

# Task Report v0.3

Geraldo Xexéo

Monday 31<sup>st</sup> May, 2021 - 23:27

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>How to use task-report</b>	<b>2</b>
2.1	Using from Overleaf . . . . .	2
<b>3</b>	<b>Package Options</b>	<b>3</b>
3.1	General behavior . . . . .	3
<b>4</b>	<b>Version</b>	<b>3</b>
<b>5</b>	<b>Usage</b>	<b>3</b>
5.1	Configuration Options . . . . .	5
5.2	Creating New States . . . . .	7
<b>6</b>	<b>The List of Tasks</b>	<b>8</b>
<b>7</b>	<b>Warnings</b>	<b>8</b>
<b>8</b>	<b>Implementation</b>	<b>8</b>
8.1	Required Packages . . . . .	8
8.2	Access to the current version . . . . .	9
8.3	Color Management for States . . . . .	9
8.4	Defining States Through a Simulated List . . . . .	9
8.5	Standard Colors . . . . .	10
<b>9</b>	<b>List of Tasks</b>	<b>10</b>
9.1	Declaring Tasks . . . . .	11
9.1.1	Helpers . . . . .	11
9.1.2	Main task macro . . . . .	11

# 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  $\text{\LaTeX}$  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.

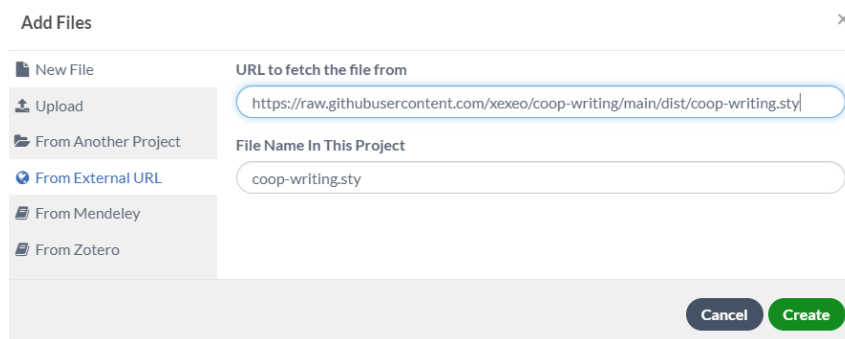


Figure 1: How to link a `task-report.sty` file in your project folder in Overleaf to the official distribution.

## 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 v0.3.

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

`\printtaskreportversion`

will result in:

task-report v. v0.3

Please state the version when reporting bugs.

## 5 Usage

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

**Mage coffe**  
**Status:** todo  
**Assigned in:** Monday 31<sup>st</sup> May, 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  
**Rationale:** Monday 31<sup>st</sup> May, 2021  

---

Rare, plese

**Drink another beer**  
**Status:** checking  
**Assigned in:** June, 1st 2021  
**From:** The Boss  
**To:** The Worker  
**Rationale:** Monday 31<sup>st</sup> May, 2021  

---

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

Drink a beer

Status: done  
Assigned in: Monday 31<sup>st</sup> May, 2021  
From: The Boss  
To: The Worker  
Rationale: Monday 31<sup>st</sup> May, 2021

Task without a name

Task without a name

Status: done

Grab a hot-dog

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

A hot dog must be done with bread and sausage

## 5.1 Configuration Options

`\trsetboxcolors` Set the colors for the 4 types of standard states Black otherwise.

```
\trsetboxcolors{\<todo-color>}{\<doing-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:** Monday 31<sup>st</sup> May, 2021

**From:** The Boss

**To:** The Worker

**Rationale:** To keep awake

**Done in:** Monday 31<sup>st</sup> May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

**Status:** doing

**Assigned in:** Monday 31<sup>st</sup> May, 2021

**From:** The Boss

**To:** The Worker

**Rationale:** To keep awake

**Done in:** Monday 31<sup>st</sup> May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

**Status:** tocheck

**Assigned in:** Monday 31<sup>st</sup> May, 2021

**From:** The Boss

**To:** The Worker

**Rationale:** To keep awake

**Done in:** Monday 31<sup>st</sup> May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

**Status:** checking  
**Assigned in:** Monday 31<sup>st</sup> May, 2021  
**From:** The Boss  
**To:** The Worker  
**Rationale:** To keep awake  
**Done in:** Monday 31<sup>st</sup> May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

**Status:** done  
**Assigned in:** Monday 31<sup>st</sup> May, 2021  
**From:** The Boss  
**To:** The Worker  
**Rationale:** To keep awake  
**Done in:** Monday 31<sup>st</sup> May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

**Assigned in:** Monday 31<sup>st</sup> May, 2021  
**From:** The Boss  
**To:** The Worker  
**Rationale:** To keep awake  
**Done in:** Monday 31<sup>st</sup> May, 2021

Coffe must be strong and add 1 spoon of sugar

## 5.2 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:** Monday 31<sup>st</sup> May, 2021  
**From:** The Boss  
**To:** The Worker  
**Rationale:** To keep awake  
**Done in:** Monday 31<sup>st</sup> May, 2021

---

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  $\text{\LaTeX}$ '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.

<code>\taskreportversion</code>	Provides current version of coop-writing
	<pre>4 \newcommand{\taskreportversion}{\tr@version}%</pre>
<code>\printtaskreportversion</code>	Provides package name and version
	<pre>5 \newcommand{\printtaskreportversion}{task-report v. \taskreportversion}%</pre>

## 8.3 Color Management for States

## 8.4 Defining States Through a Simulated List

<code>\traddstatecolor</code> <code>\usestatecolor</code>	Inserts states and their colors in a simulated list and uses them
	<pre>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 }%</pre>
<code>\trsetboxcolors</code>	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}
```

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

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

`\trstatuscolor` Select the color based on the state

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

```
34 \newcommand{\trstatuscolor}[1]{%
35 {%
36 \ifblank{#1}%
37 {%
38 \def\tr@currentboxcolor{\tr@usestatecolor{other}}%
39 }%
40 {%
41 \def\tr@currentboxcolor{\tr@usestatecolor{#1}}%
42 }%
43 }%
```

## 9 List of Tasks

```
44 \newcommand{\trsettasklisttitle}[1]{%
45 \def\trlisttasks{#1}%
46 }%
47 \trsettasklisttitle{List of Tasks}%
48 %% cria a lista, depende do pacote tclift
49 \@ifundefined{chapter}%
50 {\newlistof[section]{tasks}{trt}{\trlisttasks}}%
51 {\newlistof[chapter]{tasks}{trt}{\trlisttasks}}%
```

## 9.1 Declaring Tasks

### 9.1.1 Helpers

```

\trstatus  Helpers to build the task
\trwhen
\trwhy     52 \newcommand{\trstatus}[2][Status]{%
\trwhat    53   \textbf{#1}: #2%
\trwho     54 }%
           55 \newcommand{\trwhen}[2][Assigned in]{%
           56   \textbf{#1}: #2%
           57 }%
           58 \newcommand{\trwho}[2][To]{%
           59   \textbf{#1}: #2%
           60 }%
           61 \newcommand{\trwhat}[2][What]{%
           62   \textbf{#1}: #2%
           63 }%
           64 \newcommand{\trwhy}[2][Rationale]{%
           65   \textbf{#1}: #2%
           66 }%
           67 %

```

### 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 L<sup>A</sup>T<sub>E</sub>X 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

```

68 % [status] , what, when-assigned, from-who, to-who, why, when-done, extra
69 \newcommand{\trtask}[8] [] {%
70   \par%
71   \ifblank{#2}{
72     \def\trtask@temp{Task without a name}%
73   }%
74   {%
75     \def\trtask@temp{#2}%
76   }%
77   \refstepcounter{tasks}%
78   \addcontentsline{trt}{tasks}{\protect\numberline{\thetasks}{\trtask@temp}}%
79   \trstatuscolor{#1}%
80   \begin{tcolorbox}[title=\textbf{\trtask@temp},%
81     colback=\tr@currentboxcolor!5!white,%
82     colframe=\tr@currentboxcolor!75!black%
83   ]%
84     \ifblank{#1}{}%
85     {%
86       \trstatus{#1}\newline%
87     }%
88     \ifblank{#3}{}%
89     {%
90       \trwhen{#3}\newline%
91     }%
92     \ifblank{#4}{}%
93     {%
94       \trwho[From]{#4}\newline%
95     }%
96     \ifblank{#5}{}%
97     {%
98       \trwho{#5}\newline%
99     }%
100    \ifblank{#6}{}%
101    {%
102      \trwhy{#6}\newline%
103    }%

```

```

104      \ifblank{#7}{}%
105      {%
106          \trwhen[Done in]{#7}\newline%
107      }%
108      \ifblank{#8}{}%
109      {\tcblower%
110          #8%
111      }%
112      \end{tcolorbox}%
113 }%

```

End of Code

## Change History

v0.1		v0.3	
General: First version . . . . .	1	General: List of Tasks . . . . .	1
v0.2			
General: User can create own states	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.

<b>Symbols</b>	<code>\ifcsname</code> . . . . . 18	<code>\thetasks</code> . . . . . 78
<code>\@ifundefined</code> . . . . 7, 49		<code>\tr@astate@other</code> . . 21
<b>A</b>	<b>N</b>	<code>\tr@currentboxcolor</code>
<code>\addcontentsline</code> . . 78	<code>\newline</code> . . . . . 86, 90, 94, 98, 102, 106	. <u>33</u> , 38, 41, 81, 82
<b>C</b>	<code>\newlistof</code> . . . . . 50, 51	<code>\tr@usestatecolor</code> .
<code>\color@</code> . . . . . 7	<code>\numberline</code> . . . . . 78	. . . . . 17, 33, 38, 41
<code>\csname</code> . . . . . 13, 19	<b>P</b>	<code>\tr@version</code> . . . . . 4
<b>D</b>	<code>\par</code> . . . . . 70	<code>\traddstatecolor</code> . .
<code>\detokenize</code> . . 13, 18, 19	<code>\printtaskreportversion</code>	. . . . . <u>6</u> , 25–30
<b>E</b>	. . . . . <u>5</u>	<code>\trlisttasks</code> . 45, 50, 51
<code>\else</code> . . . . . 20	<code>\protect</code> . . . . . 78	<code>\trsetboxcolors</code> . <u>24</u> , 32
<code>\end</code> . . . . . 112	<b>R</b>	<code>\trsettasklisttitle</code>
<code>\endcsname</code> . . 13, 18, 19	<code>\refstepcounter</code> . . . 77	. . . . . 44, 47
<code>\ERROR</code> . . . . . 10	<code>\RequirePackage</code> . . . 1–3	<code>\trstatus</code> . . . . . <u>52</u> , 86
<code>\expandafter</code> . 10, 13, 19	<b>S</b>	<code>\trstatuscolor</code> . . <u>34</u> , 79
<b>F</b>	<code>\string</code> . . . . . 7	<code>\trtask</code> . . . . . <u>68</u>
<code>\fi</code> . . . . . 22	<b>T</b>	<code>\trtask@temp</code> . . . . .
<b>I</b>	<code>\taskreportversion</code> <u>4</u> , 5	. . . . . 72, 75, 78, 80
<code>\ifblank</code> 36, 71, 84, 88, 92, 96, 100, 104, 108	<code>\tcblower</code> . . . . . 109	<code>\trwhat</code> . . . . . <u>52</u>
	<code>\textbf</code> . . . . . 53, 56, 59, 62, 65, 80	<code>\trwhen</code> . . . . . <u>52</u> , 90, 106
		<code>\trwho</code> . . . . . <u>52</u> , 94, 98
		<code>\trwhy</code> . . . . . <u>52</u> , 102
		<b>U</b>
		<code>\usestatecolor</code> . . . . . <u>6</u>

# List of Tasks

5.1	Mage 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	Grab a hot-dog . . . . .	5
5.9	Drink a coffe . . . . .	6
5.10	Drink a coffe . . . . .	6
5.11	Drink a coffe . . . . .	6
5.12	Drink a coffe . . . . .	6
5.13	Drink a coffe . . . . .	7
5.14	Drink a coffe . . . . .	7
5.15	Drink a coffe . . . . .	8
9.1	Prepare a L <sup>A</sup> T <sub>E</sub> X style to support task report . . . . .	11