

Commands to show TLP 2.0 (Traffic Light Protocol) labels

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Contents

1 Usage	2
2 Package options	2
3 Implementation	3
3.1 Color definitions	3

Abstract

This document describes usage and implementation of the `traffic-light-protocol` package, which allows typesetting TLP labels in your document.tags

1 Usage

You can simply use this package by calling the `\tlp {⟨level⟩}` command. For example, calling `\tlp{red}` yields **TLP:RED**.

This package provides the following options for the `\tlp` command:

red	TLP:RED
amber	TLP:AMBER
amber+strict	TLP:AMBER+STRICT
green	TLP:GREEN
clear	TLP:CLEAR

2 Package options

This package allows to set one of the options `rgb` or `cmk`, which control whether use CMYK or RGB to define colors (the TLP standard allow any of them).

3 Implementation

We rely on some package to display colored boxes:

```
1 \RequirePackage{expl3}
2 \RequirePackage{l3keys2e}
3 \RequirePackage{xcolor}

   Load and execute package options

4 \ExplSyntaxOn
5 \str_new:N\tlp_font_color
6 \str_new:N\tlp_name
7 \str_new:N\tlp_bg_color
8 \str_set:Nn\tlp_bg_color{tlp-bg-black}
9 \str_new:N\color_mode
10 \str_set:Nn\color_mode{rgb}
11 \keys_define:nn { tlp }{
12   color-mode .choice:,
13   color-mode/rgb .code:n = \str_set:N\color_mode{rgb},
14   color-mode/cmyk .code:n = \str_set:N\color_mode{cmyk},
15
16   level .choice:,
17   level / red .code:n =
18     \str_set:Nn\tlp_font_color{tlp-font-red}
19     \str_set:Nn\tlp_name{RED},
20   level / amber .code:n =
21     \str_set:Nn\tlp_font_color{tlp-font-amber}
22     \str_set:Nn\tlp_name{AMBER},
23   level / amber+strict .code:n =
24     \str_set:Nn\tlp_font_color{tlp-font-amber}
25     \str_set:Nn\tlp_name{AMBER+STRICT},
26   level / green .code:n =
27     \str_set:Nn\tlp_font_color{tlp-font-green}
28     \str_set:Nn\tlp_name{GREEN},
29   level / clear .code:n =
30     \str_set:Nn\tlp_font_color{tlp-font-clear}
31     \str_set:Nn\tlp_name{CLEAR},
32 }
33 \ProcessKeysPackageOptions{tlp/color-mode}
34 \ExplSyntaxOff
```

3.1 Color definitions

The following color definitions are based on the [TLP 2.0](#) standard.

```
35 %
36 \ExplSyntaxOn
37 \msg_new:nnn{traffic-light-protocol}{illegal_color_mode}
38   {Illegal\ color\ mode:\ #1\ (only\ 'rgb'\ and\ 'cmyk'\ are\ supported)}
39 \cs_new_protected_nopar:Npn\tlp_set_rgb_colnames:{
40   \definecolor{tlp-bg-black}{RGB}{0,0,0}
41   \definecolor{tlp-font-red}{RGB}{255,43,43}
42   \definecolor{tlp-font-amber}{RGB}{255,192,0}
43   \definecolor{tlp-font-green}{RGB}{51,255,0}
44   \definecolor{tlp-font-clear}{RGB}{255,255,255}
```

```

45 }
46 \cs_new_protected_nopar:Npn\tlp_set_cmyk_colornames:{
47   \definecolor{tlp-bg-black}{CMYK}{0,0,0,255}
48   \definecolor{tlp-font-red}{CMYK}{0,83,83,0}
49   \definecolor{tlp-font-amber}{CMYK}{0,25,100,0}
50   \definecolor{tlp-font-green}{CMYK}{79,0,100,0}
51   \definecolor{tlp-font-clear}{CMYK}{0,0,0,0}
52 }
53 \str_case:NnF\color_mode
54 {
55   {rgb} {\tlp_set_rgb_colornames:}
56   {cmyk} {\tlp_set_cmyk_colornames:}
57 } {\msg_err:nnV{traffic-light-protocol}{illegal_color_mode}{\color_mode}}
58 \ExplSyntaxOff

```

Now we can define the \tlp macro.

\tlp

```

59 \ExplSyntaxOn
60 \NewDocumentCommand{\tlp}{m}{
61   \keys_set:nn{tlp/level}{#1}
62   \colorbox{\str_use:N\tlp_bg_color}
63     {\textcolor{\str_use:N\tlp_font_color}{
64       \textsf{\textbf{TLP:\str_use:N\tlp_name}}}}
65 }
66 \ExplSyntaxOff

```