

The tikzsymbols package*

Ben Vitecek
b.vitecek@gmx.at
GitHub

February 8, 2019

Abstract

Some symbols created using tikz.
For differences between the releases see section 2.
English is (still) not my native language so there (still) might be some errors¹ ☹.

Contents

1	Introduction	2
2	Important changes	3
3	Options	3
3.1	Load-time Options	3
3.1.1	marvosym (true/false)	3
3.1.2	prefix (<i><string></i>)	4
3.2	Normal Options	4
3.2.1	draft (true/false)	4
3.2.2	final (true/false)	5
3.2.3	tree (true/false/on/off)	5
3.2.4	after-symbol (<i><string or command></i>)	5
3.2.5	global-scale (<i><number></i>) symbol-scale (<i><key-value list></i>)	6
3.2.6	append-style (<i><tikz' keyval></i>)	6
3.2.7	usebox (true/false)	7
3.2.8	baseline (true/false)	7
3.2.9	remember-picture (true/false)	7

*This document corresponds to tikzsymbols v4.10c, dated 2019/02/08.

¹They are – of course – on purpose (expect for “avaiable” (sic!)).

4	Symbols	7
4.1	Cooking-symbols 🍳	8
4.2	Emoticons 😊	9
4.2.1	“Normal” Emoticons 🙄	9
4.2.2	“3D” Emoticons 🤪 🤨	11
4.3	Other Symbols 🍷	12
4.4	Trees 🌲	13
5	FAQ (Known errors and problems)	14
5.1	How to get rid of the space after each symbol?	14
5.2	Using the symbols causes unwanted <code><problem></code> . How could I get rid of it?	14
5.3	I am getting the error-message <code>Argument of \pgffor@next has an extra }</code>	14
5.4	Another package I load already defines <code><symbol></code> .	15
5.5	Does this package store symbols in boxes and reuses them instead of creating a new picture every time?	15
5.6	Are the symbols created with the environment <code>tikzpicture</code> ?	15
6	Nobody is perfect	15
7	Danksagung	15
8	Changes	16

1 Introduction

As far as I can remember this package is the result of me writing a cooking book². Back then I wasn’t able to find the cooking symbols I wanted and using time, tikz, lot’s of magic (also known as “programming”, but only if the respective person knows what’s going on) and a documentation in bad grammar³ I somehow ended up with this package.

During time L^AT_EX3 became known to me and I started experimenting and programming in this (I would say due to its simplicity compared to L^AT_EX 2_ε far superior) language. Well, long story short: I was impressed. And so the idea of writing my package in L^AT_EX3 was born.

I finally took my time and started rewriting my code using L^AT_EX3. This process can be summarized as: “What *does* this command?”, “Why did I define *this* command?” and more generally “*What* have I done?!” Well, let’s hope my code (and grammar) is better this time⁴.

Well ... that’s it, have fun!

²Well, it’s one result, the other one is a cooking book.

³Not that it’ now any better.

⁴Looking at own risk. You have been warned.

2 Important changes

The package should behave the same way as the “old” L^AT_EX 2_ε release.

2018 Option `draft` and `final` are now local.

2017 Option `usebox` can be used during the document.

old The horribly named command `\tikzsymbolsaftersymbolinput` is not defined anymore by this package. Please use the new option `after-symbol`, in combination with the new command `\tikzsymbolset`, see section 3 for more information.

very old The option `draft=absolute` is now obsolete and replaced by the much simpler option `draft=true`.

3 Options

Options can either be set as package options or using `\tikzsymbolset`. Some options can only be set as package options, those are described in section 3.1.

It is recommended to use the option `draft=true` while working on the document.

<code>\tikzsymbolset</code>	<code>\tikzsymbolset {⟨keys = values⟩}</code>
-----------------------------	---

Most keys, except for the load-time options (section 3.1), can be set using this command.

3.1 Load-time Options

The following options *cannot* be set using `\tikzsymbolset`.

3.1.1 marvosym (true/false)

`marvosym = true / false`

Please load `tikzsymbols` *after* `marvosym`.

`marvosym` also defines `\Smiley` and `\Coffeecup`. If you prefer those symbols (☺, ☹) over the `tikzsymbols` ones (☺, ☹) you can use this option. If set to `true` `tikzsymbols` cancels the definition of its `\Smiley` and `\Coffeecup`:

Without option “marvosym”: ☺ ☹	With option “marvosym”: ☺ ☹
<code>\usepackage{marvosym}</code>	<code>\usepackage{marvosym}</code>
<code>\usepackage{tikzsymbols}</code>	<code>\usepackage[marvosym]{tikzsymbols}</code>

This option raises an error if set `true` without loading package `marvosym`.

Can only be set as load-time option.

You may also use the option `prefix` (section 3.1.2).

3.1.2 prefix (*<string>*)

This option takes a string as value: `prefix=<string>` and adds this prefix to every command defined by this package. So setting `prefix=<prefix>` adds *<prefix>* to all commands of this package: `\<prefix>command`.

<prefix> should neither contain any special characters (e.g., ä, ü, ß, etc.) nor spaces.

By default it is empty, so no prefix is given, if this option is given without an argument *<prefix>* is set to `tikzsymbols`.

Can only be set as a load-time option.

For example:

```
\usepackage[prefix=tikzsym]{tikzsymbols}
```

defines `\Smiley` as `\tikzsymSmiley`, `\Kochtopf` as `\tikzsymKochtopf`, `\pot` as `\tikzsympot`, etc.

If you use this option or think about using this option the following command may be handy:

```
\tikzsymbolsuse{<Symbolname>}
```

This command takes the name of the symbol *without* backslash and prints the symbol (or raises an error if the symbol is not defined). Using this command you don't have to worry about a *<prefix>*, just write the command name and this command adds automatically the given prefix to the command name.

Examples: `\tikzsymbolsuse{Smiley}[2]` ☺

`\tikzsymbolsuse{BasicTree}[1.2]{black}{red!50!black}{red}{leaf}` 🌳

`\tikzsymbolsuse{Ofen}` 🚪

`\tikzsymbolsuse{Fire}[-1.3]` 🔥

etc.

3.2 Normal Options

Most of these options can be set either as a package-option or with `\tikzsymbolsset`.

3.2.1 draft (true/false)

draft `draft = <true/false>`

While working on the document it is recommended to set this option to `true` because creating many symbols may takes some time to compile and by setting this option to `true` the symbols are replaced by plain vanilla rectangles (with approximately the same height and width as the symbols) which are faster to create.

You can also set this option during the document.

The old option `draft=absolute` is obsolete and should therefore not be used.

3.2.2 final (true/false)

final final= $\langle \text{true/false} \rangle$

This key has the opposite behavior of the option **draft**.

It is a boolean key and therefore accepts only **true** or **false** and is set to **true** by default. Setting it to **true** prints all symbols normally. Setting it to **false** prints plain vanilla draft-boxes instead which speeds up the compile-process.

3.2.3 tree (true/false/on/off)

tree tree= $\langle \text{true/on/false/off} \rangle$

This key accepts **true**, **false** and furthermore **on** and **off** (for historical reasons). The latter do exactly the same as the first ones.

This option has only an effect on the command `\BasicTree` and its derivatives (`\Springtree`, `\Summertree`, `\Autumntree` and `\Wintertree`) and substitutes them with tikz drawn boxes.

So while **draft=true** replaces the output of *all* commands with simple black boxes, **tree=true/on** only replaces the output of “tree”-commands with boxes.

It is recommended to use **draft=true**, but if you want you can use this option.

3.2.4 after-symbol ($\langle \text{string or command} \rangle$)

after-symbol after-symbol = $\{ \langle \text{string or command} \rangle \}$

Is more stable if set using `\tikzsymbolset`. The value of this key is inserted after every command of this package. By default it is set to `\xspace`.

3.2.5 global-scale ($\langle number \rangle$) symbol-scale ($\langle key-value list \rangle$)

global-scale	global-scale = $\{\langle number \rangle\}$
symbol-scale	symbol-scale = $\{\langle symbol-1=number-1, symbol-2=number-2, \dots \rangle\}$

global-scale can be used to scale *all* commands by given $\langle number \rangle$.


If only some specific symbols should be scaled, you may use the second option and specify which symbol or symbols (name of the symbol without backslash) should be scaled. Using the german name (if available) has the same effect as using the english one.

Note: You can scale the symbols in this package in three different ways: The first is to scale *all* symbols using `global-scale`, the second is scaling specific symbols using `symbol-scale` and the third is by using the optional argument provided by the symbols (which I call `local-scale`; e.g. `\Smiley[2]`).

The important thing is that those scaling methods *do not cancel* each other, but behave multiplicative.

If a local scale is given (e.g. `\Smiley[2]`) with `global-scale=3` the resulting scaling will be $3 \cdot 2 = 6$. Is furthermore this specific symbol is also scaled (e.g. by 1.1), the resulting scaling (for this symbol) will be $3 \cdot 1.1 \cdot 2 = 6.6$.

Examples: `\tikzsymbolsset{symbol-scale={ Smiley= 1.5 }}` ☺

`\tikzsymbolsset{symbol-scale={ Smiley= 5 }}` 

`\tikzsymbolsset{symbol-scale={ Smiley= 2, Schneebesen=2.1 }}` ☺🥰

`\tikzsymbolsset{global-scale=3,symbol-scale={ Smiley= 2, Schneebesen=2.1 }}`



Note: Using “eggbeater” instead of “Schneebesen” does the same thing.

3.2.6 append-style ($\langle tikz' keyval \rangle$)

append-style	append-style = $\{\langle tikz' keyval \rangle\}$
--------------	---

With this option you can append `tikz' $\langle keyval \rangle$` to `tikzsymbols` internal style.

Note: The style is called `__tikzsymbols` and while the name will probably not change, you are discouraged to use it directly unless it is *really* necessary (e.g. if I did something wrong).

3.2.7 usebox (true/false)

usebox	<code>usebox = {\true/false}</code>
---------------	-------------------------------------

In `tikzsymbols` all symbols are stored inside boxes (`\sbox`) and while I still have no idea what exactly happens, it shortens the compilation time of the document. By default this option is `true`.

The drawback is that \LaTeX has only a limited number of box registers. If you come across an error message regarding boxes try setting `usebox=false`.

3.2.8 baseline (true/false)

baseline	<code>baseline = {\true/false}</code>
-----------------	---------------------------------------






This option mainly exists to let the commands of this package work inside `todonotes`' `\todo` command. If set to `true` it adds to each symbol of this package the `tikz` option `baseline=default`. If you do not want this, set this option to `false`. It is set to `true` by default.

3.2.9 remember-picture (true/false)

remember-picture	<code>remember-picture = {\true/false}</code>
-------------------------	---

Adds to each symbol created by this package the `tikz` option `remember picture={\true/false}`. It is not added by default.

4 Symbols

In this section the symbols are introduced. They  all  **change** 
automatically  with  text-size \scriptsize .


















4.1 Cooking-symbols 🍳

\Kochtopf
 \pot
 \Bratpfanne
 \fryingpan
 \Schneebeesen
 \eggbeater
 \Sieb
 \sieve
 \Purierstab
 \blender
 \Dreizack
 \trident
 \Backblech
 \bakingplate
 \Ofen
 \oven
 \Pfanne
 \pan
 \Herd
 \cooker
 \Saftpresse
 \squeezer
 \Schussel
 \bowl
 \Schaler
 \peeler
 \Reibe
 \grater
 \Flasche
 \bottle
 \Nudelholz
 \rollingpin
 \Knoblauchpresse
 \garlicpress

The following table shows all available cooking-symbols and their respective commands. The first column shows the command-names (german & english), the second the optional parameter(s). The optional parameter(s) are for both the german and the english commands the same.

$\langle scale \rangle$ can be a number between (not exactly) -1400 and (also not exactly) 1400 , default is 1 .

Da Umlaute nicht in Befehlsnamen vorkommen dürfen, werden die Umlaute ö, ä, ü durch o, a, u ersetzt.

German & English Commands		Optional parameter(s)	Output
\Kochtopf	\pot	$[\langle scale \rangle]$	
\Bratpfanne	\fryingpan	$[\langle scale \rangle]$	
\Schneebeesen	\eggbeater	$[\langle scale \rangle]$	
\Sieb	\sieve	$[\langle scale \rangle]$	
\Purierstab	\blender	$[\langle scale \rangle]$	
\Dreizack	\trident	$[\langle scale \rangle]$	
\Backblech	\bakingplate	$[\langle scale \rangle]$	
\Ofen	\oven	$[\langle scale \rangle]$	
\Pfanne	\pan	$[\langle scale \rangle]$	
\Herd	\cooker	$[\langle scale \rangle]$	
\Saftpresse	\squeezer	$[\langle scale \rangle]$	
\Schussel	\bowl	$[\langle scale \rangle]$	
\Schaler	\peeler	$[\langle scale \rangle]$	
\Reibe	\grater	$[\langle scale \rangle]$	
\Flasche	\bottle	$[\langle scale \rangle]$	
\Nudelholz	\rollingpin	$[\langle scale \rangle]$	
\Knoblauchpresse	\garlicpress	$[\langle scale \rangle]$	

4.2 Emoticons ☺

4.2.1 “Normal” Emoticons 🐱

\Smiley
 \Sadey
 \Neutrey
 \Changey
 \cChangey
 \Annoey
 \Laughey
 \Winkey
 \oldWinkey
 \Sey
 \Xey
 \Innocey
 \wInnocey
 \Cooley
 \Tongey
 \Nursey
 \Vomey
 \Walley
 \rWalley
 \Cat
 \SchrodingersCat
 \Ninja
 \Sleepy
 \NiceReapey

First column shows the commands, the second the (optional) parameter(s), the third the default-output (the only command with a mandatory argument is \Changey).

$\langle scale \rangle$ can be a number between (not exactly) -2000 and (not exactly) 2000 , default is 1.

$\langle color \rangle$ can be every defined color. Note: The color names shouldn't contain special characters like ß, ä, ö, ...

\Changey's $\langle mood \rangle$ has to be between -2 and 2 (1 equals \Smiley, -1 \Sadey and 0 \Neutrey).

\SchrodingersCat's $\langle case \rangle$ can either be 1 (alive), 0 (unknown) or -1 (dead).

Commands	(Optional) parameter(s)	Output
\Smiley	[$\langle scale \rangle$] [$\langle color \rangle$]	☺
\Sadey	[$\langle scale \rangle$] [$\langle color \rangle$]	☹
\Neutrey	[$\langle scale \rangle$] [$\langle color \rangle$]	☺
\Changey	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle mood \rangle$]	☺
\cChangey	[$\langle scale \rangle$] [$\langle color1 \rangle$] [$\langle color2 \rangle$] [$\langle color3 \rangle$] [$\langle mood \rangle$]	🟢
\Annoey	[$\langle scale \rangle$] [$\langle color \rangle$]	☹
\Laughey	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle mouth color \rangle$]	☺
\Winkey	[$\langle scale \rangle$] [$\langle color \rangle$]	☺
\oldWinkey	[$\langle scale \rangle$] [$\langle color \rangle$]	☺
\Sey	[$\langle scale \rangle$] [$\langle color \rangle$]	☹
\Xey	[$\langle scale \rangle$] [$\langle color \rangle$]	☹
\Innocey	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle halo color \rangle$]	😊
\wInnocey	[$\langle scale \rangle$]	😊
\Cooley	[$\langle scale \rangle$] [$\langle color \rangle$]	😊
\Tongey	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle tongue color \rangle$]	😊
\Nursey	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle cap color \rangle$] [$\langle cross color \rangle$]	😊
\Vomey	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle vomit color \rangle$]	🤮
\Walley	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle wall color \rangle$]	🏠
\rWalley	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle wall color \rangle$]	🏠
\Cat	[$\langle scale \rangle$]	🐱
\SchrodingersCat	[$\langle scale \rangle$] [$\langle case \rangle$]	🐱
\Ninja	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle headband color \rangle$] [$\langle eye color \rangle$]	🥷
\Sleepy	[$\langle scale \rangle$] [$\langle color \rangle$] [$\langle cap color \rangle$] [$\langle star color \rangle$]	😴
\NiceReapey	[$\langle scale \rangle$]	👻

“r” for “random generated cracks”.

Examples: \Sadey[] [red] 🟡

\backslash Cooley[-3] [cyan] 🤖
 \backslash Vomey[1.5] [green!80!black] [olive] 🍌
 \backslash Nursey[] [yellow] [blue] [red] 🧑.
 \backslash Ninja[1.3] [] [violet] [red] 🍷.
 \backslash colorbox{yellow}{ \backslash Winkey \backslash Annoey[-1] \backslash Neutrey} 😊😞😞
 \backslash textcolor{blue}{ \backslash Sey} 😊
 \backslash Sleepey[1] [white] [blue] [yellow!95!black] 🧠
 \backslash SchrodingersCat{1} 🐱
 \backslash SchrodingersCat{0} 🐱
 \backslash SchrodingersCat{-1} 🐱
 \backslash Changey{-2} 😞 \backslash Changey{-1.367} 😞 \backslash Changey{-1} 😞 \backslash Changey{0} 😞
 \backslash Changey{1} 😊 \backslash Changey{1.41} 😊 \backslash Changey{2} 😊
 \backslash cChangey{2} 🟢 \backslash cChangey{1} 🟢 \backslash cChangey{0.5} 🟢 \backslash cChangey{0.1} 😊
 \backslash cChangey{0} 😊 \backslash cChangey{-0.5} 😊 \backslash cChangey{-1} 🟠 \backslash cChangey{-2} 🔴
 \backslash cChangey[] [] [blue]{-1} 🟣 \backslash cChangey[] [] [blue]{0.5} 🔵
 If you intent to change the color of \backslash cChangey you may define a new command
 so that you do not have to write those brackets each time.

4.2.2 “3D” Emoticons 😊🙄

`\dSmiley`
`\dSadey`
`\dNeutrey`
`\dChangey`
`\dcChangey`
`\dAnnoey`
`\dLaughy`
`\dWinkey`
`\dSey`
`\dXey`
`\dInnocey`
`\dCooley`
`\dNinja`
`\drWalley`
`\dWalley`
`\dVomey`
`\dNursey`
`\dTongey`
`\dSleepey`
`\olddWinkey`

First column shows the commands (note: the “3D” Emoticons begin with `\d...`), the second shows the (optional) parameter(s), the third shows the default-output (the only command with a mandatory argument is `\dChangey`).

`<scale>` can be a number between a small number (under -500 for sure) and a large number (over 500 for sure), default is 1 .

`<color>` can be every defined color (see examples below). Note: The color names shouldn’t contain special characters like ß, ä, ö, ...

`\Changey`’s `<mood>` has to be between -2 and 2 (1 equals `\dSmiley`, -1 `\dSadey` and 0 `\dNeutrey`).

Commands	Optional parameter(s)	Output
<code>\dSmiley</code>	<code>[<scale>] [<color>]</code>	😊
<code>\dSadey</code>	<code>[<scale>] [<color>]</code>	🙄
<code>\dNeutrey</code>	<code>[<scale>] [<color>]</code>	😐
<code>\dChangey</code>	<code>[<scale>] [<color>] {<mood>}</code>	😊
<code>\dcChangey</code>	<code>[<scale>] [<color1>] [<color2>] [<color3>] {<mood>}</code>	🟢
<code>\dLaughy</code>	<code>[<scale>] [<color>] [<mouth color>]</code>	😄
<code>\dAnnoey</code>	<code>[<scale>] [<color>]</code>	😞
<code>\dWinkey</code>	<code>[<scale>] [<color>]</code>	😏
<code>\olddWinkey</code>	<code>[<scale>] [<color>]</code>	😊
<code>\dSey</code>	<code>[<scale>] [<color>]</code>	😊
<code>\dXey</code>	<code>[<scale>] [<color>]</code>	😏
<code>\dInnocey</code>	<code>[<scale>] [<color>] [<halo color>]</code>	😇
<code>\dCooley</code>	<code>[<scale>] [<color>]</code>	😏
<code>\dTongey</code>	<code>[<scale>] [<color>] [<tongue color>]</code>	😏
<code>\dNursey</code>	<code>[<scale>] [<color>] [<cap color>] [<cross color>]</code>	😏
<code>\dVomey</code>	<code>[<scale>] [<color>] [<vomit color>]</code>	🤮
<code>\dWalley</code>	<code>[<scale>] [<color>] [<wall color>]</code>	👁
<code>\drWalley</code>	<code>[<scale>] [<color>] [<wall color>]</code>	👁
<code>\dNinja</code>	<code>[<scale>] [<color>] [<headband color>] [<eye color>]</code>	🥷
<code>\dSleepey</code>	<code>[<scale>] [<color>] [<cap color>] [<star color>]</code>	😴

“r” for “random generated cracks”.

Examples: `\dSadey[] [red]` 🙄

`\dCooley[-3] [cyan]` 🤖

`\dVomey[1.5] [green!70!black] [olive]` 🤮

`\dNursey[] [yellow] [blue] [red]` 🤮

`\dNinja[1.3] [] [violet] [red]` 🥷

`\dChangey{-2}` 😞 `\dChangey{-1.367}` 😞 `\dChangey{-1}` 😞 `\dChangey{0}` 😊
`\dChangey{1}` 😊 `\dChangey{1.41}` 😊 `\dChangey{2}` 😊

`\dcChangey{2}` 🟢 `\dcChangey{1}` 🟡 `\dcChangey{0.5}` 🟠 `\dcChangey{0.1}` 🟤
`\dcChangey{0}` 🟤 `\dcChangey{-0.5}` 🟠 `\dcChangey{-1}` 🟡 `\dcChangey{-2}` 🟢
 🟢

`\dcChangey[] [] [blue]{-1}` 🟡 `\dcChangey[] [] [blue]{0.5}` 🟢

If you intent to change the color of `\dcChangey` you may define a new command so that you do not have to write those brackets each time.

4.3 Other Symbols 🏠

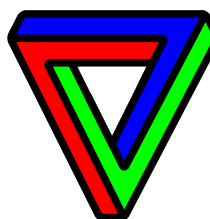
`\Strichmaxerl`
`\Candle`
`\Fire`
`\Coffeecup`
`\Chair`
`\Bed`
`\Tribar`
`\Moai`
`\Snowman`

`\Strichmaxerl`'s optional parameters 2–5 (*⟨left arm⟩* to *⟨right leg⟩*) can be a number between -360 and 360 (of course the number can be even greater or even smaller.). The parameters are the angles between the body and the separate parts of `\Strichmaxerl` (see examples).

⟨scale⟩ can be a very great and a very small negative number (but I don't think, that you need so large symbols).

⟨color⟩ can be every defined color. Note: The color names shouldn't contain special characters like ß, ä, ö,

Commands	Optional parameter(s)	Output
<code>\Strichmaxerl</code>	<i>[[⟨scale⟩] [⟨left arm⟩] [⟨right arm⟩] [⟨left leg⟩] [⟨right leg⟩]</i>	⌘
<code>\Candle</code>	<i>[[⟨scale⟩]</i>	🕯
<code>\Fire</code>	<i>[[⟨scale⟩]</i>	🔥
<code>\Coffeecup</code>	<i>[[⟨scale⟩]</i>	☕
<code>\Chair</code>	<i>[[⟨scale⟩]</i>	🪑
<code>\Bed</code>	<i>[[⟨scale⟩]</i>	🛏
<code>\Moai</code>	<i>[[⟨scale⟩]</i>	🗿
<code>\Tribar</code>	<i>[[⟨scale⟩] [⟨color 1⟩] [⟨color 2⟩] [⟨color 3⟩]</i>	🔺
<code>\Snowman</code>	<i>[[⟨scale⟩]</i>	🧊



`\Tribar[-10] [blue] [red] [green]`

`\Tribar[2.1] [blue] [blue!50] [blue!20]` 🔺

`\Strichmaxerl[1] [10] [30] [40] [4] ⌘` ,
`\Strichmaxerl[1.4] [210] [310] [10] [90] ⌘` ,
`\Strichmaxerl[2] [510] [110] [190] [990] ⌘` ,
`\Strichmaxerl[0.9] [54] [28] [95] [16] ⌘`
`\Strichmaxerl[] [54] [28] ⌘`

`\Strichmaxerl [] [45] [45] [45] [45] ?`

`\BasicTree`
`\Springtree`
`\Summertree`
`\Wintertree`
`\WorstTree`

4.4 Trees 🌳






`<scale>` can be a number between (not exactly) -900 and (again not exactly) 900 , default is 1.

`<color>` can be every defined color (see examples below). Note: The color names shouldn't contain special characters like β , \ddot{a} , \ddot{o} ,


`{<leaf>}` uses the colors of `{<leaf color a>}` and `{<leaf color b>}`, you can leave this one empty if you don't want leaves (`\Wintertree` is without *leaf*, see examples below).

If you are using those trees, L^AT_EX needs longer to produce the output. So you may use the package option `tree=off`, or (better) `draft=true` (see section 3.2.1 and section 3.2.3) to make L^AT_EX faster.

Furthermore those trees are pretty much stolen from the tikz manual.

Commands	Optional/Needed parameter(s)	Output
<code>\BasicTree</code>	<code>[<scale>] {<trunk color>} {<leaf color a>} {<leaf color b>} {<leaf>}</code>	see below
<code>\Springtree</code>	<code>[<scale>]</code>	
<code>\Summertree</code>	<code>[<scale>]</code>	
<code>\Autumntree</code>	<code>[<scale>]</code>	
<code>\Wintertree</code>	<code>[<scale>]</code>	
<code>\WorstTree</code>	<code>[<scale>]</code>	

`\BasicTree` **examples** Some “normal” trees:

`\colorbox{green}{\BasicTree{red}{orange}{yellow}{leaf}}` 

`\BasicTree[5]{orange!95!black}{orange!80!black}{orange!70!black}{leaf}`



`\BasicTree[2]{blue!65!white}{cyan!50!white}{cyan!50!white}{}` 

`\BasicTree[-1.54]{green!20!black}{green!50!black}{green!70!black}{leaf}`




`\colorbox{black}{\BasicTree[3.75]{gray!80}{gray!50}{gray!40}{leaf}}`




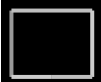


`draftbox \BasicTree` **examples** Some “draftbox” trees (using `tree=false`):

...and using the same trees with `tree=off/false` or `draft(=true)`:

`\colorbox{green}{\BasicTree{red}{orange}{yellow}{leaf}}` 

```

\BasicTree[5]{orange!95!black}{orange!80!black}{orange!70!black}{leaf}

\BasicTree[2]{blue!65!white}{cyan!50!white}{cyan!50!white}{ } 
\BasicTree[-1.54]{green!20!black}{green!50!black}{green!70!black}{leaf}

\colorbox{black}{\BasicTree[3.75]{gray!80}{gray!50}{gray!40}{leaf}}


```

I think it's better if you define your own trees using `\newcommand` and `\BasicTree`:

```

\newcommand{\Myicetree}[1][1]{%
  \BasicTree[#1]{blue!65!white}{cyan!50!white}{cyan!50!white}{}}

```

5 FAQ (Known errors and problems)

Or “Questions I assume would be frequently asked, if people would frequently ask questions”.

5.1 How to get rid of the space after each symbol?

By default the package adds `\xspace` after each command. To remove it use the option `after-symbol`. Using

```
\tikzsymbolset{after-symbol={}}
```

removes the `\xspace` command and thus the unwanted space.

5.2 Using the symbols causes unwanted *<problem>*. How could I get rid of it?

This could have something to do with question 5.5 (after you made sure that the symbols cause the problem). Try using setting the option `usebox=false` and recompile a few times. If the problem persists, please send a bug report (section 6).

5.3 I am getting the error-message Argument of \pgffor@next has an extra }

If you encounter an error message like

```
Argument of \pgffor@next has an extra }
```

while using `babel` with e.g. language “`français`” and for example `\Cooley` you may add

```
\usetikzlibrary{babel}
```

to your preamble. This should (hopefully) fix the problem.

5.4 Another package I load already defines $\langle symbol \rangle$.

You can override pretty much every symbol simply by loading `tikzsymbols` last as it defines the symbols via `\DeclareDocumentCommand` (see `xparse`).

If you want to use the symbols of both packages you may have a look at option `prefix`.

5.5 Does this package store symbols in boxes and reuses them instead of creating a new picture every time?

Yes, it does. It can become a problem if \LaTeX runs out of boxes. If this happens, use `usebox=false`.

Furthermore, `tikz` allows to reference pictures using e.g. `remember picture`. This also influences the symbols of `tikzsymbols`. As those symbols are stored and copied for printing, labels attached to the symbols get repeated. In this case, also try using `usebox=false` (or try the option `remember-picture=false`).

5.6 Are the symbols created with the environment `tikzpicture`?

Yes, they are.

6 Nobody is perfect

If you find a bug please send me a mail (or report it on GitHub) involving a *minimal example* showing the bug and a short description (english or german). Please mention (if you are writing a mail) “`tikzsymbols`” in the header, “`gmx`” has a habit of putting mails into the spam-folder and it helps me to recognize those mails faster. This can also be the reason why I may need some time to answer the mail.

As I am also new to GitHub, I also may take longer to answer, at least until I figured out how to get a mail if a new issue is created.

Suggestions are also welcome.

7 Danksagung

I would like to thank all users for providing bug reports and helping to improve this package.

Furthermore many thanks to my brother helping me improving the symbols.

8 Changes

See the “README.md” file.