

Task Report v0.4

Geraldo Xexéo

Tuesday 1st June, 2021 - 20:16

Contents

1	Introduction	2
2	How to use task-report	2
2.1	Using from Overleaf	2
3	Package Options	3
3.1	General behavior	3
4	Version	3
5	Usage	3
5.1	Configuration Options	5
5.1.1	Configuring Colors	5
5.2	Changing Field Names	8
5.3	Creating New States	8
6	The List of Tasks	9
7	Warnings	9
8	Implementation	9
8.1	Required Packages	10
8.2	Access to the current version	10
8.3	Color Management for States	10
8.4	Defining States Through a Simulated List	10
8.5	Standard Colors	11
8.6	Managing The Fields Names	11
8.7	Standard Field Names	12
9	List of Tasks	12
9.1	Declaring Tasks	12
9.1.1	Helpers	12

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 latest, 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 External 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.

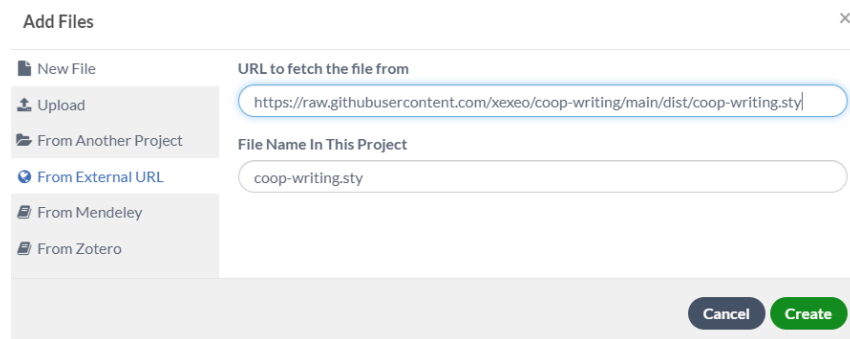


Figure 1: How to link a `task-report.sty` file in your project folder in Overleaf to the official distribution.

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.

<code>\taskreportversion</code>	Provides the current version
<code>\printtaskreportversion</code>	Provides name and version

`\taskreportversion` was used in the title of this article. The current version is v0.4.

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

`\printtaskreportversion`

will result in:

task-report v. v0.4

Please state the version when reporting bugs.

5 Usage

<code>\trtask</code>	This is the main macro for the package. <code>\trtask[<i><status></i>]{<i><name></i>}{<i><when-assigned></i>}{<i><who-assigned></i>}{<i><to-who-assigned></i>}{<i><why></i>}{<i><when-done></i>}{<i><extra-text></i>}</code>
----------------------	--

Although it has 7 mandatory parameters, all of them can be empty.

There are 5 possible 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:

```
%\trtask[todo]{Mage coffe}{\today}{Geraldo Xexéo}{}{}{}{Please do the coffe strong}
%\trtask[doing]{Drink a coffe}{June, 1st 2021}{The Boss}{The Worker}{}{}{}
%\trtask[tocheck]{Roast the beef}{June, 1st 2021}{The Boss}{The Worker}{\today}{}{Rare,
%\trtask[checking]{Drink another beer}{June, 1st 2021}{The Boss}{The Worker}{\today}{}{P
%\trtask[done]{Drink a beer}{\today}{The Boss}{The Worker}{\today}{}{}
%\trtask{}{}{}{}{}{}{}{}
```

```
%\trtask[done]{}{}{}{}{}{}{}{}
%\trtask{Grab a hot-dog}{3}{4}{5}{6}{7}{A hot dog must be done with bread and sausage}
%
```

generates:

Make coffe
Status: todo
Assigned in: Tuesday 1st June, 2021
From: Geraldo Xexéo

Please do the coffe strong

Drink a coffe
Status: doing
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: Tuesday 1st June, 2021

Rare, plese

Drink another beer
Status: checking
Assigned in: June, 1st 2021
From: The Boss
To: The Worker
Done in: Tuesday 1st 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: Tuesday 1st June, 2021
From: The Boss
To: The Worker
Rationale: Because I want
Done in: Tuesday 1st June, 2021

Task without a name

Task without a name

Status: done

arg 2

Status: arg 1
Assigned in: arg 3
From: arg 4
To: arg 5
Rationale: arg 6
Done in: arg 7

arg 8

5.1 Configuration Options

5.1.1 Configuring Colors

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

`\trsetboxcolors{\<todo-color>}{\<doing-color>}{\<tocheck-color>}{\<checking-color>}{\<done-color>}{\<other-color>}`

The example:

```
%\trsetboxcolors{magenta}{purple}{orange}{pink}{lime}{pink}
%
%\trtask[todo]{Drink a coffe}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask[doing]{Drink a coffe}{\today}{The Boss}{The Worker}%
```

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

generates:

Drink a coffe
Status: todo Assigned in: Tuesday 1 st June, 2021 From: The Boss To: The Worker Rationale: To keep awake Done in: Tuesday 1 st June, 2021
<hr/> Coffe must be strong and add 1 spoon of sugar

Drink a coffe
Status: doing Assigned in: Tuesday 1 st June, 2021 From: The Boss To: The Worker Rationale: To keep awake Done in: Tuesday 1 st June, 2021
<hr/> Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: tocheck
Assigned in: Tuesday 1st June, 2021
From: The Boss
To: The Worker
Rationale: To keep awake
Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: checking
Assigned in: Tuesday 1st June, 2021
From: The Boss
To: The Worker
Rationale: To keep awake
Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: done
Assigned in: Tuesday 1st June, 2021
From: The Boss
To: The Worker
Rationale: To keep awake
Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Assigned in: Tuesday 1st June, 2021
From: The Boss
To: The Worker
Rationale: To keep awake
Done in: Tuesday 1st 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 .

```

\trsetfieldsnames{<status>}{<assigned>} {<from>}{<to>} {<done>}{<why>}

For example:

%\trsetfieldsnames{Stage}{Demand date}{Who asked for}{To who}{Ready in}{Reasons}
%\trtask[done]{Drink a coffe}{\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
Demand date: Tuesday 1st June, 2021
Who asked for: The Boss
To who: The Worker
Reasons: To keep awake
Ready in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

This command can be used to internationalization.

5.3 Creating New States

`\traddstatecolor` Users can create their own state using

```

\traddstatecolor{<state>}{<color>}

For example:
```



```
%\traddstatecolor{waiting}{teal}
%\trtask[waiting]{Drink a coffe}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%
```

generates:

Drink a coffe
Status: waiting Assigned in: Tuesday 1 st June, 2021 From: The Boss To: The Worker Rationale: To keep awake Done in: Tuesday 1 st June, 2021
<hr/> Coffe must be strong and add 1 spoon of sugar

6 The List of Tasks

`\listoftasks` A list of tasks can be generated with the command:

```
\listoftasks
```

Its title can be changed with the command:

```
\trsettasklisttitle{\new-title}
```

The command:

```
\setlength{\cfttasksnumwidth}{25pt}
```

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

7 Warnings

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

8 Implementation

8.1 Required Packages

- `mdframed` makes the frame around 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

```
4 \newcommand{\taskreportversion}{\tr@version}%
```

`\printtaskreportversion` Provides package name and version

```
5 \newcommand{\printtaskreportversion}{task-report v. \taskreportversion}%
```

8.3 Color Management for States

8.4 Defining States Through a Simulated List

`\traddstatecolor` Inserts states and their colors in a simulated list and uses them

`\usestatecolor`

```
6 \newcommand{\traddstatecolor}[2]{%
7   \ifundefined{\string\color@#2}%
8   {%
9     \message{#2 not defined}%
10    \expandafter\ERROR%
11   }%
12   {%
13     \expandafter\gdef\csname tr@astate@\detokenize{#1}\endcsname{#2}%
14  }%
15 }%
16 %
17 \def\tr@usestatecolor#1{%
18   \ifcsname tr@astate@\detokenize{#1}\endcsname%
19     \csname tr@astate@\detokenize{#1}\expandafter\endcsname%
20   \else%
21     \tr@astate@other%
22   \fi%
23 }%
```

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

```
\trsetboxcolors{\todo-color}\doing-color\tocheck-color\checking-color\done-color\other-color}
```

```
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}
31 }%
```

8.5 Standard Colors

Sets the standard colors for the standard states

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

8.6 Managing The Fields Names

`\traddfieldname` Define field names - does not create a new field
`\tr@usesfieldname`

```
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 }%
```

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

```
\trsetfieldsnames{\status}\assigned\from\to\done\why}
```

```
44 \newcommand{\trsetfieldsnames}[6]{%
45 \traddfieldname{status}{#1}
46 \traddfieldname{assigned}{#2}
47 \traddfieldname{from}{#3}
48 \traddfieldname{to}{#4}
49 \traddfieldname{done}{#5}
50 \traddfieldname{why}{#6}
51 }%
```

8.7 Standard Field Names

Sets the standard text for the fields

```
52 \trsetfieldsnames{Status}{Assigned in}{From}{To}{Done in}{Rationale}
```

`\tr@currentboxcolor` The dirt trick of using a global variable to store a value

```
53 \def\tr@currentboxcolor{\tr@usestatecolor{other}}%
```

`\trstatuscolor` Select the color based on the state

```
\trstatuscolor{\<state>}
```

```
54 \newcommand{\trstatuscolor}[1]{%
```

```
55 {%
```

```
56 \ifblank{#1}%
```

```
57 {%
```

```
58 \def\tr@currentboxcolor{\tr@usestatecolor{other}}%
```

```
59 }%
```

```
60 {%
```

```
61 \def\tr@currentboxcolor{\tr@usestatecolor{#1}}%
```

```
62 }%
```

```
63 }%
```

9 List of Tasks

```
64 \newcommand{\trsettasklisttitle}[1]{%
```

```
65 \def\trlisttasks{#1}%
```

```
66 }%
```

```
67 \trsettasklisttitle{List of Tasks}%
```

```
68 %% cria a lista, depende do pacote tcloft
```

```
69 \@ifundefined{chapter}%
```

```
70 {\newlistof[section]{tasks}{trt}{\trlisttasks}}%
```

```
71 {\newlistof[chapter]{tasks}{trt}{\trlisttasks}}%
```

9.1 Declaring Tasks

9.1.1 Helpers

`\trstatus` Helpers to build the task

`\trwhen`

`\trwhy`

`\trwho`

```
72 \newcommand{\trstatus}[2][\tr@usesfieldname{status}]{%
```

```
73 \textbf{#1}: #2%
```

```
74 }%
```

```
75 \newcommand{\trwhen}[2][\tr@usesfieldname{assigned}]{%
```

```
76 \textbf{#1}: #2%
```

```
77 }%
```

```

78 \newcommand{\trwho}[2][\tr@usesfieldname{to}]{%
79   \textbf{#1}: #2%
80 }%
81 \newcommand{\trwhy}[2][\tr@usesfieldname{why}]{%
82   \textbf{#1}: #2%
83 }%
84 %

```

9.1.2 Main task macro

`\trtask` Describes a task

`\trtask[<status>]{<name>}{<when-assigned>}{<who-assigned>}{<to-who-assigned>}{<why>}{<when-d`

For example:

```

%\trtask[Help students organize]{doing}
% {Prepare a \LaTeX\ style to support task report}
% {2021-05-31}{Xexéo}{Geraldo Xexéo}{%
%

```

generates:

Prepare a \LaTeX style to support task report

Status: doing
Assigned in: 2021-05-31
From: Xexéo
To: Geraldo Xexéo
Rationale: Help students organize
Done in: not yet

This is an idea to help understanding the work being done

```

85 % [status] , what, when-assigned, from-who, to-who, why, when-done, extra
86 \newcommand{\trtask}[8][{}]{%
87   \par%
88   \ifblank{#2}{
89     \def\trtask@temp{Task without a name}%
90   }%
91   {%
92     \def\trtask@temp{#2}%
93   }%
94   \refstepcounter{tasks}%
95   \addcontentsline{trt}{tasks}{\protect\numberline{\thetasks}{\trtask@temp}}%
96   \trstatuscolor{#1}%
97   \begin{tcolorbox}[title=\textbf{\trtask@temp},%

```

```

98         colback=\tr@currentboxcolor!5!white,%
99         colframe=\tr@currentboxcolor!75!black%
100     ]%
101     \ifblank{#1}{}%
102     {%
103         \trstatus{#1}\newline%
104     }%
105     \ifblank{#3}{}%
106     {%
107         \trwhen{#3}\newline%
108     }%
109     \ifblank{#4}{}%
110     {%
111         \trwho[\tr@usesfieldname{from}]{#4}\newline%
112     }%
113     \ifblank{#5}{}%
114     {%
115         \trwho{#5}\newline%
116     }%
117     \ifblank{#6}{}%
118     {%
119         \trwhy{#6}\newline%
120     }%
121     \ifblank{#7}{}%
122     {%
123         \trwhen[\tr@usesfieldname{done}]{#7}\newline%
124     }%
125     \ifblank{#8}{}%
126 {\tcblower#8}%
127 \end{tcolorbox}%
128 }%

```

End of Code

Change History

v0.1		v0.3
General: First version	1	General: List of Tasks 1
v0.2		v0.4
General: User can create own states 1		General: Allows redefining field names 1

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	<code>\ifcsname</code> 18, 38	<code>\tr@usesfieldname</code> <u>33</u> , 72, 75, 78, 81, 111, 123
<code>\@ifundefined</code> 7, 69	N	<code>\tr@usestatecolor</code> 17, 53, 58, 61
A	<code>\newline</code> . . 103, 107, 111, 115, 119, 123	<code>\tr@version</code> 4
<code>\addcontentsline</code> . . 95	<code>\newlistof</code> 70, 71	<code>\traddfieldname</code> <u>33</u> , 45–50
C	<code>\numberline</code> 95	<code>\traddstatecolor</code> <u>6</u> , 25–30
<code>\color@</code> 7	P	<code>\trlisttasks</code> . 65, 70, 71
<code>\csname</code> . . 13, 19, 34, 39	<code>\par</code> 87	<code>\trsetboxcolors</code> <u>24</u> , 32, <u>44</u>
D	<code>\printtaskreportversion</code> <u>5</u>	<code>\trsetfieldsnames</code> 44, 52
<code>\detokenize</code> 13, 18, 19, 34, 38, 39	<code>\protect</code> 95	<code>\trsettasklisttitle</code> 64, 67
E	R	<code>\trstatus</code> <u>72</u> , 103
<code>\else</code> 20, 40	<code>\refstepcounter</code> . . . 94	<code>\trstatuscolor</code> . . <u>54</u> , 96
<code>\end</code> 127	<code>\RequirePackage</code> . . . 1–3	<code>\trtask</code> <u>85</u>
<code>\endcsname</code> 13, 18, 19, 34, 38, 39	S	<code>\trtask@temp</code> 89, 92, 95, 97
<code>\ERROR</code> 10	<code>\string</code> 7	<code>\trwhen</code> <u>72</u> , 107, 123
<code>\expandafter</code> 10, 13, 19, 34, 39	T	<code>\trwho</code> <u>72</u> , 111, 115
F	<code>\taskreportversion</code> <u>4</u> , 5	<code>\trwhy</code> <u>72</u> , 119
<code>\fi</code> 22, 42	<code>\tcblower</code> 126	U
I	<code>\textbf</code> 73, 76, 79, 82, 97	<code>\usestatecolor</code> <u>6</u>
<code>\ifblank</code> 56, 88, 101, 105, 109, 113, 117, 121, 125	<code>\thetasks</code> 95	
	<code>\tr@astate@other</code> . . 21	
	<code>\tr@currentboxcolor</code> . . <u>53</u> , 58, 61, 98, 99	

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	4
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	6
5.12	Drink a coffe	7
5.13	Drink a coffe	7
5.14	Drink a coffe	7
5.15	Drink a coffe	8
5.16	Drink a coffe	9
9.1	Prepare a L ^A T _E X style to support task report	13