# The English documentation of the package yagusylo\*

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#### Abstract

This package enables you to obtain a symbol whithout loading the package which usually provides it in order to avoid name clashes.

It could be considered as a extended version of pifont gone technicolor.

#### Résumé

La documentation de yagusylo est disponible en français sous le nom de yagusylo-fr et yagusylo-fr.pdf devrait être disponible avec extension.

#### Contents

1	Introduction						
2	Special names and general conventions  4						
Ι	$\mathbf{U}\mathbf{s}$	${f age}$	6				
3	One	e Glyph Macros	6				
	3.1	Of Keys and How to Set Them	6				
	3.2	The Macros Proper	6				
	3.3	For Those in the Know	7				
4	Filli	ing and Line	8				
	4.1	Filling	8				
		4.1.1 The Keys	8				
		4.1.2 The Macros for Filling	8				
		4.1.3 The Making-Of	8				
	4.2	To Draw a Line	9				
		4.2.1 Special Keys for Lines	9				
		4.2.2 The Macros for Drawing a Line	9				
5	Iten	nize	10				
	5.1	Environment yagitemize	10				
			10				
			10				
	5.2		10				
			10				
			10				

<sup>\*</sup>This document corresponds to the file yagusylo v1, dated 2009/02/26.

6	Enumerate	11
	.1 Special Keys for yagenumerate	11
	.2 Patterns and how to create them	11
	.3 The environment yagenumerate	
	.4 To Set the Environment	12
7	Miscellaneous	12
	.1 Configuration file	12
	.2 Colours and How to Get Rid of It	12
II	Summary of usage	13
8	The Package Keys	13
9	The Commands and Environments	13
	.1 One Glyph Macros	
	.2 Filling and Line Drawing	
	.3 Itemize and Enumerate (Yagusylo Way)	
II	Examples	17
<b>10</b>	yagding, \defdingname, and \yagding*	17
11	yafgill and \yagfill*	17
	1.1 The Key leadtype	17
	1.2 The Key symplace	18
	11.2.1 Values other than a	18
	11.2.2 Value a	19
<b>12</b>	Environments yagitemize and yagitemize*	19
	2.1 Environment yagitemize*	19
13	The configuration file	20
ΙV	Showcase	21
		0.1
14	From the package pifont	21
	4.1 The Symbols of Symfam pifont	21
<b>15</b>	From the package ifsym	22
	5.1 The Symbols of Symfam ifsym	22
	5.2 The Symbols of Symfam ifsymgeo	
	5.3 The Symbols of Symfam ifsymgeonarrow	
	5.4 The Symbols of Symfam ifsymgeowide	
	5.5 The Symbols of Symfam ifsymweather	
	5.6 The Symbols of Symfam ifsymclock	27
<b>16</b>	From the package marvosym	28
	6.1 The Symbols of Symfam marvosym	28
<b>17</b>	From the package fourier	29
	7.1 The Symbols of Symfam fourier	29
18	From the package wasysym	30
	8.1 The Symbols of Symfam wasysym	30

<b>19</b>	From the package bbding	31
	19.1 The Symbols of Symfam bbding	31
<b>2</b> 0	From the package dingbat	32
	20.1 The Symbols of Symfam dingbat	32
	20.2 Large Symbols of dingbat	33
	20.3 The Symbols of Symfam ark	34

#### 1 Introduction

I began to write this package when, for I wanted this symbol **a** in front of my phone number in a document using the class lettre, I realised that both marvosym and lettre.cls define a macro \fax. Because of this name clash I was pretty disappointed.

In fact, very often, we use just some symbols of all those provided by a package such as marovsym. So a lot of macros are defined and loaded for pretty nothing. yagusylo limits the number of macros but cannot prevent TEX to load all the necessary fonts, which is rather good.

Actually, after some thinking, the shortest and quickest way out of the quagmire in which I was stuck was certainly not to write this package but for it was written I would have loathed to let it gather dust in some remote part of my hard disk and I uploaded to my site as a sort of pre-CTAN version.

There I rest for a while before uploading the then version — after a bit of beautification perhaps — on CTAN and I happen to reread a part of the LaTeX Companion 2nd edition and to stumble upon the pifont package. And I was appaled for it seemed that my package did not qualify any more for a quick CTANification.

I decided to add some new capabilities to yagusylo and first of all some equivalent of the environments provided by pifont. And now, after some work and not a few hints from the usual suspects of fr.comp.text.tex — Jean-Côme Charpentier, Arnaud Schmittbuhl, Manuel Pégourié-Gonnard — I can without too much blushing upload the true first version of my tiny work.

Before going on hard facts about the usage, just a word about its name. yagusylo is the acronym of Yet another grand unified symbols loader. This is kind of ironic for I think there are not so many packages entitled unified symbols loader if any. I leave the reader decide if "grand" is the appropriate adjective; -)

### 2 Special names and general conventions

Hereafter a "symbols family" is a set of glyphs which is, in terms of NFSS, defined by the encoding U, a family, and possibly a series, and a shape. yagusylo provides names for these symbols families which you could read in table 1, page 13.

It is often the name of the package which provides the symbols, e. g. fourier or marvosym but, for some packages, there are many families: with dingbat there are dingbat and ark.

So when you require the symbols family marvosym, it boils down to something as \fontencoding{U}\fontfamily{mvs}\fontseries{m}\fontshape{n}\selectfont plus a tiny bit of code to put some color, if the option color is enabled, and the fact that it is done in a group to limit the font change.

For sake of laziness, "symfam" will be an abbreviation of "symbols family". I will sometimes refer to a symbol as a *ding*.

This package uses xkeyval to handle its options. So an option is in fact a key and its value. There are global options wich can be set in the preamble within the optional argument of \usepackage for instance

\usepackage[onerror=nice, info=mute]{yagusylo}

which sets two global options viz. onerror and mute. The global option keys are disabled at the end of the preamble so you can't change these options in the middle of the document.

The other keys are still active at the beginning of the document and are used intensively to change the behaviour of the macros of yagusylo. They will be referred at as "local options".

They are local in that first, internally, I do not use \gsetkeys to set them and, secondly, in that they "respect the group limits". So, if you set some local option inside an environment, the setup will be confined to that environment and the option will find its previous value after the environment.

All the local keys affect the behaviour of almost all the commands but *not* the behaviour of the environment yagenumerate. There are special keys for it.

Some macros have a starred and some even a plussed version. That is that you will find along with \somemacro a \somemacro\* and perhaps also a \somemacro+. Where the bare version \somemacro expects a \( \china{char-num} \) — an integer between 0 and 255 — the

starred version \somemacro\* awaits a  $\langle ding\text{-}name \rangle$  as defined by macros \defdingname or \defdingname+, see page 6.

The plus versions are not for the fainthearted and require a lot. Be aware and shun them accordingly ;-)

For sake of convenience I will write  $\scalebox{\scaleb$ 

Some macros accept a argument which can have a "normal" value or the *special* value \*. I will then write that argument as  $\langle normal/* \rangle$ .

#### Part I

# Usage

Remark In this document yagusylo is loaded with \usepackage[color=true, onerror=nice]{yagusylo}.

### 3 One Glyph Macros

symfam symcolor The first three macros provide a means of obtaining *one* glyph. Their behaviour depends, in some way, on two keys symfam and symcolor that is why I first explain how to set keys with yagusylo.

#### 3.1 Of Keys and How to Set Them

\setyagusylokeys

You can use \setyagusylokeys with as its one and only one mandatory argument a list of pairs of the form key=value:

\setyagusylokeys{ $\langle list\ of\ key\text{-}value\ pairs/* \rangle$ }.

To set e. g. the key symfam to the value marvosym and the key symcolor to gray you will type

\setyagusylokeys{symfam=marvosym, symcolor=gray}

and the values will be set up until the end of the group in which the command is given or until the next use of \setyagusylokeys.

You can use the \setyagusylokeys macro with the special argument \* to return to the default values of the local keys of the package.

After \setyagusylokeys{\*}, symfam has value *pifont* and symcolor *red*, see table 2 on page 13, for a complete list of local keys and their default values.

The macro \setyagusylokeys does not affect the behaviour of yagenumerate environment.

#### 3.2 The Macros Proper

\yagding

yagusylo provides the macro \yagding the syntax of which is:

 $\gamma = \gamma [\langle family \rangle] \{\langle char-num \rangle\} [\langle colour \rangle]$ 

where  $\langle family \rangle$  is one of the symfams. By default,  $\langle family \rangle$  equals pifort unless you have given an other value to the key symfam before using \yagding either in the preamble or the document body.

The  $\langle char\text{-}num\rangle$  is the number of the symbol in the font file which "describes" it. You can look at the section IV on page 21, to find the list of all available symbols with their families and numbers. In any case  $\langle char\text{-}num\rangle$  is an integer between 0 and 255 inclusive.

The  $\langle colour \rangle$  is the name of a colour known by xcolor which deals with all the gory details. By default the colour is the value of symcolor which is itself red by default.

For example, I get "\*" with \yagding[fourier]{88}[blue]. With \yagding{88} I obtain "\*", symbol defined in the pifont package with the default colour red. With \yagding{88}[green] I obtain "\*".

Thanks to xargs, yagusylo provides macros which accept more than one optional argument.

\defdingname

With \defdingname you can give a local or global name to a symbol:

 $\label{lem:local_def} $$ \left(\frac{family}{*}\right) \left(\frac{family}{*$ 

If  $\langle defext \rangle$  has value local — which is the default value — the name is local in the sense that its existence is limited to the englobing group. To obtain a global definition you have to give  $\langle defext \rangle$  the value global. Other value will result in an error, if onerror has value tough or in a warning and then in a local definition.

To be able to use the 2nd optional argument  $\langle defext \rangle$  you must provide the first one. So you can define a name like this:

#### \defdingname[fourier][global]{116}{rhand}[red]

and then, even if that definition is made in a group, everywhere in the following part of the document you will obtain "%" with \yagding\*{rhand}. To help the user to obtain the usual behaviour of \defdingname with 2nd argument global, yagusylo enables the use of \* as value of the first (optional) argument. So \defdingname[\*][global]{75} will create, globally, the same macro as \defdingname{75} does locally.

The last (optional) argument  $\langle colour/* \rangle$  leads to a special behaviour when its value is \*. In that case, the colour of the ding will be the colour which is current at the time of use of \yagding\* and not, as usual, if  $\langle colour/* \rangle$  is not explicitly given, at the time of definition.

To be clearer, let's assume that at a certain time, the current symcolor has value red and then you write

\setyagusylokeys{symcolor=blue}

if \yagding\*{hand} gives the same ऺॢ \yagding\*{handvar} gives ऺॖॎ.

**Remark** The yagusylo macros the name of which begins with def, as \defdingname, do not check previous existence and enable redifinition.

\yagding\*

You will then be able to use  $\gray varphi varphi$ 

and the obtained glyph cannot be affected by the settings of the local keys except symcolor in the special case of a definition using \* as 4th argument as explained above, see page 7.

For example, with \defdingname[fourier]{116}{finger}[gray] I define the name of the symbol "" and I can then get it with \yagding\*{finger}.

In fact, the **true** name of the macro which is used internally by yagusylo is \Y@G@@⊔fin ger. If with such a name there is still a clash it's because somebody did it on purpose!

#### 3.3 For Those in the Know

\yagding+

\yagding+ has syntax:

 $\label{lem:colour} $$ \operatorname{center}_{\langle char-num\rangle}_{\langle colour\rangle}_{\langle col$ 

All the other arguments refer to the NFSS specification:  $\langle encoding \rangle$  is the font encoding, which defaults to U,  $\langle family \rangle$  is the font family,  $\langle series \rangle$  is the font series, and  $\langle shape \rangle$  is the font shape. If you want to use a glyph for which series or shape is undefined, just give \* as argument.

So  $\gray \gray \$ 

\defdingname+

\defdingname+ has syntax:

```
\label{eq:coding} $$ \left(\frac{\langle encoding \rangle}{\langle char-num \rangle} \left(\frac{\langle family \rangle}{\langle chour/* \rangle} \right) \right) = \left(\frac{\langle family \rangle}{\langle chour/* \rangle} \right) $$
```

where the arguments  $\langle ding\text{-}name \rangle$ ,  $\langle defext \rangle$ , and  $\langle colour/*\rangle$  have the same role as in \def dingname.

By default  $\langle encoding \rangle$  which awaits a font encoding has value U. By default  $\langle series \rangle$  — a font series — and  $\langle shape \rangle$  — a font shape — have a value which leads to their getting lost.  $\langle family \rangle$  would like to be set to a legal font family name.

Once the symbol name defined, you will use it with the usual \yagding\*.

Be aware that in order to use a font encoding different from U, you have to declare it in the preamble as an argument of fontenc. So to be able to show you what follows I have this \usepackage[T2C,T1]{fontenc} in the preamble of this document and then \yagding+[T2C]{cmr}{m}{1}28}[blue] gives  $\Pi_{D}$ .

### 4 Filling and Line

The macros \yagline(\*/+) use \yagfill(\*/+) to place the dings so I begin with filling.

#### 4.1 Filling

The filling mechanism is based on the  $T_EX$  commands \leaders, \xleaders and \cleaders. Some keys are reserved for setting the behaviour of \yagfill(\*/+) and then govern also the behaviour of \yagline(\*/+).

#### 4.1.1 The Keys

Six option keys govern the behaviour of the macros \yagfill(\*/+). They are leadtype, symplace, sympos, boxwidth, before, and after.

leadtype

The key leadtype has default value l and can also have value x or c. With l the TEX macro \leaders is used, with c it is \cleaders and with x it is \xleaders. Some examples below will show the different looks, see page 17.

symplace

The key symplace takes its value among c — default —, r, l, a, and n.

sympos If n is chosen, then the key sympos must be set, sympos requires an integer between 0 and 1,000 inclusive.

before after If a is chosen, then the keys before and after must be set. Both those options require a non-negative LATEX length but if you do not set after explicitly it will take the same value as before.

boxwidth

Except when a is chosen, boxwidth must be a non-negative LATEX length. If boxwidth has value 0 pt — or any other null length — then the actual box width will be the natural width of the symbol used by the macros  $\gamma$  in fact, that will be the case whenever the value given to boxwidth is less than the natural width of the symbol.

#### 4.1.2 The Macros for Filling

\yagfill

The macro \yagfill has the following syntax:

where the *(list of key-value pairs)*, if provided, sets up the value of the keys listed. In case a key is not explicitly set, it keeps its current value. So if the optional argument is not given, all the following keys have their current value: symfam,symcolor, leadtype, symplace, sympos, boxwidth, before, and after.

⟨char-num⟩ has the same meaning as it has for \yagding above.

\yagfill\*

The macro \yagfill\* has the following syntax:

 $\label{list of key-value pairs} $$ \left( \ ding-name \right) $$$ 

where the  $\langle list\ of\ key-value\ pairs \rangle$  has the same usage as with \yagfill but where  $\langle ding-name \rangle$  must be the name of a symbol previously defined via \defdingname(+).

\yagfill+

The macro  $\$  yagfill+ has the following syntax:

 $\yagfill+[\langle list\ of\ key-value\ pairs \rangle] \{\langle material \rangle\}$ 

where  $\langle material \rangle$  is something wich can be typeset and has a positive width.

You can look at some examples in the section 11, on page 17.

#### 4.1.3 The Making-Of

The three macros use the same internal code to build the boxes used by the TEX macro \leaders, \cleaders, or \xleaders. The more general is clearly the +-ed version.

First in case symplace is not a, the box has width the value of boxwidth unless that value is less than the natural width of the box containing the material to be typeset in which case the natural width is assumed.

With symplace equals a, the width of the box equals the sum of the values of before, after, and the natural width of the material. In this case the material begins at distance the value of before from the beginning of the box.

<sup>&</sup>lt;sup>1</sup>That natural width is obtained with \settowidth.

When symplace doesn't equal a, you have to provide a means of positionning the material.

The more general case is then to use of n as value of symplace together with a integer between 0 and 1,000 as value of sympos. In that case, the distance between the left end of the box and the left end of the material is given by  $bw \times n/1,000 - 0.5mw$  where bw is the actual boxwidth, n the value of sympos, and mw the width of the material. If n is not an integer or is out of bound you will have an error.

You can consider "symplace=c", "symplace=1", and "symplace=r" as abbreviations for "symplace=n, sympos=500", "symplace=n, sympos=0", and "symplace=n, sympos=1000" respectively, to achieve a placement centered, on the left, and on the right respectively. I have kept the mnemomics of e. g. \makebox.

It could seem obvious but it costs nothing to repeat it: you can set the options governing \yagfill and friends with \setyagusylokeys, see page 18, example 5.

#### 4.2 To Draw a Line

#### 4.2.1 Special Keys for Lines

head The macros \yagline(\*/+) use internally the equivalent of \yagfill+ and so are subjects to the same keys but there are two extra keys to set the behaviour of \yagline and friends. The key head must be a LATEX length, which can be negative. It fixes the distance between the left margin and the left end of the first box of the line with the proviso that the leadtype may make some differences in this respect.

The option key tail fixes the distance between the right margin and the right end of the last box of the line with the same remark about the behaviour of \leaders. If tail is not explicitly given a value, which must be a legal LATEX length, the mecanism assumes that it has the same value as head.

To set both those keys, yagusylo provides the macro \setyagline the syntax of which is the rather unusual:

 $\styagline{\langle head-value \rangle}[\langle tail-value \rangle]$ 

where both values must be lengths. I have decided for this syntax because then head and tail are in the  $natural^2$  order.

By default, head and tail have value 0.5in and  $setyagusylokeys{*}$  set them back to that value.

#### 4.2.2 The Macros for Drawing a Line

\yagline The syntax of \yagline is

 $\gamma = [\langle list \ of \ key-value \ pairs \rangle] \{\langle char-num \rangle\}$ 

where  $\langle list\ of\ key-value\ pairs \rangle$  and  $\langle char-num \rangle$  have their usual meanings.

\yagline\* The syntax of \yagline\* is

 $\gamma = [\langle list \ of \ key-value \ pairs \rangle] \{\langle ding-name \rangle\}$ 

where  $\langle list\ of\ key-value\ pairs \rangle$  and  $\langle ding-name \rangle$  have their usual meanings once again.

\yagline+ The syntax of \yagline+ is

 $\gamma = \frac{(list \ of \ key-value \ pairs)}{(material)}$ 

where all the arguments have the same meanings as in \yagfill+.

All three macros begin and end with a \par so some text\yagline{40}and text results in "some text

and text". Perhaps in such a case it would be better to code some text\yagline{41} \noindent and text which gives "some text

and text" and I was not referring to the chosen glyph.

<sup>&</sup>lt;sup>2</sup>Natural at least for left-to-right writing!

#### 5 Itemize

yagusylo provide two environments yagitemize and yagitemize\* and two macros \setyagitemize(\*) to set the default behaviour of each environment respectively.

#### 5.1 Environment yagitemize

#### 5.1.1 The Environment yagitemize...

yagitemize

Here comes the first environment of yagusylo. As it names could suggest it is a kind of itemize environment. It has the following syntax:

 $\verb|\begin{yagitemize}| [\langle symfam \rangle] {\langle char-num/* \rangle} [\langle colour \rangle] \\$ 

then a certain number of \items and

\end{yagitemize}

as usual.

The mandatory argument  $\langle char-num \rangle$  must be a number in the above defined meaning or a star \* in which case the behaviour of the environment changes a little: in such a case, yagitemize relies on the default values you will have already provided via \setyagitemize at which we will look below.

You can nest as many yagitemize as you want but do not complaint if too much results in too ugly. Moreover, because yagitemize rests on the well known and ubiquitous list environment, LATEX could complain about too many nested lists at a certain time and don't forget that a quote environment is also a list.

#### 5.1.2 And How to Set It Up

\setyagitemize

The macro \setyagitemize enables you to define different symbols for the different level of nesting of the yagitemize environment. It takes an only mandatory argument which must have the following form:

 $\verb|symfam1|, \verb|number1|, \verb|colour1|. symfam2|, \verb|number2|, \verb|colour2|. \dots symfam| symfam|, \verb|numbern|, colourn| \\$ 

With a period "." you change depth level. For each level you have to provide three values separated by commas. The first one is a *symfam* as defined above, the second is the number of the required symbol and the third is the colour of that symbol. I have not provided means of considering default values. All three must be explicitly set up.

When yagitemize encounters the n+1th level, where n is the number of the last given triplet, it emits a warning or an error, depending of the value of the global key onerror, and if onerror has not the value tough, it assumes the n-th level setup for the subsequent level.

I have taken measures to ensure that the first yagitemize will use the first definition given in \setyagitemize, at the price of some new LATEX counters, whichever level of nested list you begin it.

#### 5.2 Environment yagitemize\*

#### 5.2.1 The Environment yagitemize\*...

yagitemize\*

The yagitemize\* environment has the following syntax:

\begin{vagitemize\*}  $[\langle dinq\text{-}name \rangle]$ 

its optional argument, if provided, must be a symbol name, as usual for a starred macro. When no argument  $\langle ding\text{-}name \rangle$  is provided, it uses the default setup defined via \setyagitemize\*.

#### 5.2.2 And How to Set It Up

\setyagitemize\*

The macro \setyagitemize\* enables you to define different symbols for the different level of nesting of the yagitemize\* environment. It takes an only mandatory argument which must have the following form:

```
\verb|dingname1. dingname2. .... dingname| n
```

where each dingname k must be a valid name defined with \defdingname(+), see page 19, example 8.

The mechanism is analog to that of \setyagitemize and \setyagitemize\* has on the environment yagitemize\* the same effect as the non-starred macro has on the non-starred environment.

**Remark** I do not provide a plussed version of the yagitemize environment for it is possible to define symbol names with \defdingname+ and use them in \setyagitemize\*.

#### 6 Enumerate

As yagitemize mimics the usual LATEX itemize, yagenumerate apes LATEX enumerate but with a yagusylo dressing; -)

#### 6.1 Special Keys for yagenumerate

The behaviour of the yagenumerate environment is controlled by the following keys: symfam, symcolor, firstitemnum, enumlength, and enumpattern. Both symfam and symcolor, in this context, are different from the non special local keys symfam and symcolor. We could say that there are two bunches of keys, one for yagenumerate — referred at as the enum bunch — and the other — which I will refer to as the general bunch — for all the rest and that, even if they looks alike, two keys attached to different bunches do not open the same doors.

symfam [enum]
symcolor [enum]

Nonetheless, both symfam and symcolor of the enum bunch do control the symfam and the colour of the dings used in the enumeration. At the beginning of the document — after \begin{document} — they have values pifont and blue respectively.

firstitemnum

In a yagenumerate environment, each \item increment a counter which will point to the glyph used for that item. The number, in the symfam as usual, of the first such glyph is set by firstitemnum which defaults to 172.

enumlength

With enumlength we control the number of items which may appear on the same level of yagenumerate. Its default value is 10. After that you will have an error whatever the value of the key onerror.

enumpattern

The special key enumpattern is even more special. You will read more detailled explanations about it in the following section.

#### 6.2 Patterns and how to create them

A pattern for yagenumerate is a means of keeping and calling a whole set of special keys. There are four pre-defined pattern, viz. piwcr, piwcs, pibcr, and pibcs. The defaut pattern is piwcr. In those names pi means pifont; c is for circle; w for white and b for black which could be a bit misleading as you will soon see; s is for sans-serif and r for roman. They all limit the enumerate length to 10.

Here are the first number for those patterns:

piwcr: ①

piwcs: 1

🕼 pibcr: 🚺

🕼 pibcs: 🕕

\newenumpattern

You can defined your own pattern with  $\newnumpattern$  the syntax of which is:  $\newnumpattern{\langle patname \rangle}{\langle list\ of\ key-value\ pairs \rangle}$ 

in which  $\langle patname \rangle$  is the name of the pattern and  $\langle list\ of\ key-value\ pairs \rangle$  contains at least symfam, firstitemnum, and enumlength. If symcolor is not used, the colour of the pattern will be the default one at the time of the definition. I have not provided a mechanism similar to that of \defdingname, feel free to ask if you find it would be useful.

#### 6.3 The environment yagenumerate

yagenumerate

The environment yagenumerate begins with

\begin{yagenumerate} [ $\langle list\ of\ key\text{-}value\ pairs/* \rangle$ ] and inside you will use \item as in a usual LATEX enumerate.

If there is no argument, i. e. you type something like

\begin{yagenumerate}

\item ...

then the aspect of the enumeration is provided by the current values of symfam, symcolor, firstitemnum, and enumlength.

If the argument is a \* then the aspect is controlled by the current default pattern.

Lastly the aspect is determined by the list of key-value pairs provided by the user. The keys not explicity provided will have their default values.

Because yagenumerate redefines \item you can't use a normal enumerate nested in a yagenumerate without using the environment notyagenum as a kind of wrapper of the LATEX enumerate, see page 20, example 9.

The limits of nesting are those of LATEX.

#### 6.4 To Set the Environment

\setyagenumeratekeys

To set the keys which govern the aspect of yagenumerate you can use the macro \setyag enumeratekeys which has a syntax analog to that of \setyagusylokeys, see page 6.

With \setyagenumeratekeys{\*} keys symfam, symcolor, firstitemnum, enumlength, and enumpattern revert to their default values.

#### 7 Miscellaneous

I put here some items I have not yet been able to insert cleverly in the course of the documentation.

#### 7.1 Configuration file

configfile

It is possible to use a configuration file. yagusylo may read the file yagusylo.cfg if you have set the boolean key configfile to true. Its default value is false. The file yagusylo.cfg must be findable by TFX. In case it is not an error will be produced.

#### 7.2 Colours and How to Get Rid of It

color

As stated before the colour management is devoluted to xcolor if the key color is set, globally, to *true*. That provides two means of reverting to black on white only.

The first method is simply to change the value of color to false. All the colours of yagusylo will be then turned off.

The second method is to pass the option monochrome to xcolor. To do so you will load yagusylo thus:

\usepackage[color=true, XcolorOptions=monochrome]{yagusylo}

XcolorOptions

I will seize the opportunity of mentioning XcolorOptions to add this: if you want to pass more than one options to xcolor you have to list them inside curly braces thus:

\usepackage[color=true, XcolorOptions={monochrome, table}]{yagusylo}

#### Part II

# Summary of usage

### 8 The Package Keys

The table 1 lists the symfams known to the day by yagusylo, the symfams are also the possible values of the key symfam.

package	symfam	package	$\operatorname{symfam}$
pifont	pifont	marvosym	marvosym
ifsym	ifsym	fourier	fourier
	ifsymgeo	wasysym	wasysym
	ifsymgeonarrow	bbding	bbding
	ifsymgeowide	dingbat	dingbat
	ifsymweather		ark
	ifsymclock		

Table 1: The Symfams

The table 2 shows all the option keys, default values and other possible values. Self-understandingly, when I write "any length" it must be understood that that length has to make sense in the context.

key	default value	other possible values
-	Globa	l option keys
info	normal	verbose, mute
onerror	tough	nice
color	false	true
XcolorOptions		list of options known by xcolor
configfile	false	true
	Local option	keys, general bunch
symfam	pifont	see table 1
symcolor	$\operatorname{red}$	any colour known by xcolor
leadtype	1	c, x
symplace	$\mathbf{c}$	l, r, a, n
sympos	0	integer between 0 and 1,000 inclusive
boxwidth	0.2  in	any non-negative length
before	0 pt	any non-negative length
after	0 pt	any non-negative length
head	36.135  pt	any length
tail	36.135  pt	any length
	Local option	keys, enum bunch
firstitemnum	172	integer between 0 and 255 inclusive
enumlength	10	integer
symcolor	blue	any colour known by <b>xcolor</b>
symfam	pifont	see table 1

Table 2: The Keys of yagusylo

#### 9 The Commands and Environments

I give here all the possible usages of the yagusylo macros and environments. I will use the following  $\langle denomination \rangle$ s to refer to some well defined objects:

4 (char-num): an integer between 0 and 255 inclusive,

- h  $\langle number \rangle$ : an integer for which some additional properties could be provided,
- $\delta \langle symfam \rangle$ : the symbolic name of a symfam as listed in table 1,
- $\langle colour \rangle$ : the symbolic name of a colour known by xcolor,
- P ⟨ding-name⟩: the name of a ding as defined with \defdingname(+),
- ♂ ⟨defext⟩: the "extension" of the definition, can be local default or global,
- $\coprod$   $\langle G\text{-}list \rangle$ : a list which consists of any number of key-value pairs in which the keys are attached to the general bunch, see page 13,
- $\bigcirc$   $\langle E\text{-}list \rangle$ : a list which consists of any number of key-value pairs in which the keys are attached to the enum bunch, see page 13,
- \( \lambda \leftrightarrow \l
- $\triangle$   $\langle P\text{-length}\rangle$ : any non-negative LATEX length.

By the way, the preceding yagenumaration has been obtain with

\begin{yagenumerate}[symfam=wasysym, firstitemnum=88, enumlength=14, sym color=purple]

#### 9.1 One Glyph Macros

```
\begin{tabular}{ll} $$ \gding{\langle char-num\rangle} & \gding{\langle char-num\rangle} & \gding[\langle symfam\rangle] & \gding[\langle symfam\rangle] & \gding[\langle symfam\rangle] & \gding{\langle char-num\rangle} & \gding{\langle dinq-name\rangle} \end{tabular}
```

```
\defdingname{\langle char-num\rangle}{\langle ding-name\rangle}
\defdingname[\langle symfam \rangle] \{\langle char-num \rangle\} \{\langle ding-name \rangle\}
\defdingname[*]{\langle char-num\rangle}{\langle ding-name\rangle}
\defdingname[\langle symfam \rangle][\langle defext \rangle]\{\langle char-num \rangle\}\{\langle ding-name \rangle\}
\defdingname[*][\langle defext\rangle]\{\langle char-num\rangle\}\{\langle ding-name\rangle\}
\defdingname\{\langle char-num\rangle\}\{\langle ding-name\rangle\}[\langle colour\rangle]
\defdingname[\langle symfam \rangle] \{\langle char-num \rangle\} \{\langle ding-name \rangle\} [\langle colour \rangle]
\defdingname[*]{\langle char-num\rangle}{\langle ding-name\rangle}[\langle colour\rangle]
\defdingname[\langle symfam \rangle][\langle defext \rangle]\{\langle char-num \rangle\}\{\langle ding-name \rangle\}[\langle colour \rangle]
\label{lem:defdingname} $$ \left( \left( \frac{defext}{defext} \right) \right) \left( \left( \frac{defext}{defext} \right) \right) \left( \frac{defext}{defext} \right) $$
\defdingname{\langle char-num\rangle}{\langle ding-name\rangle}[*]
\defdingname[\langle symfam \rangle] \{\langle char-num \rangle\} \{\langle ding-name \rangle\} [*]
\defdingname[*] \{\langle char-num \rangle\} \{\langle ding-name \rangle\} [*]
\defdingname[\langle symfam \rangle][\langle defext \rangle]\{\langle char-num \rangle\}\{\langle ding-name \rangle\}[*]
\defdingname[*][\langle defext \rangle] \{\langle char-num \rangle\} \{\langle ding-name \rangle\}[*]
\{\langle shape \rangle\}\{\langle char-num \rangle\}\{\langle ding-name \rangle\}[\langle colour /* \rangle]
\style G-list
\setyagusylokeys{*}
```

#### 9.2 Filling and Line Drawing

```
\yagfill{\langle char-num \rangle}
         \ygfill[\langle G-list\rangle]\{\langle char-num\rangle\}
        \yagfill*{\langle dinq-name \rangle}
         \ygfill*[\langle G-list\rangle] \{\langle ding-name\rangle\}
        \ygfill+{\langle material \rangle}
         \yagfill+[\langle G-list\rangle]\{\langle material\rangle\}
where \langle material \rangle is something which can be typeset and has positive width. Caution: do
not expect it to work with just anything!
        \sline{\langle length \rangle}
        \sline{\langle length \rangle}[\langle length \rangle]
        \yagline{\langle char-num \rangle}
         \gamma = [\langle G-list \rangle] \{\langle char-num \rangle\}
         \yagline+\{\langle material \rangle\}
         \ygline+[\langle G-list\rangle] \{\langle material\rangle\}
```

#### 9.3 Itemize and Enumerate (Yagusylo Way)

All the environments are list-like, inside you have to use \item to achieve some meaningfull typesetting but it is up to you. I only give the syntax of the beginning of environments for I assume you know how to end them ;-)

```
\begin{yagitemize} {\langle char-num \rangle} 
          \begin{yagitemize}{*}
          \begin{yagitemize} [\langle symfam \rangle] {\langle char-num \rangle} 
          \begin{yagitemize} {\langle char-num \rangle} [\langle colour \rangle] 
          \begin{yagitemize}{*}[\langle colour \rangle]
          \begin{yagitemize} [\langle symfam \rangle] {\langle char-num \rangle} [\langle colour \rangle]
          \begin{yagitemize} [\langle symfam \rangle] {*} [\langle colour \rangle] \end{yagitemize}
          \begin{yagitemize*}
          \begin{yagitemize*} [\langle ding\text{-}name \rangle] 
          \styagitemize{\langle special \ list \rangle}
whith
          \langle special \ list \rangle = \langle triple \rangle . \cdots \langle triple \rangle . \langle triple \rangle
where
          \langle triple \rangle = \langle symfam \rangle, \langle char-num \rangle, \langle colour \rangle
with the usual meaning of \langle symfam \rangle, \langle char-num \rangle, and \langle colour \rangle.
          \setyagitemize* \{\langle list\ of\ ding-names \rangle\}
whith
          \langle list\ of\ ding-name \rangle = \langle ding-name \rangle . \cdots \langle ding-name \rangle . \langle ding-name \rangle
with the usual meaning of \langle ding\text{-}name \rangle.
          \begin{yagenumerate}
          \begin{yagenumerate} [\langle E\text{-}list \rangle] \end{yagenumerate}
          \begin{yagenumerate}[*]
```

```
\label{eq:continuous_expansion} $$ \operatorname{\ensuremath{\continuous}{\continuous}{\continuous}{\continuous} $$ \operatorname{\ensuremath{\continuous}{\continuous}{\continuous}{\continuous}{\continuous} $$ \ensuremath{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{\continuous}{
```

#### Part III

# Examples

### 10 \yagding, \defdingname, and \yagding\*

```
_ 1 — \defdingname _
     \setyagusylokeys{symfam=fourier}
     \begin{quote}
   inside \texttt{quote} environment\par
26
     \defdingname{116}{lHand}\yagding*{lHand}
     \auad
     \defdingname{116}{lHandStar}[*]\yagding*{lHandStar}
30
     \defdingname[*][global]{116}{gHandRed}[red]\yagding*{gHandRed}
31
     \defdingname[*][global]{116}{gHandStar}[*]\yagding*{gHandStar}
     \quad \yagding{117}
34
35
     \setyagusylokeys{symcolor=blue}
     \yagding*{lHand}\quad\yagding*{lHandStar}\quad
     \yagding*{gHandRed}\quad\yagding*{gHandStar}\quad \yagding{117}
38
     \end{quote}
   outside \texttt{quote} environment\par
     \yagding*{lHand}\quad\yagding*{lHandStar}\quad
41
     \yagding*{gHandRed}\quad\yagding*{gHandStar}\quad \yagding{117}
42
43
     \setyagusylokeys{symcolor=green, symfam=pifont}
     \yagding*{lHand}\quad\yagding*{lHandStar}\quad
45
     \yagding*{gHandRed}\quad\yagding*{gHandStar}\quad \yagding{117}
```

#### inside quote environment

```
(* (* (* **)
(* (* (* **)

outside quote environment

[? lHand ?] [? lHandStar ?] (* (* **)

[? lHand ?] (* (* (* **)

]
```

```
2 — \yagding+
\yagding+{logo}{m}{n}{77}[blue]\yagding+{logo}{m}{n}{69}[red]%
\yagding+{logo}{m}{n}{84}[gray]\yagding+{logo}{m}{n}{65}[black]%
\yagding+{logo}{m}{n}{80}[orange]\yagding+{logo}{m}{n}{79}[purple]%
\yagding+{logo}{m}{n}{83}[brown]\yagding+{logo}{m}{n}{84}[green]
```

**METAPOST** 

### 11 \yafgill and \yagfill\*

#### 11.1 The Key leadtype

```
3 — leadtype _______
thinggummy\yagfill{84}kinda big%

\[ \setyagusylokeys{boxwidth=2cm, symcolor=gray}\par \]
```

```
thinggummy\yagfill{84}kinda big\par
thingyagfill{84}kinda very very big\par
thinggummy\yagfill[leadtype=x]{84}kinda big\par
thingyagfill[leadtype=x]{84}kinda very very big\par
thinggummy\yagfill[leadtype=c]{84}kinda big\par
thingyagfill[leadtype=c]{84}kinda very very big
```

 thinggummy
 \*
 \*
 \*
 \*
 \*
 \*
 \*
 \*
 kinda big

 thinggummy
 \*
 \*
 \*
 \*
 kinda very very big

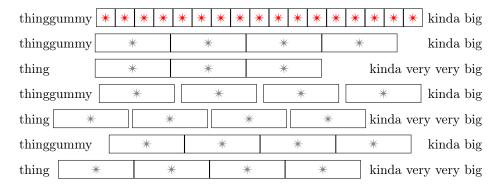
 thinggummy
 \*
 \*
 \*
 \*
 kinda very very big

 thing
 \*
 \*
 \*
 \*
 kinda very very big

 thinggummy
 \*
 \*
 \*
 kinda very very big

 thing
 \*
 \*
 \*
 kinda very very big

and the same thing in which I show the boxes used by TFX to type the leaders:



#### 11.2 The Key symplace

#### 11.2.1 Values other than a

| Setyagusylokeys{boxwidth=2cm, symcolor=blue}% |
| Caversham Heights \yagfill[symplace=c]{87}Bradshaw\par |
| Caversham Heights \yagfill[symplace=1]{87}Bradshaw\par |
| Caversham Heights \yagfill[symplace=r]{87}Bradshaw\par |
| Caversham Heights \yagfill[symplace=r]{87}Bradshaw\par |
| Caversham Heights \yagfill[symplace=n,sympos=250]{87}Bradshaw\par |



```
11.2.2 Value a
                         6 — symplace, before, and after
   The Squire of High Potternews
   \yagfill[symplace=a, before=0.1in]{84}Jurisfiction\par
   The Squire of High Potternews
   \yagfill[symplace=a, before=0.1in, after=0.3in]{84}Jurisfiction\par
   The Squire of High Potternews
   \yagfill[symplace=a, after=0.3in]{84}Jurisfiction\par
   The Squire of High Potternews
21
   \yagfill[leadtype=x, symplace=a,
22
      before=0.1in, after=0.3in]{84}Jurisfiction \par
                                                                    Jurisfiction
       The Squire of High Potternews
       The Squire of High Potternews
                                                                    Jurisfiction
       The Squire of High Potternews
                                                                    Jurisfiction
       The Squire of High Potternews
                                                                    Jurisfiction
                                  7 - \text{vagfill}
   \defdingname[fourier]{116}{mainv}[green]
   \defdingname[fourier]{116}{mainb}[blue]
16
   \defdingname[fourier]{116}{mainr}[red]
17
   \yagfill+[boxwidth=1.25cm]{\yagding*{mainv}%
18
     \yagding*{mainb}\yagding*{mainr}}
19
```

ejeje jajaja jajaja jajaja jajaja jajaja jajaja

### 12 Environments yagitemize and yagitemize\*

#### 12.1 Environment yagitemize\*

```
€ H
€ J
€ K
```

With such a setup, for this document has onerror=nice at the loading of yagusylo, you'll find the following text in the .log file:

```
Package yagusylo Warning: Too deeply nested for your setup.

(yagusylo) I keep on using the last symbol.

(yagusylo) You could have a look at your last

(yagusylo) 'setyagitemize''

(yagusylo) First 'yagitemize*' too many on input line ***.
```

in which \*\*\* would give the number of the line on which is the fifth \begin{yagitemize\*} for we provided explicit setup for four levels only.

```
9 — yagenumerate and notyagenum
     \begin{yagenumerate}
11
       \item Thursday Next;
12
         \begin{notyagenum}
13
            \begin{enumerate}
14
            \item Light armoured brigade;
            \item SpecOps 27;
16
            \end{enumerate}
17
         \end{notyagenum}
18
       \item Landen Park-Lane;
19
     \end{yagenumerate}
20
```

- 1 Thursday Next;
  - (a) Light armoured brigade;
  - (b) SpecOps 27;
- 2 Landen Park-Lane;

### 13 The configuration file

Here is the core of the configuration file yagusylo.cfg provided, as an example, with this package:

```
\defyagenumpattern{wastrol}{symfam=wasysym, firstitemnum=88, enumlength=14, symcolor=purple}
```

# Part IV

# Showcase

# 14 From the package pifont

### 14.1 The Symbols of Symfam pifont

33 : ⊱	34 : ➤	35 : ⊁	36 : №	37 : <b>~</b>	38 : <b>©</b>
39 : 🕭	40 : <b>+</b>	41 : ⊠	42:	43 : ☞	44 : ♉
45 : ₺	46 : ☜	47 : ⊜	48: 🕏	49 : ∞	50 : ❖
51 : 🗸	52 : 🗸	53 : X	54 : <b>*</b>	55 : <b>X</b>	56 : <b>X</b>
57 : <del>•</del>	58 : <b>+</b>	59 : <b>+</b>	60 : <b>+</b>	61 : <b>†</b>	62 : T
63 : <b>†</b>	64 : ₩	65 : ❖	66 : <b>+</b>	67 : <b>4</b>	68 : <b>*</b>
69 : <b>�</b>	70 : ◆	71 : ❖	72 : <b>★</b>	$73: \Leftrightarrow$	74 : <b>②</b>
75 : <b>☆</b>	76 : ★	77 : ★	78 : <b>★</b>	79 : ★	80: 🏠
81 : <b>*</b>	82 : <b>*</b>	83:*	84:*	85 : <b>∗</b>	86 : ★
87 : ★	88:*	89:**	90: **	91 : <b>*</b>	92 : <b>*</b>
93 : <b>*</b>	94: *	95 : <b>☆</b>	96: 🟶	97 : 🏶	98: 🛇
99:*	100: ☀	101: *	102 : ₩	103 : <del>**</del>	104 : <b>*</b>
105 : <b>*</b>	106 : *	107 : <b>*</b>	108 : ●	109: O	110 : ■
$111 : \Box$	112 : □	113 : 🗖	114 : □	115 : ▲	116 : ▼
117 : ♦	118 : 💠	119 : ▶	120 : I	121 : ▮	122 : ■
123 : 6	124 : •	125 : <b>"</b>	126 : **		
$161: \P$	162 : <b>*</b>	163 : 🕇	164 : ❤	165 : ▶	166 : 👻
167: <b>2</b>	168 : 📤	169 : ♦	170 : ♥	171 : ♠	172: ①
173: 2	174: ③	175: 4	176 : ⑤	177 : <b>6</b>	178: ②
179: 8	180: 9	181: 10	182 : <b>0</b>	183 : <b>②</b>	184 : <b>3</b>
185 : <b>4</b>	186 : <b>6</b>	187 : <b>6</b>	188 : <b>7</b>	189 : <b>3</b>	190 : <b>9</b>
191 : <b>0</b>	192: 1	193: ②	194: 3	195: 4	196: ⑤
197: @	198: ⑦	$199:  ext{ }  ext{ }$	200: 9	201: 10	202 : <b>①</b>
203 : <b>2</b>	204 : <b>3</b>	205 : <b>4</b>	206 : <b>6</b>	207 : <b>6</b>	208 : <b>7</b>
209 : <b>3</b>	210 : <b>9</b>	211 : <b>0</b>	212 : <b>→</b>	$213: \rightarrow$	$214: \leftrightarrow$
$215: \updownarrow$	216 : 🛰	217 : →	218 : 🗾	219 : →	220 : →
$221: \rightarrow$	222 : →	223 : ➡	224 : ➡	225 : ➡	226 : ➤
227 : ➤	228 : <b>&gt;</b>	229 : 🕶	230 : ➡	231 : ▶	232 : ➡
233 : ▷	234 : ➪	235 : 🗢	236 : 🗢	237 : ❖	238 : ⇨
$239: \Rightarrow$	240:	241 : ⇒	242 : <b>⊃</b>	243 : ▶→	244 : 🛰
245 : >>	246 : 💞	247 : 🔩	248 : ▶→	249 : 🖍	250 : →
251 : ❖	252 : ➤	253 : ▶	$254:\Rightarrow$		

# From the package ifsym

### 15.1 The Symbols of Symfam ifsym

0 : \( \sum \) 6 : \( \cdot \) 12 : \( \delta \)	1 : � 7 : ••	2 : <b>*</b> 8 : •••	3 : <b>1</b> 9 : <b></b>	4 : 🚍 10 : 👪	5 : • 11 : <b>X</b>
14: 😽					
16 : <b>†</b> 22 : <b>△</b> 28 : <b>▲</b> 34 : <b>□</b> 40 : <b>☞</b>	17 : ▲ 23 : ▲ 29 :   35 :   41 :   ↑	$ \begin{array}{c} 18 :                                   $	$ \begin{array}{c} 19 :                                   $	20 : ▲ 26 : )( 32 : √ 38 : √∟	21 : ▲ 27 : ↑ 33 : ጌ 39 : ጌ
45 : -	46:.				
48 : <b>0</b> 54 : <b>6</b> 60 : <	49 :   55 : <b>1</b> 61 : <	50 : <b>ट</b> 56 : <b>B</b> 62 : ≻	51 : <b>3</b> 57 : <b>9</b> 63 : >	52 : <b>Ч</b> 58 :	53 : <b>5</b> 59 : ₩
68 :					
72 :					
76:	77 : —				
100:_					
108:_	109 : -				
124 :					

### 15.2 The Symbols of Symfam ifsymgeo

0 : □ 6 : ❖	$egin{array}{ccc} 1 & : & & \\ 7 & : & & & \end{array}$	2 : □ 8 : ◆	3 : <b>■</b> 」 9 : ◆	4: 🗖	5 : <b>◇</b>
13 : X	14 : X	15 : ×			
$26 : \overline{}$ $32 : \overline{}$ $38 : \diamondsuit$	27 : <sup>—</sup> 33 : △	28 : <sup>-</sup> 34 : <	$29: \downarrow \ 35: \bigvee$	30 :	31 :   37 : O
47:	48 : □ 54 : ♦	49 : △	50 : <	$51: \nabla$	52 : ▷
63 : <b>◆</b> 69 : ○	64 : □ 70 : ❖	65 : △	66 : ⊲	67 : ▽	68 : ▷
79 : <b>♦</b> 85 : <b>●</b>	80 : ■ 86 : ◆	81 : 🛦	82 : <b>◄</b>	83 : ▼	84 :
95 : <b>♦</b> 101 : <b>●</b>	96 : ■ 102 : ◆	97 : ▲	98 : ◀	99 : ▼	100 : ▶
111 : ❖ 117 : ●	112 : ■ 118 : ◆	113: ▲	114 : ◀	115 : ▼	116 : ▶

### 15.3 The Symbols of Symfam ifsymgeonarrow

0 : ☐ 6 : ﴾	$egin{array}{ccc} 1 & : \ \hline 1 & \\ 7 & : \ & \end{array}$	$egin{array}{ccc} 2 & : \mathbb{Q} \\ 8 & : & \end{array}$	3 : <b>□</b> 9 : <b>♦</b>	4 : 🗓	5 : <sup>(x)</sup>
13 : X	14 : X	15 : <sup>X</sup>			
26 : − 32 : □ 38 : ◊	27 : − 33 : ∆	28 : ⁻ 34 : <	$\begin{array}{cc} 29 :   \\ 35 : \nabla \end{array}$	30 :	31 :   37 : O
47 : <b>◊</b> 53 : ○	48 : □ 54 : ◊	49 : Δ	50 : ⊲	51 : ∇	52 : <b>▷</b>
63 : <b>♦</b> 69 : ○	64 : □ 70 : ◊	65 : 4	66 : ⊲	67 : ₹	68 : ⊳
79 : <b>♦</b> 85 : ●	80 : <b>■</b> 86 : <b>♦</b>	81 : 🛦	82 : ◀	83 : ₹	84 : ►
95 : <b>♦</b> 101 : <b>●</b>	96 : ■ 102 : ♦	97 : ▲	98 : ◀	99 : ₹	100 : ►
111 : ♦ 117 : ●	112: • 118: •	113: 4	114: ◄	115: 🔻	116: ►

### 15.4 The Symbols of Symfam ifsymgeowide

0 : □ 6 : ❖	1 : <b>□</b> 7 : ❖	2 : □ 8 : ◆	3 : <b>■</b> 」 9 : ◆	4 : <b>=</b>	5 : ⇔
13 :×	14 : ×	15 : ×			
$26: -$ $32: -$ $38: \Leftrightarrow$	27 : — 33 : △	28 : − 34 : ◀	29 :	30 : ₁ 36 : ▷	31 : 1 37 : O
47 : <b>◆</b> 53 : ○	48 : □ 54 : ❖	49 : △	50 : ◁	51 : ▽	52 : ▷
63 : <b>◆</b> 69 : ○	64 : □ 70 : ❖	65 : 🛆	66 : ⁴	67 : ▽	68 : ▷
79 : ❖ 85 : ●	80 : <b>■</b> 86 : ◆	81 : 🔺	82 : ◀	83 : ▼	84 :
95 : <b>⇔</b> 101 : <b>●</b>	96 : <b>■</b> 102 : ◆	97: 🔺	98 : ◀	99 : ▼	100 : ▶
111 : <b>⇔</b> 117 : <b>●</b>	112 : <b>-</b> 118 : •	113: 🔺	114 : ◀	115: ▼	116 : •

### 15.5 The Symbols of Symfam ifsymweather

0 : o 6 : •	1 : • 7 : •	2 : • 8 : •	3 : • 9 : •	4 : • 10 : ↓	5 : • 11 : •
16 : ☆ 22 : ;;;; 28 : ;;;; 34 : 🔐	17 : ❖ 23 : ❖ 29 : ☆ 35 : ❖	18 : ● 24 : ∷ 30 : ❖ 36 : ❖	19 : <b>₩</b> 25 : <b>*</b> 31 : ∷	20 :      26 :     32 : •	21 : /// 27 : 🍮 33 : ///
48 : 54 : 1	49 : 100	50 : 56 : 1	51 : 57 : 57	52:	53:

### 15.6 The Symbols of Symfam ifsymclock

0 :	1 : 0 7 : 0 13 : 0 19 : 0 25 : 0 31 : 0 43 : 0 49 : 0 55 : 0 61 : 0 67 : 0 73 : 0 97 : 0 97 : 0 103 : 0 109 : 0 115 : 0 121 : 0 127 : 0 133 : 0 139 :	2 : ③ 8 : ② 14 : ③ 20 : ② 26 : ③ 32 : ③ 38 : ③ 44 : ⑤ 50 : ③ 62 : ③ 68 : ⑥ 74 : ⑤ 80 : ⑥ 92 : ⑥ 98 : ⑥ 104 : ⑥ 110 : ⑥ 116 : ⑥ 122 : ⑥ 128 : ⑥ 134 : ⑥ 140 : ②	3 : \$\tilde{\tii	4 : \$\infty\$ 10 : \$\infty\$ 16 : \$\infty\$ 22 : \$\infty\$ 28 : \$\infty\$ 40 : \$\infty\$ 46 : \$\infty\$ 52 : \$\infty\$ 58 : \$\infty\$ 64 : \$\infty\$ 70 : \$\infty\$ 76 : \$\infty\$ 82 : \$\infty\$ 88 : \$\infty\$ 100 : \$\infty\$ 112 : \$\infty\$ 118 : \$\infty\$ 124 : \$\infty\$ 130 : \$\infty\$ 136 : \$\infty\$ 142 : \$\infty\$	5 : © 11 : © 17 : © 23 : © 29 : © 35 : © 41 : © 47 : © 53 : © 65 : © 71 : © 77 : © 83 : © 95 : © 101 : © 107 : © 113 : © 119 : © 131 : © 137 : © 143 : ©
148 : (3) 154 : (3)	$149: \bigcirc 155: \bigcirc 1$	150 : Ĝ	151 : 🕮	152 : 🐯	153 : 🌑

# From the package marvosym

### 16.1 The Symbols of Symfam marvosym

	v	v	J		
$0:\square$	$1:\Box$	$2:\square$	$3:\square$	$4:\square$	$5:\square$
$6:\square$	$7:\square$	8 : 🗆	$9:\square$	$10:\square$	$11:\square$
$12: \square$	$13: \square$	$14: \square$	$15: \square$	$16: \square$	$17: \square$
18 : □	$19:\square$	$20:\square$	$21:\square$	$22:\square$	$23:\square$
$24:\square$	$25:\square$	$26:\square$	$27:\square$	$28:\square$	$29:\square$
30 : □	$31:\square$	32:	33:	34:	$35: \Delta$
$36:\underline{\&}$	37 : 🚵	38 : <b>\</b>	39 : Þ	40 : (	41 : )
42 : ×	43:+	44:,	45 : -	46 : .	47 : /
48:0	49 : 1	50 : <b>2</b>	51:3	52 : <b>4</b>	53 : <b>5</b>
54 : <b>6</b>	55 : <b>7</b>	56 : <b>8</b>	57 : <b>9</b>	58 : →	59 : ⇒
60 : ≤	61 : ≘	62 : ≥	63 : ⇔	64 : <b>@</b>	65 <u>:</u> 0
66 : ⊠	67 : <b>C€</b>	68 : €	69 : £	70:閩	71:
72 : 🖺	73 : <b>쓰</b>	74 : <b>▲</b>	75 : 🛎	$76: \overline{\Pi}$	77 :
78 : □	79 : □	80 :	81 : ≍	82 :	83 : ≍
84: 🕿	85 : ☺	86 : ☑	87 : ∢	88 : 🗷	89 : 🕝
90:	91 : /	92 : <b>X</b>	93 : ≡	94 : ≢	95 :/
96 : <b>⑤</b>	97 : <b>*</b> -	98 : 🔼	99 : €	100 : €	101 : €
102: 👪	103 :	104 : 🕏	105: 🗓	106 : <b>☆</b>	107 : №
108: ↓	109 :	110 : 🕾	111 : ☻	112 :	113 : ⊁
114 : 120 : <b>♣</b>	115 : ≼	116 : FAX	117 : FAX	118 : 📾	119 : 💰
	121 : <b>i</b>	122:	123 : O	$124 : \mathbf{o}'$ $130 : \square$	125 : <b>ợ</b> ′
126 : ♀	127 : <b>♂</b>	128 : <b>♥</b> ′	129 : <b>♥</b> 135 : <b>♥</b>	130 : ⊔ 136 : †	131 : <b>&amp;</b>
132 : <b>Q</b> 132 : <b>∀</b>	133 : <b>℘′</b>	134 : <b>†</b>		142 : <u>Ы</u> _	137 : ₩
$138: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	139 : <b>□</b> 145 : ●	140 : ♡ 146 : ●	141 : <b>@</b> 147 : ■	142 : <u>Bd</u> 148 : ■	143 : □ 149 : ●
150 : <b>–</b>	145 . <b>□</b>	140 . <b>□</b>	153 : <b>L</b>	154 : <b>I</b>	155 : <b>O</b>
156 : <b>T</b>	157 : L	152 : <b>I</b> 158 : I	159 : <b>T</b>	160 : $\phi$	161 : $\beta$
					•
162 : 🞝	163 : <b>%</b>	164 : €	165:際	166 : <b>\$</b>	167 : ⊜
168 : ∅ 174 : ఈ	169 : ⊚ 175 : ゐ	170 : ❷ 176 : ゐ	171 : 🕲	172 : <b>©</b>	173 : <b>⊚</b> 179 : □
180 : ◄◀	175 : ₺₹	182 : ◀	177 : <i>ឝ</i> 183 : ▶	178 : ≥ 184 : ► 1	185 : ▶▶
186 : ▲	187 : ▼	182 : <b>▼</b>	189 : <b>▼</b>	190 : ©	191 : <b>©</b>
192 : <b>②</b>	193 : <b>7</b>	194 : ¥	195 : <b>2</b>	196 : <b>o</b> '	197 : <u>3</u>
198: ち	199 : 🕏	194. ¥ 200 : ¥	201 : 9	202 : ð	$203:\triangle$
204 : 🖄	205: 🗈	206 : 📼	207:	208 : ₪	209 :
210 : 🖴	211:	212 :	213 : 🕥	214 :	215 :
216: 🕶	217:	218 : 🐠	219 :	220 :	221 :
222 : $\square$	$223:\square$	224 : <b>T</b>	225 : 8	226 : П	227 : <b>2</b>
228 : <b>Q</b>	229 : m	230 : <b>Ω</b>	231 : M	232 : ⊀	233 : <b>T</b>
234 : <b>₩</b>	235 : <b>X</b>	236 : □	237 : □	238 : □	239 : $\square$
240 : <b>A</b>	241: p	$242:\square$	$243:\square$	$244:\square$	$245:\square$
$246:\square$	247 : ·	$248:\square$	$249:\square$	$250:\square$	$251:\square$
$252:\square$	253 : 🕶	254 : 🚱	255: 🕃		
			-		

### 17 From the package fourier

### 17.1 The Symbols of Symfam fourier

65 : **(** 66 : ⚠ 69 :€ 76 :**⋠**  $77: \odot$ 78 : 🏋 84 : 🗶 85 : 🗙 89: • 90 : **•** 92 : **~** 93 : 💠 88: 💥 91 : **•** 102:103 : ← 104 : 🗢 106 : \* 109 : 😮 110 : 😮  $111: \S$ 116: 117: 🖘

# 18 From the package wasysym

# 18.1 The Symbols of Symfam wasysym

$0: \triangle$ $6: \varnothing$ $12: J$ $18: 4$ $24: \vdash$ $30: \checkmark$ $36: \checkmark$ $42: $ $48: $ $54: \clubsuit$ $60: \vdash$ $66: *$	$\begin{array}{cccc} 1 & : \lhd \\ 7 & : & & \\ \hline 13 & : & \\ 19 & : & \bigcirc \\ 25 & : & \bigcirc \\ 31 & : & \varnothing \\ 37 & : & \bigcirc \\ 43 & : & & \\ 49 & : & \bowtie \\ 55 & : & \bigcirc \\ 61 & : & \Box \\ 67 & : & & \\ \end{array}$	$2 :  ext{ }  ext{ }$	$3: \triangleright$ $9: \diamond$ $15: \nearrow$ $21: \otimes$ $27: \boxtimes$ $33: \diamondsuit$ $39: \diamondsuit$ $45: \bigcirc$ $51: \diamondsuit$ $57: \bigcirc$ $63: \gtrsim$ $69: *$	$4 : \trianglerighteq$ $10 : \blacksquare$ $16 : \blacktriangleleft$ $22 : ⊗$ $28 : ⊕$ $34 : \circlearrowleft$ $40 : \lt$ $46 : ⋩$ $52 : ⋈$ $58 : \sim$ $64 : ⋈$ $70 : \triangledown$	$5 : : :$ $11 : J$ $17 : \blacktriangleright$ $23 : \Upsilon$ $29 : \propto$ $35 : \bigcirc$ $41 : >$ $47 : ©$ $53 : \pi$ $59 : \sim$ $65 : \times$ $71 : \P$
72 : ▶ 80 : ₹ 85 : ₽ 91 : ₹ 97 : △ 103 : ₹ 109 : <b>X</b> 115 : ∬ 121 : ∭ 127 : ₽	73 : □  81 : ✓  86 : ♂  92 : E  98 : M,  104 : ‰  116 : ∭  122 :  ∮	74 : □  82 : `  87 : ♂  93 : ♂  99 : ♂  105 : ♭  111 : □  117 : ∳  123 : ∰	88: 4 94: Ⅱ 100: ♂ 106: Þ 112: ⊟ 118:  ∰	76 : ▼  89 : ἡ 95 : ☺  101 : ≈  107 : δ  113 : ⊡  119 : ∫  125 : □	$90 : \delta$ $96 : m$ $102 : \mathcal{K}$ $108 : \circ$ $114 : \int$ $120 : \int$ $126 : \Box$

# 19 From the package bbding

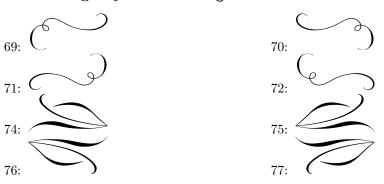
### 19.1 The Symbols of Symfam bbding

0 : ★ 6 : ★ 12 : ⊠ 18 : ☜ 24 : ☜ 30 : ❖ 36 : ★ 42 : † 48 : ❖ 54 : ❖ 60 : ★ 72 : ★ 84 : ❖ 90 : ★ 90 : ★	1 : ★ 7 : ★ 13 : ★ 19 : ♥ 25 : ♥ 31 : ★ 43 : ↑ 49 : ★ 67 : ★ 79 : ★ 85 : ★ 91 : ♥ 97 : ●	2 : ⊁ 8 : ☎ 14 : ☎ 20 : ॐ 26 : ॐ 32 : ❖ 38 : ☎ 44 : ☎ 50 : ❖ 56 : ★ 62 : ★ 68 : ┼ 74 : ♣ 80 : ☎ 86 : ﴾ 92 : ⅙ 98 : ♡	3 : ★ 9 : ♥ 15 : ♥ 21 : ₺ 27 : ₺ 33 : ↓ 39 : † 45 : † 51 : ★ 57 : ★ 63 : ★ 75 : ★ 81 : ₺ 87 : ★ 93 : ★	4 : ★ 10 : ♣ 16 : ★ 22 : ♠ 28 : ♠ 34 : ✔ 40 : ♣ 46 : ♣ 52 : ♣ 58 : ♠ 70 : ★ 70 : ★ 82 : ♣ 88 : ♣ 94 : ★ 100 : ♠	5 : ★ 11 : ★ 17 : ☞ 23 : ☞ 29 : ❖ 41 : ★ 47 : ★ 59 : ★ 71 : ★ 83 : ★ 89 : ★ 101 : □
90 : <b>米</b>	91 : 🏶	92 : 🗱	93: 💥	94 : 🌞	95 : 🗱

# $20 \quad \text{From the package dingbat} \\$

### 20.1 The Symbols of Symfam dingbat

# 20.2 Large Symbols of dingbat



### 20.3 The Symbols of Symfam ark

67: > 68:

69:

76 : **1** 

80:

82:

85:

100: €1

117:

### Index

*, 5–7, 10, 12, 14	\setyagitemize, $10$
()	$\styagitemize*, 10$
after (KEY), 8	\setyagusylokeys, 6
before (KEY), 8	symcolor (KEY), 6
boxwidth (KEY), 8	symcolor [enum] (KEY), 11
( ), -	SYMFAM
KEY	ark, 34
after, 8	bbding, 31
before, 8	dingbat, 32
boxwidth, 8	fourier, 29
color, 12	ifsym, 22
configfile, $12$	ifsymclock, 27
enumlength, 11	ifsymgeo, 23
enumpattern, 11	ifsymgeonarrow, 24
firstitemnum, 11	ifsymgeowide, 25
$\mathtt{head},9$	ifsymweather, 26
leadtype, 8	marvosym, 28
symcolor, 6	pifont, 21
symcolor [enum], 11	wasysym, 30
$ exttt{symfam}, 6$	symfam (KEY), 6
symfam [enum], 11	symfam [enum] (KEY), 11
${ t symplace}, 8$	symplace (KEY), 8
${ t sympos}, 8$	sympos (key), 8
$\mathtt{tail}, 9$	toil (VEV) 0
${\tt XcolorOptions}, 12$	tail (KEY), 9
color (KEY), 12	XcolorOptions (KEY), 12
configfile (KEY), 12	1100101 0 p 010110 (1121), 12
	\yagding, 6
\defdingname, 6	\yagding, 6 \yagding*, 7
\defdingname, 6 \defdingname+, 7	
\defdingname+, 7	\yagding*, 7
\defdingname+, 7 enumlength (KEY), 11	\yagding*, 7 \yagding+, 7
\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11	\yagding*, 7 \yagding+, 7 yagenumerate (environment), 12
\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment	\yagding*, 7 \yagding*, 7 yagenumerate (environment), 12 \yagfill, 8
\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment yagenumerate, 12	\yagding*, 7 \yagding*, 7 \yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8
\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment    yagenumerate, 12    yagitemize, 10	\yagding*, 7 \yagding+, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8
\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment yagenumerate, 12	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment    yagenumerate, 12    yagitemize, 10    yagitemize*, 10</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill*, 8  yagitemize (environment), 10 yagitemize* (environment), 10
\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment    yagenumerate, 12    yagitemize, 10	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill*, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment    yagenumerate, 12    yagitemize, 10    yagitemize*, 10</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>handle continued the continued continued the continued contin</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10 firstitemnum (KEY), 11</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>handle continued the continued continued the continued contin</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>hat the control of the control</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10 firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11 PACKAGE</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10 firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10  firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31     dingbat, 32</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10  firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31     dingbat, 32     fourier, 29</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10  firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31     dingbat, 32     fourier, 29     ifsym, 22</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10  firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31     dingbat, 32     fourier, 29     ifsym, 22     marvosym, 28</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10  firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31     dingbat, 32     fourier, 29     ifsym, 22</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9
<pre>\defdingname+, 7 enumlength (KEY), 11 enumpattern (KEY), 11 environment     yagenumerate, 12     yagitemize, 10     yagitemize*, 10  firstitemnum (KEY), 11 head (KEY), 9 leadtype (KEY), 8 \newenumpattern, 11  PACKAGE     bbding, 31     dingbat, 32     fourier, 29     ifsym, 22     marvosym, 28     pifont, 21</pre>	\yagding*, 7 \yagding*, 7  yagenumerate (environment), 12 \yagfill, 8 \yagfill*, 8 \yagfill+, 8  yagitemize (environment), 10 yagitemize* (environment), 10 \yagline, 9 \yagline*, 9