

The MANTYS Package

MANuals for TYpSt

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MIT

Helpers to build manuals for Typst packages.

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<https://github.com/jneug/typst-mantys>

MANTYS is a Typst template to help package and template authors to write manuals. It provides functionality for consistent formatting of commands, variables, options and source code examples. The template automatically creates a table of contents and a command index for easy reference and navigation.

For even easier manual creation, **MANTYS** works well with TIDY, the Typst docstring parser.

The main idea and design was inspired by the L^AT_EX package **CNLT_X** by Clemens NIEDERBERGER.

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Part I.

About

MANTYS is a Typst package to help package and template authors to write consistently formatted manuals. The idea is that, as many Typst users are switching over from \TeX , they are used to the way packages provide a PDF manual for reference. Though in a modern ecosystem there are other ways to write documentation (like mdBook¹ or AsciiDoc²), having a manual in PDF format might still be beneficial, since many users of Typst will generate PDFs as their main output.

The design and functionality of **MANTYS** was inspired by the fantastic \LaTeX package **CNLT \X** ³ by Clemens NIEDERBERGER⁴.

This manual is supposed to be a complete reference of **MANTYS**, but might be out of date for the most recent additions and changes. On the other hand, the source file of this document is a great example of the things **MANTYS** can do. Other than that, refer to the README file in the GitHub repository and the source code for **MANTYS**.

MANTYS is in active development and its functionality is subject to change. Until version 1.0.0 is reached, the command signatures and layout may change and break previous versions. Keep that in mind while using **MANTYS**.

Contributions to the package are very welcome!

¹<https://rust-lang.github.io/mdBook/>

²<https://asciidoc.org>

³<https://ctan.org/pkg/cnltx>

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Part II.

Usage

II.1. Using Mantys

Just import `MANTYS` inside your `typ` file:

```
#import "@preview/mantys:0.1.1": *
```

II.1.1. Initializing the template

After importing `MANTYS` the template is initialized by applying a show rule with the `#mantys()` command passing the necessary options using `with`:

```
#show: mantys.with(  
  ...  
)
```

`#mantys()` takes a bunch of arguments to describe the package. These can also be loaded directly from the `typst.toml` file in the packages' root directory:

```
#show: mantys.with(  
  ..toml("typst.toml"),  
  ...  
)
```

```
#mantys(  
  <name>: none,  
  <title>: none,  
  <subtitle>: none,  
  <info>: none,  
  <authors>: (),  
  <url>: none,  
  <repository>: none,  
  <license>: none,  
  <version>: none,  
  <date>: none,  
  <abstract>: [],  
  <titlepage>: #titlepage,  
  <examples-scope>: (:),  
  ..<args>  
) [<body>]
```

— Argument —

```
<titlepage>: #titlepage
```

none

A function that renders a titlepage for the manual. Refer to `#name()` for details.

Argument

`<examples-scope>: (:)`

none

Default scope for code examples.

```
examples-scope: (
  cmd: mantys.cmd
)
```

For further details refer to `#name()`.

All other arguments will be passed to `#titlepage()`.

All uppercase occurrences of `<name>` will be highlighted as a packagename. For example MANTYS will appear as MANTYS.

II.2. Available commands

<code>#arg()</code>	<code>#cmdref()</code>	<code>#meta()</code>
<code>#args()</code>	<code>#command()</code>	<code>#module-commands()</code>
<code>#argument()</code>	<code>#default()</code>	<code>#opt()</code>
<code>#barg()</code>	<code>#doc()</code>	<code>#relref()</code>
<code>#choices()</code>	<code>#dtype()</code>	<code>#sarg()</code>
<code>#cmd()</code>	<code>#dtypes()</code>	<code>#symbol()</code>
<code>#cmd-label()</code>	<code>#func()</code>	<code>#value()</code>
<code>#cmd-selector()</code>	<code>#lambda()</code>	<code>#var()</code>
<code>#var-label()</code>		
<code>#variable()</code>		

II.2.1. Describing arguments and values

`#meta(<name>)` → content

Highlight an argument name. `#meta[variable]` → `<variable>`

Argument

`<name>`

string | content

Name of the argument.

`#value(<value>)` → content

Shows `<value>` as content.

- `#value("string")` → string
- `#value([string])` → [string]
- `#value(true)` → true
- `#value(1.0)` → 1.0
- `#value(3em)` → 3em
- `#value(50%)` → 50%
- `#value(left)` → left

2.2.1 Available commands

- `#value((a: 1, b: 2)) → (a: 1, b: 2)`

—Argument—

⟨value⟩

any

Value to show.

#default(⟨value⟩) → content

Highlights the default value of a set of `#choices()`.

- `#default("default-value") → "default-value"`
- `#default(true) → true`
- `#choices(1, 2, 3, 4, default: 3) → 1|2|3|4`

—Argument—

⟨value⟩

any

The value to highlight.

#doc(⟨target⟩, ⟨name⟩: none, ⟨anchor⟩: none, ⟨fnote⟩: false) → content

Create a link to the reference documentation at <https://typst.app/docs/reference/>.

See the `#doc("meta/locate")` function.

See the `locate` function.

—Argument—

⟨target⟩

string

Path to the subpage of <https://typst.app/docs/reference/>. The lowercase command for example is located in the category text and has ⟨target⟩: `"text/lowercase"`.

—Argument—

⟨name⟩: none

string

Optional name for the link. With `auto`, the ⟨target⟩ is split on / and the last part is used.

—Argument—

⟨anchor⟩: none

string

An optional HTML page anchor to append to the link.

—Argument—

⟨fnote⟩: false

boolean

Show the reference link in a footnote.

#dtype(⟨type⟩, ⟨fnote⟩: false, ⟨parse-type⟩: false) → content

Shows a highlighted data type with a link to the reference page.

⟨t⟩ may be any value to pass to `type` to get the type or a `string` with the name of a datatype. To show the string type, use `#dtype("string")`. To force the parsing of the values type, set ⟨parse-type⟩: `true`.

2.2.1 Available commands

- `#dtype("integer")` → `integer`
- `#dtype(1deg)` → `angle`
- `#dtype(true)` → `boolean`
- `#dtype(())` → `array`
- `#dtype(red)` → `color`

Argument

⟨type⟩

any

Either a value to take the type from or a string with the datatype name.

Argument

⟨fnote⟩: `false`

boolean

If `true`, the reference link is shown in a footnote.

Argument

⟨parse-type⟩: `false`

boolean

If ⟨t⟩ should always be passed to type.

`#dtypes(..⟨types⟩, ⟨sep⟩: "box(inset:(left:1pt,right:1pt), sym.bar.v)")` → `content`

Shows a list of datatypes.

- `#dtypes(false, "integer", (:))` → `boolean` | `integer` | `dictionary`

Argument

..<⟨types⟩

any

List of values to get the type for or strings with datatype names.

`#arg(..⟨args⟩)` → `content`

Shows an argument, either positional or named. The argument name is highlighted with `#meta()` and the value with `#value()`.

- `#arg[name]` → ⟨name⟩
- `#arg("name")` → ⟨name⟩
- `#arg(name: "value")` → ⟨name⟩: `"value"`
- `#arg("name", 5.2)` → ⟨name⟩: `5.2`

Argument

..<⟨args⟩

any

Either an argument name (`string`) or a (name: value) pair either as a named argument or as exactly two positional arguments.

`#barg(⟨name⟩)` → `content`

Shows a body argument.

Body arguments are positional arguments that can be given as a separate content block at the end of a command.

- `#barg[body]` → [⟨body⟩]

2.2.1 Available commands

Argument

`<name>`

string

Name of the argument.

#sarg(`<name>`) → **content**

Shows an argument sink.

- **#sarg**[args] → `..<args>`

Argument

`<name>`

string

Name of the argument.

#args(`..<args>`) → **array**

Creates a list of arguments from a set of positional and/or named arguments.

strings and named arguments are passed to **#arg**(), while **content** is passed to **#barg**(). The result is to be unpacked as arguments to **#cmd**().

```
#cmd( "conditional-show", ..args(hide: false, [body]) )
```

```
#conditional-show(<hide>: false)[<body>]
```

Argument

`..<args>`

any

Either an argument name (**string**) or a (name: value) pair either as a named argument or as exactly two positional arguments.

#choices(`<default>`: `"__none__"`, `..<values>`) → **content**

Shows a list of choices possible for an argument.

If `<default>` is set to something else than `"__none__"`, the value is highlighted as the default choice. If `<default>` is already given in `<values>`, the value is highlighted at its current position. Otherwise `<default>` is added as the first choice in the list.

- **#choices**(left, right, center) → `left|right|center`
- **#choices**(left, right, center, default:center) → `left|right|center`
- **#choices**(left, right, default:center) → `center|left|right`
- **#arg**(align: **choices**(left, right, default:center)) → `<align>`: `center|left|right`

#symbol(`<name>`, `<module>`: **none**) → **content**

Shows a Typst reserved symbol argument.

- **#symbol**("dot") → `dot`
- **#symbol**("angle.l", module:"sym") → `sym.angle.l`
- **#arg**(format: **symbol**("angle.l", module:"sym")) → `<format>`: `sym.angle.l`

#func(`<name>`, `<module>`: **none**)

Create a function argument. Function arguments may be used as an argument value with **#arg**().

- `#func("func") → #func`
- `#func("clamp", module:"calc") → #calc.clamp`
- `#arg(format: func("upper")) → <format>: #upper`

#lambda(..<args>, <ret>: none) → content

Create a lambda function argument. Lambda arguments may be used as an argument value with `#arg()`. To show a lambda function with an argument sink, prefix the type with two dots.

- `#lambda("integer", "boolean", ret:"string") → (integer, boolean) => string`
- `#lambda("..any", ret:"boolean") → (..any) => boolean`
- `#arg(format: lambda("string", ret:"content")) → <format>: (string) => content`

II.2.2. Describing commands

```
#cmd(
  <name>,
  <module>: none,
  <ret>: none,
  <index>: true,
  <unpack>: false,
  ..<args>
) → content
```

Renders the command `<name>` with arguments and adds an entry with `<kind>: "command"` to the index.

`<args>` is a collection of positional arguments created with `#arg()`, `#barg()` and `#sarg()`.

All positional arguments will be rendered first, then named arguments and all body arguments will be added after the closing paranthesis.

- `#cmd("cmd", arg[name], sarg[args], barg[body]) → #cmd(<name>, ..<args>)[<body>]`
- `#cmd("cmd", ..args("name", [body]), sarg[args]) → #cmd(<name>, ..<args>)[<body>]`

—Argument—

`<name>` string

Name of the command.

—Argument—

`<module>: none` string

Name of a module, the command belongs to.

—Argument—

`<ret>: none` any

Returned type.

—Argument—

`<index>: true` boolean

Whether to add an index entry.

2.2.2 Available commands

—Argument—

`<unpack>: false`

boolean

If `true`, the arguments are shown in separate lines.

—Argument—

`..<args>`

any

Arguments for the command, created with the argument commands above or `#args()`.

`#opt(<name>, <index>: true, <clr>: rgb("#0074d9")) → content`

Shows the option `<name>` and adds an entry with `<kind>: "option"` to the index.

- `#opt[examples-scope] → examples-scope`

—Argument—

`<name>`

string | content

Name of the option.

—Argument—

`<index>: true`

boolean

Whether to create an index entry.

—Argument—

`<clr>: rgb("#0074d9")`

color

A color

`#var(<name>) → content`

Shows the variable `<name>` and adds an entry to the index.

- `#var[colors] → #colors`

`#cmd-label(<name>, <module>: "\\") → label`

Creates a label for the command with name `<name>`.

—Argument—

`<name>`

string

Name of the command.

—Argument—

`<module>: "\\"`

string

Optional module name.

`#var-label(<name>, <module>: "\\") → label`

Creates a label for the variable with name `<name>`.

—Argument—

`<name>`

string

Name of the variable.

2.2.2 Available commands

—Argument—

`<module>: "\\\""`

string

Optional module name.

#command(`<name>`, `<label>`: `auto`, `..<args>`)[`<body>`] → `content`

Displays information of a command by formatting the name, description and arguments. See this command description for an example.

—Argument—

`<name>`

string

Name of the command.

—Argument—

`<label>`: `auto`

string

Custom label for the command. Defaults to `auto`.

—Argument—

`..<args>`

content

List of arguments created with the argument functions like `#arg()`.

—Argument—

`<body>`

content

Description for the command.

#variable(`<name>`, `<types>`: `none`, `<value>`: `none`, `<label>`: `auto`)[`<body>`] → `content`

Displays information for a variable definition.

```
#variable("primary", types:("color",), value:green)[
    Primary color.
]
```

`#primary: rgb("#2ecc40")`

color

Primary color.

—Argument—

`<name>`

string

Name of the variable.

—Argument—

`<types>`: `none`

array

Array of types to be passed to `#dtypes()`.

—Argument—

`<value>`: `none`

any

Default value.

2.2.2 Available commands

Argument	
<code><body></code>	content
Description of the variable.	

```
#argument(  
  <name>,  
  <is-sink>: false,  
  <types>: none,  
  <choices>: none,  
  <default>: "\"__none__\""  
) [<body>] → content
```

Displays information for a command argument. See the argument list below for an example.

Argument	
<code><name></code>	string
Name of the argument.	

Argument	
<code><is-sink>: false</code>	boolean
If this is a sink argument.	

Argument	
<code><types>: none</code>	array
Array of types to be passed to <code>#dtypes()</code> .	

Argument	
<code><choices>: none</code>	array
Optional array of valid values for this argument.	

Argument	
<code><default>: "\"__none__\""</code>	any
Optional default value for this argument.	

Argument	
<code><body></code>	content
Description of the argument.	

```
#module-commands(<module>)[<body>] → content
```

A wrapper around `#command()` calls that belong to an internal module. The module name is displayed as a prefix to the command name.

```
#module-commands("mty")[
  #command("rawi")[
    Shows #arg[code] as inline #doc("text/raw") text (with #arg(block: false)).
  ]
]
```

#mty.rawi()

Shows `<code>` as inline raw text (with `<block>`: `false`).

Argument

`<module>`

string

Name of the module.

Argument

`<body>`

content

Content with `#command()` calls.

#cmd-selector(<name>) → selector

Creates a selector for a command label.

Argument

`<name>`

string

Name of the command.

#cmdref(<name>, <module>: none, <format>: (...) => ...) → content

Creates a reference to a command label.

Argument

`<name>`

string

Name of the command.

Argument

`<module>`: none

string

Optional module name.

Argument

`<format>`: (...) => ...

function

Function of (`string`, `location`) => `content` to format the reference. The first argument is the name of the command (the same as `<name>`) and the second is the location of the referenced label.

#relref(<label>) → content

Creates a relative reference showing the text “above” or “below”.

- `#relref(cmd-label("meta"))` → above
- `#relref(cmd-label("shortex"))` → below

Argument	
<code><label></code>	<code>label</code>
The label to reference.	

#cmd-

Same as `#cmd()`, but does not create an index entry.

#opt-

Same as `#opt()`, but does not create an index entry.

#var-

Same as `#var()`, but does not create an index entry.

II.2.3. Source code and examples

MANTYS provides several commands to handle source code snippets and show examples of functionality. The usual `raw` command still works, but these commands allow you to highlight code in different ways or add line numbers.

Typst code examples can be set with the `#example()` command. Simply give it a fenced code block with the example code and **MANTYS** will render the code as highlighted Typst code and show the result underneath.

```
#example[```
This will render as *content*.

Use any #emph[Typst] code here.
```]
```

---

This will render as **\*content\***.

Use any `#emph[Typst]` code here.

---

This will render as **content**.

Use any *Typst* code here.

The result will be generated using `eval` and thus run in a local scope without access to imported functions. To pass your functions or modules to `#example()` either set the `examples-scope` option in the initial `#mantys()` call or pass a `<scope>` argument to `#example()` directly.

See below for how to use the `#example()` command.

### 2.2.3 Available commands

To use fenced code blocks in your example, add an extra backtick to the example code:

```
#example[```\n``rust\n fn main() {\n println!(\"Hello World!\");\n }\n ```\n```\n]
```

```
```\nrust\nfn main() {\n  println!(\"Hello World!\");\n}\n```\n
```

```
fn main() {\n  println!(\"Hello World!\");\n}
```

#example(**<side-by-side>**: **false**, **<imports>**: **(:)**, **<mode>**: **"code"**)[**<example-code>**][**<result>**]
Sets [**<example-code>**] as a raw block with **<lang>**: **"typ"** and the result of the code beneath. [**<example-code>**] need to be raw code itself.

```
#example[```\n  *Some lorem ipsum:*\  
  #lorem(40)\n  ```\n]
```

```
*Some lorem ipsum:*\  
#lorem(40)
```

Some lorem ipsum:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim aenean sit amet, nunc malesuada accumsan magna ut velit. Mauris nunc est enim sit amet venenatis urna cursus eget nunc scelerisque viverra mauris in aliquam euismod porttitor. Vivamus magna sed egestas et eget sed vestibulum sit et molestie ac tincidunt vitae semper quis lectus nulla at volutpat diam ut venenatis faucibus magna mollis imperdiet etiam porttitor quis non elit dapibus semper viverra nam libero justo laoreet sit amet eros ac tincidunt ornare massa eu tincidunt.

—Argument—

<example-code>

content

A block of raw code representing the example Typst code.

—Argument—

<side-by-side>: **false**

none

2.2.3 Available commands

Usually, the `<example-code>` is set above the `<result>` separated by a line. Setting this to `true` will set the code on the left side and the result on the right.

Argument

`<scope>: (:)`

none

The scope to pass to `eval`.

Examples will always import the `examples-scope` set in the initial `#mantys()` call. Passing this argument to an `#example()` call *additionally* make those imports available in this example. If an example should explicitly run without imports, pass `<scope>: none`:

```
#example[`I use #opt[examples-scope].`]
#example(scope:none)[``
// This will fail: #opt[examples-scope]
I can't use `#opt()`, because i don't use `examples-scope`.
``]
```

Argument

`<mode>: "code"`

none

The mode to evaluate the example in. See `eval/mode` for more information.

Argument

`<result>`

content

The result of the example code. Usually the same code as `<example-code>` but without the raw markup. See below for an example of using `[<result>]`.

`<result>` is optional and will be omitted in most cases!

Setting `<side-by-side>: true` will set the example on the left side and the result on the right and is useful for short code examples. The command `#side-by-side()` exists as a shortcut.

```
#example(side-by-side: true)[``
  *Some lorem ipsum:*\  
  #lorem(20)  
``]
```

```
*Some lorem ipsum:*\  
#lorem(20)
```

Some lorem ipsum:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quater.

`[<example-code>]` is passed to `#mty.sourcecode()` for processing.

2.2.3 Available commands

If the example-code needs to be different than the code generating the result (for example, because automatic imports do not work or access to the global scope is required), `#example()` accepts an optional second positional argument `[<result>]`. If provided, `[<example-code>]` is not evaluated and `[<result>]` is used instead.

```
#example[```\n    #value(range(4))\n```\n    The value is: #value(range(4))\n]
```

```
#value(range(4))
```

The value is: (0, 1, 2, 3)

#side-by-side(`<scope>`: (:), `<mode>`: "code") [`<example-code>`] [`<result>`]

Shortcut for `#example(<side-by-side>: true)`.

#sourcecode(`<title>`: none, `<file>`: none) [`<code>`]

If provided, the `<title>` and `<file>` argument are set as a titlebar above the content.

Argument

`<code>`

content

A `#raw()` block, that will be set inside a bordered block. The raw content is not modified and keeps its `<lang>` attribute, if set.

Argument

`<title>`: none

content

A title to show above the code in a titlebar.

Argument

`<file>`: none

content

A filename to show above the code in a titlebar.

`#sourcecode()` will render a raw block with line numbers and proper tab indentions using `CODELST` and put it inside a `#mty.frame()`.

If provided, the `<title>` and `<file>` argument are set as a titlebar above the content.


```
#sourcecode(title:"Some Rust code", file:"world.r")[``rust
fn main() {
println!("Hello World!");
}
``]
```

Some Rust code

 world.r

```
fn main() {
println!("Hello World!");
}
```

#codesnippet()[<code>]

A short code snippet, that is shown without line numbers or title.

```
#codesnippet[``shell-unix-generic
git clone https://github.com/jneug/typst-mantys.git mantys-0.0.3
``]
```

```
git clone https://github.com/jneug/typst-mantys.git mantys-0.0.3
```

#shortex(<sep>: [sym.arrow.r](#))[<code>]

Display a very short example to highlight the result of a single command. <sep> changes the separator between code and result.

```
- #shortex(`#emph[emphasis]`)
- #shortex(`#strong[strong emphasis]`, sep "::")
- #shortex(`#smallcaps[Small Capitals]`, sep:sym.arrow.r.double.long)
```

- [#emph](#)[emphasis] → *emphasis*
- [#strong](#)[strong emphasis] :: **strong emphasis**
- [#smallcaps](#)[Small Capitals] ⇒ SMALL CAPITALS

II.2.4. Other commands**#package()**

Shows a package name:

- [#package](#)[tablex] → [TABLEX](#)
- [#nty.package](#)[tablex] → [TABLEX](#)

#module()

Shows a module name:

- [#module](#)[nty] → [nty](#)

- `#mty.module[mty] → mty`

#doc(<target>, <name>: none, <fnote>: false)

Displays a link to the Typst reference documentation at <https://typst.app/docs>. The <target> need to be a relative path to the reference url, like `"text/raw"`. `#doc()` will create an appropriate link URL and cut everything before the last / from the link text.

The text can be explicitly set with <name>. For (<fnote>: `true`) the documentation URL is displayed in an additional footnote.

Remember that `#doc("meta/query")` requires a `#doc("meta/locate", name:"location")` obtained by `#doc("meta/locate", fnote:true)` to work.

Remember that query requires a location obtained by `locate`⁵ to work.

Footnote links are not yet reused if multiple links to the same reference URL are placed on the same page.

#command-selector(<name>)

Creates a selector for the specified command.

```
// Find the page of a command.
#let cmd-page( name ) = locate(loc => {
  let res = query(cmd-selector(name), loc)
  if res == () {
    panic("No command " + name + " found.")
  } else {
    return res.last().location().page()
  }
})
```

The `#cmd-[mantys]` command is documented on page `#cmd-page("mantys")`.

The `#mantys()` command is documented on page 3.

II.2.5. Using Tidy

MANTYS can be used with the docstring parser **TIDY**, to create a manual from the comments above each function. See the **TIDY** manual for more information on this.

MANTYS ships with a **TIDY** template and a helper function to use it.

#tidy-module(

```
<data>,
<include-examples-scope>: false,
<extract-headings>: 2,
<tidy>: none,
```

⁵<https://typst.app/docs/reference/meta/locate>

```
..<args>
)
```

`#tidy-module()` calls `#tidy.parse-module()` and `#tidy.show-module()` on the provided `<tidy>` instance. If no instance is provided, the current **TIDY** version from the preview repository is used.

Setting `<include-examples-scope>`: `true` will add the `examples-scope` passed to `#mantys()` to the evaluation of the module.

To extract headings up to a certain level from function docstrings and showing them between function documentations, set `<extract-headings>` to the highest heading level that should be extracted. `<extract-headings>`: `none` disables this.

This manual was compiled with `<extract-headings>`: `3` and thus the Section II.2.1 heading was shown before the description of `#api.meta()`.

II.2.6. Templating and styling

```
#titlepage(
  <name>,
  <title>,
  <subtitle>,
  <info>,
  <authors>,
  <urls>,
  <version>,
  <date>,
  <abstract>,
  <license>
)
```

The `#titlepage()` command sets the default titlepage of a **MANTYS** document.

To implement a custom title page, create a function that takes the arguments shown above and pass it to `#mantys()` as `<titlepage>`:

```
#let my-custom-titlepage( ..<args> ) = [*My empty title*]

#show: mantys.with(
  ..<toml>("typst.toml"),
  titlepage: my-custom-titlepage
)
```

A `<titlepage>` function gets passed the package information supplied to `#mantys()` with minimal preprocessing. The function has to check for `none` values for itself. The only argument with a guaranteed value is `<name>`.

II.2.7. Utilities

Most of **MANTYS** functionality is located in a module named **mty**. Only the main commands are exposed at a top level to keep the namespace pollution as minimal as possible to prevent name collisions with commands belonging to the package / module to be documented.

The commands provide some helpful low-level functionality, that might be useful in some cases.

Some of the utilities of previous versions are now covered by **TOOLS4TYPST**.

<code>#add-mark()</code>	<code>#gitlink()</code>	<code>#name()</code>
<code>#alert()</code>	<code>#has-mark()</code>	<code>#package()</code>
<code>#author()</code>	<code>#idx()</code>	<code>#pkglink()</code>
<code>#cblock()</code>	<code>#idx-term()</code>	<code>#place-marker()</code>
<code>#code-example()</code>	<code>#make-index()</code>	<code>#rawc()</code>
<code>#date()</code>	<code>#marginnote()</code>	<code>#rawi()</code>
<code>#footlink()</code>	<code>#marker()</code>	<code>#sourcecode()</code>
<code>#frame()</code>	<code>#module()</code>	<code>#ver()</code>

#mty.rawi(`<lang>`: `none`)[`<code>`] → `content`

Shows `<code>` as inline raw text (with `<block>`: `false`).

- `#mty.rawi("some inline code")` → some inline code

Argument: `<code>` `content`
String content to be displayed as raw.

Argument: `<lang>`: `none` `string`
Optional language for syntax highlighting.

#mty.rawc(`<color>`)[`<code>`] → `content`

Shows `<code>` as inline raw text (with `<block>`: `false`) and with the given `<color>`. This supports no language argument, since `<code>` will have a uniform color.

- `#mty.rawc(purple, "some inline code")` → some inline code

Argument: `<color>` `color`
Color for the raw text.

Argument: `<code>` `content`
String content to be displayed as raw.

#mty.cblock(`<width>`: `90%`, `..<args>`)[`<body>`] → `content`

2.2.7 Available commands

A block that is centered in its parent container.

```
#mty.cblock(width:50%)[#lorem(40)]
```

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quaerat voluptatem. Ut enim aequaleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere.

Argument

<width>: 90%

length

Width of the block.

Argument

..[args](#)

any

Arguments for block.

Argument

<body>

content

Content of the block

#mty.frame(..[args](#)) → **content**

Create a frame around some content.

Uses [SHOWYBOX](#) and can take any arguments the [#showybox\(\)](#) command can take.

```
#mty.frame(title:"Some lorem text")[#lorem(10)]
```

Some lorem text

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

..[args](#) (any): Arguments for [SHOWYBOX](#).

```
#mty.alert(  
  <color>: rgb("#0074d9"),  
  <width>: 100%,  
  <size>: 0.88em,  
  ..<style>,  
  <body>  
)
```

An alert box to highlight some content.

2.2.7 Available commands

Uses `SHOWYBOX` and can take any arguments the `#showybox()` command can take.

```
#mty.alert(color:purple, width:4cm)[#lorem(10)]
```

Lorem ipsum dolor
sit amet, consectetur
adipiscing elit, sed do.

`#mty.marginnote(<pos>: left, <gutter>: 0.5em, <dy>: "-1pt") [<body>] → content`

Places a note in the margin of the page.

—Argument—

`<pos>: left`

alignment

Either `left` or `right`.

—Argument—

`<gutter>: 0.5em`

length

Spacing between note and textarea.

—Argument—

`<dy>: "-1pt"`

length

How much to shift the note up or down.

—Argument—

`<body>`

content

Content of the note.

`#mty.idx-term(<term>) → string`

Removes special characters from `<term>` to make it a valid format for the index.

—Argument—

`<term>`

string | content

The term to sanitize.

`#mty.idx(<term>: none, <hide>: false, <kind>: "\"term\"") [<body>] → (none|content)`

Adds `<term>` to the index.

Each entry can be categorized by setting `<kind>`. `#make-index()` can be used to generate the index for one kind only.

—Argument—

`<term>: none`

string | content

An optional term to use, if it differs from `<body>`.

2.2.7 Available commands

Argument

`<hide>: false`

boolean

If `true`, no content is shown on the page.

Argument

`<kind>: "\"term\""`

string

A category for this term.

Argument

`<body>`

content

The term or label for the entry.

`#mtty.make-index(<kind>: none, <cols>: 3, <headings>: (...) => ..., <entries>: (...) => ...) → content`

Creates an index from previously set entries.

Argument

`<kind>: none`

string

An optional kind of entries to show.

Argument

`<cols>: 3`

integer

Number of columns to show the entries in.

Argument

`<headings>: (...) => ...`

function

Function to generate headings in the index. Gets the letter for the new section as an argument: (string) => content

Argument

`<entries>: (...) => ...`

function

A function to format index entries. Gets the index term, the label and the location for the entry: (string, content, location) => content

`#mtty.ver(..<args>)`

Generate a version number from a version string or array. The function takes a variable number of arguments and builds a version string in *semver* format:

- `#mtty.ver(0,1,1) → 0.1.1`
- `#mtty.ver(0,1,"beta-1") → 0.1.beta-1`
- `#mtty.ver("1.0.2") → 1.0.2`

`#mtty.name(<name>, <last>: none) → content`

Highlight human names (with first- and lastnames).

- `#mtty.name("Jonas Neugebauer") → Jonas NEUGEBAUER`
- `#mtty.name("J.", last:"Neugebauer") → J. NEUGEBAUER`

2.2.7 Available commands

Argument

<name>

string

First or full name.

Argument

<last>: none

string

Optional last name.

#mty.author(<info>) → content

Show author information.

- `#mty.author("Jonas Neugebauer")` → Jonas NEUGEBAUER
- `#mty.author((name:"Jonas Neugebauer"))` → Jonas NEUGEBAUER
- `#mty.author((name:"Jonas Neugebauer", email:"github@neugebauer.cc"))` → Jonas NEUGEBAUER <github@neugebauer.cc>

Argument

<info>

string | dictionary

Either a string with an author name or a dictionary with the name and email keys.

#mty.date(<d>, <format>: "[year]-[month]-[day]") → content

Show a date with a given format.

- `#mty.date("2023-09-25")` → 2023-09-25
- `#mty.date(datetime.today())` → 2024-03-20

Argument

<d>

datetime | string

Either a date as a string or datetime.

Argument

<format>: "[year]-[month]-[day]"

string

An optional datetime format string.

#mty.package(<name>)

Show a package name.

- `#mty.package("code1st")` → CODE1ST

Argument

<name>

string

Name of the package.

#mty.module(<name>)

Show a module name.

- `#mty.module("util")` → util

Argument

<name>

string

Name of the module.

#mty.footlink(**<url>**, **<label>**) → **content**

Creates a link with an attached footnote showing the **<url>**.

- **#mty.footlink**("https://neugebauer.cc", "neugebauer.cc") → neugebauer.cc⁶

— Argument —

<url>

string

The url for the link and the footnote.

— Argument —

<label>

string

The label for the link.

#mty.gitlink(**<repo>**) → **content**

Creates a link to a GitHub repository given in the format user/repository and shows the url in a footnote.

- **#mty.gitlink**("jneug/typst-mantys") → jneug/typst-mantys⁷

— Argument —

<repo>

string

Identifier of the repository.

#mty.pkglink(**<name>**, **<version>**, **<namespace>**: **"\"preview\""**) → **content**

Creates a link to a Typst package in the Typst package repository at typst/packages.

- **#mty.pkglink**("codelst", (2,0,0)) → CODELST:2.0.0⁸

— Argument —

<name>

string

Name of the package.

— Argument —

<version>

string

Version string of the package as an array of ints (e.g. (0,0,1)).

— Argument —

<namespace>: **"\"preview\""**

string

The namespace to use. Defaults to preview.

#mty.add-mark(**<mark>**)[**<elem>**]

Adds a label to a content element.

— Argument —

<mark>

string | label

A label to attach to the content.

⁶<https://neugebauer.cc>

⁷<https://github.com/jneug/typst-mantys>

⁸<https://github.com/typst/packages/tree/main/packages/preview/codelst/2.0.0>

Argument

<elem>

content

Content to mark with the label.

#**mty.has-mark**(<mark>)[<elem>]

Tests if <value> has a certain label attached.

- #**mty.has-mark**(<x>, mty.add-mark(<x>, raw("some code")))) → true
- #**mty.has-mark**(<x>, [#raw("some code")<x>]) → true
- #**mty.has-mark**(<y>, [#raw("some code")<x>]) → false

Argument

<mark>

string | label

A label to check for.

Argument

<elem>

content

The content to test.

#**mty.place-marker**(<name>)Places an invisible marker in the content that can be modified with a #**show** rule.

```
This marker not replaced: #mty.place-marker("foo1")
#show mty.marker("foo1"): "Hello, World!"
Here be a marker: #mty.place-marker("foo1")\
Here be a marker, too: #mty.place-marker("foo2")
```

This marker not replaced:

Here be a marker: Hello, World!

Here be a marker, too:

Argument

<name>

string

Name of the marker to be referenced later.

#**mty.marker**(<name>)Creates a selector for a marker placed via #**place-marker**().

```
#show mty.marker("foo1"): "Hello, World!"
Here be a marker: #mty.place-marker("foo1")\
Here be a marker, too: #mty.place-marker("foo2")
```

Here be a marker: Hello, World!

Here be a marker, too:

Argument

<name>

string

Name of the marker to be referenced.

#`mty.sourcecode`(..`args`) → `content`

Shows sourcecode in a frame.

Uses `CODELST` to render the code.

See Section II.2.3 for more information on sourcecode and examples.

—Argument—

..`args`

`any`

Argumente für `#code.lst.sourcecode()`

#`mty.code-example`(
`<side-by-side>`: `false`,
`<scope>`: `"(:)"`,
`<mode>`: `"\"markup\""`,
`<breakable>`: `false`,
 ..`args`
)[`<example-code>`]

Show an example by evaluating the given raw code with Typst and showing the source and result in a frame.

See section II.2.3 for more information on sourcecode and examples.

—Argument—

`<side-by-side>`: `false`

`boolean`

Shows the source and example in two columns instead of the result beneath the source.

—Argument—

`<scope>`: `"(:)"`

`dictionary`

A scope to pass to eval.

—Argument—

`<mode>`: `"\"markup\""`

`string`

The evaluation mode: `"markup"|"code"|"math"`

—Argument—

`<breakable>`: `false`

`boolean`

If the frame may brake over multiple pages.

—Argument—

`<example-code>`

`content`

A raw block of Typst code.

—Argument—

..`args`

`content`

An optional second positional argument that overwrites the evaluation result. This can be used to show the result of a sourcecode, that can not evaluated directly.

#primary

Highlights some content with the [primary color](#).

#secondary

Highlights some content with the [secondary color](#).

#mark-arg

Mark content as an argument.

#is-arg

Test if `<value>` is an argument created with `#arg()`.

#not-is-arg

Test if `<value>` is no argument created with `#arg()`.

#mark-body

Mark content as a body argument.

#is-body

Test if `<value>` is a body argument created with `#barg()`.

#not-is-body

Test if `<value>` is no body argument created with `#barg()`.

#mark-sink

Mark content as an argument sink.

#is-sink

Test if `<value>` is an argument sink created with `#sarg()`.

#not-is-sink

Test if `<value>` is no argument sink created with `#sarg()`.

#mark-choices

Mark content as a choices argument.

#is-choices

Test if `<value>` is a choice argument created with `#choices()`.

#not-is-choices

Test if `<value>` is no choice argument created with `#choices()`.

#mark-func

Mark content as a function argument.

#is-func

Test if `<value>` is a function argument created with `#func()`.

#not-is-func

Test if `<value>` is no function argument created with `#func()`.

#mark-lambda

Mark content as a lambda argument.

#is-lambda

Test if `<value>` is a lambda argument created with `#lambda()`.

#not-is-lambda

Test if `<value>` is no lambda argument created with `#lambda()`.

#lineref

Show a reference to a labeled line in a sourcecode.

Uses `CODELST` to show the reference.

II.2.8. Tidy template

<code>#get-type-color()</code>	<code>#show-outline()</code>	<code>#show-parameter-list()</code>
<code>#show-function()</code>	<code>#show-parameter-block()</code>	<code>#show-type()</code>

#mtj-tidy.get-type-color(<type>) → color

Returns the color for a specific type.

Argument	
<code><type></code>	any
Type to get the color for.	

#mtj-tidy.show-outline(<module-doc>, <style-args>: none) → content

Shows the outline of a module (list pf functions).

Argument	
<code><module-doc></code>	dictionary
Parsed module data.	

Argument	
<code><style-args>: none</code>	dictionary
Styling arguments.	

#mtj-tidy.show-type(<type>, <style-args>: "(:)")

Create beautiful, colored type box

#mtj-tidy.show-parameter-list(<fn>, <display-type-function>) → content

Show a list of arguments for a given function.

Argument	
<code><fn></code>	dictionary
Parsed function dictionary.	

#mtj-tidy.show-parameter-block(
 `<name>`,
 `<types>`,
 `<style-args>`,

2.2.8 Available commands

```
<show-default>: false,  
<default>: none  
)[<content>] → content
```

Create a parameter description block, containing name, type, description and optionally the default value. Passes the parameter information to `#argument()`.

Argument	
<name>	string
Name of the function.	
Argument	
<types>	array
Array of possible types.	
Argument	
<content>	content
Description of the argument.	
Argument	
<style-args>	dictionary
TIDY configuration.	

```
#mtty-tidy.show-function(<fn>, <style-args>, <tidy>: none, <extract-headings>: "2 // Additional arguments")
```

Show function

```
#fn-color
```

Color to highlight function names in

Part III.

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