsetboxcolors{red}{yellow}{cyan}{blue}{green}{black}
```

8.6 Managing The Fields Names

```
\traddfieldname \tr@usesfieldname
```

Define field names - does not create a new field

```
33 \newcommand{\traddfieldname}[2]{%
34 \expandafter\gdef\csname tr@fieldnames@\detokenize{#1}\endcsname{#2}%
35 }%
36 %
37 \def\tr@usesfieldname#1{%
38 \ifcsname tr@fieldnames@\detokenize{#1}\endcsname%
39 \csname tr@fieldnames@\detokenize{#1}\expandafter\endcsname%
40 \else%
41 Missing Field Name%
42 \fi%
43 }%
```

8.7 Standard Field Names

Sets the standard text for the fields

```
\trsetfieldsnames \trsettitlelabel
```

Set the names for the field names and for the titles.

```
\time {\it title-label}
44 \newcommand{\trsetfieldsnames}[7]{%
      \traddfieldname{status}{#1}%
45
      \traddfieldname{duedate}{#2}%
46
      \traddfieldname{assigned}{#3}%
47
      \traddfieldname{from}{#4}%
      \traddfieldname{to}{#5}%
49
      \traddfieldname{done}{#6}%
50
      \traddfieldname{why}{#7}%
51
52 }%
53 %
54 \traddfieldname{defaulttitle}{Task without a name}\%
56 \def\tr@defaulttitlelabel{}%
57 \newcommand{\trsettitlelabel}[1]{%
      \def\tr@defaulttitlelabel{#1}%
59 }%
60 %
61 \trsetfieldsnames{Status}{Due date}{Assigned in}{From}{To}{Done in}{Rationale}
```

 $\trsetfieldsnames {\langle status \rangle} {\langle duedate \rangle} {\langle assigned \rangle} {\langle from \rangle} {\langle to \rangle} {\langle done \rangle} {\langle why \rangle}$

\trsetcolon

63 \newcommand{\trsetcolon}[1]{%

```
\traddfieldname{colonmark}{#1}
                      64
                      65 }
                      66 \trsetcolon{:}
\tr@currentboxcolor The dirt trick of using a global variable to store a value
                      67 \def\tr@currentboxcolor{\tr@usestatecolor{other}}%
     \trstatuscolor Select the color based on the state
                         \trstatuscolor{\langle state \rangle}
                      68 \newcommand{\trstatuscolor}[1]%
                      69 {%
                      70 \left\{ 1\} 
                      72 \def\tr@currentboxcolor{\tr@usestatecolor{other}}%
                      73 }%
                      74 {%
                      75 \def\tr@currentboxcolor{\tr@usestatecolor{#1}}%
                      76 }%
                      77 }%
                           List of Tasks
                      9
                      78 \newcommand{\trsettasklisttitle}[1]{%
                            \def\trlisttasks{#1}%
                      80 }%
```

9.1 Declaring Tasks

83 \@ifundefined{chapter}%

81 \trsettasklisttitle{List of Tasks}% 82 %% cria a lista, depende do pacoto tcloft

84 {\newlistof[section]{tasks}{trt}{\trlisttasks}}% 85 {\newlistof[chapter]{tasks}{trt}{\trlisttasks}}%

9.1.1 Helpers

\tr@field Helpers to build the task \trtitle should be improved to chack if \tr@defaulttitlelabel is not empty and use it

```
86 \newcommand{\tr@title}[1]{%
87 \ifx\tr@defaulttitlelabel\empty%
88 \textbf{#1}%
89 \else%
90 \textbf{\tr@defaulttitlelabel\tr@usesfieldname{colonmark}\ #1}%
91 \fi%
92 }%
```

```
93 %
94 \newcommand{\tr@field}[2]{%
95 \textbf{#1}\tr@usesfieldname{colonmark} #2%
96 }%
97 %
```

9.1.2 Main task macro

```
\trtask Describes a task
```

```
\trtask[\langle status\rangle] \{\langle name\rangle\} \{\langle uhe-date\rangle\} \{\langle when-assigned\rangle\} \{\langle who-assigned\rangle\} \{\langle uhe-done\rangle\} \{\langle vhe-done\rangle\} \{\langle v
```

generates:

```
Make a LATEXKanbam document

Status: doing
Due date: soon
Assigned in: 2021-05-31
From: Xexéo
To: Geraldo Xexéo
Rationale: Help control tasks
Done in: not yet

Use colors
```

```
98 % [status] , what, due-date when-assigned, from-who, to-who, why, when-done, extra
 99 \newcommand{\trtask}[9][]{%
100
       \par%
101
       \left\{ \frac{\#2}{4} \right\}
       \def\trtask@temp{\tr@usesfieldname{defaulttitle}}%
102
103
       }%
104
       {%
105
       \def\trtask@temp{#2}%
106
107
       \refstepcounter{tasks}%
       \addcontentsline{trt}{tasks}{\protect\numberline{\thetasks}{\trtask@temp}}%
108
       \trstatuscolor{#1}%
109
       \begin{tcolorbox}[title=\tr@title{\trtask@temp},%
110
```

```
111 colback=\tr@currentboxcolor!5!white,%
112 colframe=\tr@currentboxcolor!75!black%
113]%
                                         \left\{ 1\right\} 
114
                                         {%
115
                                                         \tr@field{\tr@usesfieldname{status}}{#1}\newline%
116
                                         }%
117
                                         \left\{ \frac{43}{3} \right\}
118
119 {%
                           120
121 }%
122 \left\{ 4\right\} 
123 {%
                          \label{tr0field(tr0usesfieldname{assigned}){#4}\newline% } % \label{tr0field(tr0usesfieldname{assigned}){#4}\newline% } % \label{tr0field(tr0usesfieldname{assigned}){#4}\newline% } % \label{tr0field(tr0usesfieldname{assigned}){#4}\newline% } % % \label{tr0fieldname{assigned}} % % \label{tr0fieldname{assigne
124
125 }%
126 \ifblank{#5}{}%
127 {%
                          \verb|\tr0field{\tr0usesfieldname{from}}{\#5}\newline\%|
128
129 }%
130 \ifblank{#6}{}%
131 {%
                          \tr@field{\tr@usesfieldname{to}}{#6}\newline%
132
133 }%
134 \ifblank{#7}{}%
135 {%
                          \tr@field{\tr@usesfieldname{why}}{\#7}\newline\%
136
137 }%
138 \ifblank{#8}{}%
139 {%
                          \tr@field{\tr@usesfieldname{done}}{\#8}\newline\%
140
141 }%
142
                                         \left\{ \frac{\#9}{}\right\} 
143
                                         {\tcblower%
144
                                         #9%
145
                                         }%
146
                           \end{tcolorbox}%
147 }%
```

End of Code

Change History

v0.1		v0.4
General: First version	1	General: Allows redefining field
v0.2		names
General: User can create new states	1	v0.5
v0.3		General: Allows redefining header
General: List of Tasks	1	and colon

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols	\ifcsname 18, 38	\tr@field 86 ,							
$\c \c \$	\ifx 87								
	27	128, 132, 136, 140							
\ _ 90	N	\tr@title 86, 110							
	\newline 116, 120, 124,	$\tr @usesfieldname$.							
${f A}$	128, 132, 136, 140 \newlistof \ldots 84, 85	33, 90, 95, 102,							
\addcontentsline 108	\numberline 108	116, 120, 124,							
\mathbf{C}	(Humberline 100	128, 132, 136, 140							
\color@ 7	P	\tr@usestatecolor .							
\csname 13, 19, 34, 39	\par 100	\dots 17, 67, 72, 75							
	\propty printtaskreportversion	\tr@version 4							
D	<u>5</u>	\traddfieldname							
\detokenize 13,	\protect 108	. <u>33</u> , 45–51, 54, 64							
18, 19, 34, 38, 39	D	\traddstatecolor							
${f E}$	R	$\dots \dots \underbrace{6}_{5}, 25 - 30$							
\else $20, 40, 89$	\refstepcounter 107 \RequirePackage 1-3	\trlisttasks . 79, 84, 85							
\empty 87	\nequirerackage 1-3	\trsetboxcolors . $\underline{24}$, 32							
\end 146	${f S}$	\trsetcolon $\underline{63}$							
\endcsname 13,	\string 7	\trsetfieldsnames . $\underline{44}$							
18, 19, 34, 38, 39	-	\trsettasklisttitle							
\ERROR 10	${f T}$								
\expandafter 10, 13, 19, 34, 39	\taskreportversion $\underline{4}, 5$	\trsettitlelabel $\underline{44}$							
. 10, 13, 13, 34, 39	\tcblower 143	\trstatuscolor . $\underline{68}$, 109							
\mathbf{F}	\textbf 88, 90, 95	\trtask 98							
\fi 22, 42, 91	\thetasks 108 \tr@astate@other 21	\trtask@temp							
I	\tr@currentboxcolor	. 102, 105, 108, 110							
\ifblank 70, 101, 114,	67, 72, 75, 111, 112								
118, 122, 126,	\tr@defaulttitlelabel	${f U}$							
130, 134, 138, 142	56, 58, 87, 90	\usestatecolor \dots $\underline{6}$							

List of Tasks

5.1	Make coffe	4
5.2	Drink a coffe	4
5.3	Roast the beef	4
5.4	Drink another beer	4
5.5	Drink a beer	5
5.6	Task without a name	5
5.7	Task without a name	5
5.8	arg 2	5
5.9	Drink a coffe	6
5.10	Drink a coffe	6
5.11	Drink a coffe	7
5.12	Drink a coffe	7
5.13	Drink a coffe	7
5.14	Drink a coffe	8
5.15	Drink a coffe	8
5.16	Drink a coffe	9
5.17	Drink a coffe	10
5.18	Drink a coffe	10
9.1	Make a LATEXKanbam document	15