

# stmlistings package description

Copyright © 2021 DLR FA STM  
v20210216

Martin Rädcl

2021-02-16

These are the listings definitions for `stm $\text{latex}$` . It is build upon the [listings](#) package.

## Contents

<b>1. Usage</b>	<b>1</b>
1.1. Load the whole <code>stm<math>\text{listings}</math></code> package	1
1.1.1. Description	1
1.1.2. Options	1
1.2. <code>stm<math>\text{listings}</math>styles</code>	2
1.2.1. Description	2
1.2.2. Styles	2
1.3. <code>stm<math>\text{listings}</math>commands</code>	2
1.3.1. Description	2
1.3.2. Command <code>\inlinecode</code>	2
<b>A. The code</b>	<b>4</b>
A.1. <code>stm<math>\text{listings}</math>.sty</code>	4
A.2. <code>stm<math>\text{listings}</math>commands.sty</code>	7
A.3. <code>stm<math>\text{listings}</math>environments.sty</code>	9
A.4. <code>stm<math>\text{listings}</math>styles.sty</code>	11

## 1. Usage

### 1.1. Load the whole `stm $\text{listings}$` package

#### 1.1.1. Description

This is an interface package which loads listings styles and commands commonly required throughout document creation.

By default the package loads

- `stmlistingscommands.sty`
- `stmlistingsenvironments.sty`
- `stmlistingsstyles.sty`

See subsection 1.1.2 for options to change the default package behavior.

### 1.1.2. Options

**Option *styles*** This is a boolean option. Expected values are either `true` or `false`. It controls whether to load the predefined listings styles.

```
\usepackage[styles=true|false]{stmlistings}
```

`styles=true` is the default. It is used in case `styles=false` is not set explicitly.

**Option *commands*** This is a boolean option. Expected values are either `true` or `false`. It enables and disables the loading of specific listings commands.

```
\usepackage[commands=true|false]{stmlistings}
```

`commands=true` is the default. It is used in case `commands=false` is not set explicitly.

**Option *environments*** This is a boolean option. Expected values are either `true` or `false`. It enables and disables the loading of specific listings environments.

```
\usepackage[environments=true|false]{stmlistings}
```

`environments=true` is the default. It is used in case `environments=false` is not set explicitly.

## 1.2. `stmlistingsstyles`

### 1.2.1. Description

### 1.2.2. Styles

## 1.3. `stmlistingscommands`

### 1.3.1. Description

These are commands and shortcuts for listings.

### 1.3.2. Command `\inlinecode`

**Description** Create an code snippet in the current line.

**Usage** The command arguments are

Nr.	Entity	Type	Default	Description
1	Delimiter	optional	+	Defines beginning and end of the code snippet.
2	Color	optional	<code>verbgraycolor</code>	Background color
3	Style	optional	<code>inlinecodestyle</code>	Listings style
3	Content	mandatory		Code

### Examples

- `\inlinecode{Example}`: This is an `Example` for an in line code definition.
- `\inlinecode[+][verbgraycolor][inlinecodestyle]{Example}`: This is an `Example` for an in line code definition.
- `\inlinecode[+][green]{Example}`: This is an `Example` for an in line code definition.
- `\inlinecode[|]{1+2}`: Example for a different delimiter `1+2` in case the default delimiter is used in the expression.

## A. The code

### A.1. stmlistings.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes listings definitions.
6 % Based upon the listings package:
7 %   https://ctan.org/pkg/listings
8 %
9 % Usage
10 % - Premble:
11 %   - \usepackage{stmlistings}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               _ _/|_ _
20 %               / _/_/_/_/
21 %               www.dlr.de/fa/en   | / DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
24 %
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX version 2e.
30 \NeedsTeXFormat{LaTeX2e}
31
32 % Provide the name of your page, the date it was last updated, and a
33 %   comment about what it's used for
34 \ProvidesPackage{stmlistings}[2019/10/27 STMs custom LaTeX listings
35 %   definitions]
36
37 % -----
38 % Package
39 % -----
```

```

39 \@ifpackageloaded{listings}{\RequirePackage{listings}}%
40 \@ifpackageloaded{stmcolors}{\RequirePackage{stmcolors}}%
41 \@ifpackageloaded{kvoptions}{\RequirePackage{kvoptions}}%
42
43 % -----
44 % Options
45 % -----
46
47 \SetupKeyvalOptions{%
48   family=stmlistings,%
49   prefix=stmlistings@,%
50   setkeys=\kvsetkeys,%
51 }
52
53 % Styles
54 \DeclareBoolOption[true]{styles}
55
56 % Environments
57 \DeclareBoolOption[true]{environments}
58
59 % Commands
60 \DeclareBoolOption[true]{commands}
61
62 % Process options
63 \ProcessKeyvalOptions{stmlistings}
64
65 % -----
66 % Modules
67 % -----
68
69 % Styles
70 \ifstmlistings@styles
71   \@ifpackageloaded{stmlistingsstyles}{\RequirePackage{
72     stmlistingsstyles}}%
73 \fi
74
75 % Environments
76 \ifstmlistings@environments
77   \@ifpackageloaded{stmlistingsenvironments}{\RequirePackage{
78     stmlistingsenvironments}}%
79 \fi
80
81 % Commands
82 \ifstmlistings@commands

```

```

81 \@ifpackageloaded{stmlistingscommands}{\RequirePackage{
    stmlistingscommands}}%
82 \fi
83
84 % -----
85 % Preferences
86 % -----
87
88 % http://tex.stackexchange.com/a/64845/44634
89 \makeatletter
90 \@ifundefined{KOMAClassName}
91 {% true -> no KOMA class
92   %
93 }%
94 {% false -> KOMA class
95   \newcaptionname{english}{\lstlistlistingname}{List of \lstlistingname
96     s}%
97   \newcaptionname{ngerman}{\lstlistlistingname}{Quelltextverzeichnis}%
98 }%
99 \makeatother
100 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
101 % That's it %
102 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
103
104 % Finally, we'll use \endinput to indicate that LaTeX can stop reading
    this file. LaTeX will ignore anything after this line.
105 \endinput

```

## A.2. stmlistingscommands.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes listings definitions.
6 % Based upon the listings package:
7 %   https://ctan.org/pkg/listings
8 %
9 % Usage
10 % - Preamble:
11 %   - \usepackage{stmlistingscommands}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               _ _/_/_
20 %               /_/_/_/_/
21 %               www.dlr.de/fa/en   |/_ DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
24 %
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX version 2e.
30 \NeedsTeXFormat{LaTeX2e}
31
32 % Provide the name of your page, the date it was last updated, and a
33 %   comment about what it's used for
34 \ProvidesPackage{stmlistingscommands}[2019/10/27 STMs custom LaTeX
35 %   listings definitions]
36
37 % -----
38 % Package
39 % -----
40
41 \@ifpackageloaded{listings}{\RequirePackage{listings}}%
42 \@ifpackageloaded{stmcolors}{\RequirePackage{stmcolors}}%
```

```

41 \@ifpackageloaded{stmlistingsstyles}{\RequirePackage{stmlistingsstyles}}%
42 \@ifpackageloaded{xparse}{\RequirePackage{xparse}}%
43 \@ifpackageloaded{ifmtarg}{\RequirePackage{ifmtarg}}%
44
45 % -----
46 % Commands
47 % -----
48
49 \newcommand*{\lstcomment}[1]{\hfill\makebox[5.25cm][l]{#1}}%
50
51
52 % https://tex.stackexchange.com/a/33753
53 \DeclareDocumentCommand{\inlinecode}{%
54   0{+}% Delimiters - optional, default in brackets
55   0{verbgraycolor}% Color for the colorbox - optional, default in
      brackets
56   0{inlinecodestyle}% Style definition for code - optional, default in
      brackets
57   m% content
58 }{%
59   \colorbox{#2}{\lstinline[style=#3]#1#4#1}%
60 }
61
62 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
63 % That's it %
64 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
65
66 % Finally, we'll use \endinput to indicate that LaTeX can stop reading
      this file. LaTeX will ignore anything after this line.
67 \endinput

```



### A.3. stmlistingsenvironments.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes listings definitions.
6 % Based upon the listings package:
7 %   https://ctan.org/pkg/listings
8 %
9 % Usage
10 % - Preamble:
11 %   - \usepackage{stmlistingsenvironments}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               _ _/_ _
20 %               / _/_/_/
21 %               www.dlr.de/fa/en   | / DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
24 %
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX version 2e.
30 \NeedsTeXFormat{LaTeX2e}
31
32 % Provide the name of your page, the date it was last updated, and a
33 %   comment about what it's used for
34 \ProvidesPackage{stmlistingsenvironments}[2019/10/27 STMs custom LaTeX
35 %   listings definitions]
36
37 % -----
38 % Package
39 % -----
40
41 \@ifpackageloaded{listings}{%
```

```

41 }{%
42   \RequirePackage{listings}
43 }%
44
45 \@ifpackageloaded{stmcolors}{%
46 %
47 }{%
48   \RequirePackage{stmcolors}
49 }%
50
51 % -----
52 % Styles
53 % -----
54
55 \@ifpackageloaded{stmlistingsstyles}{%
56 %
57 }{%
58   \RequirePackage{stmlistingsstyles}
59 }%
60
61 % -----
62 % Environments
63 % -----
64
65 \lstnewenvironment{code}{%
66   \lstset{style=scriptstyle}
67 }{}
68
69 \lstnewenvironment{texcode}{%
70   \lstset{style=texcodestyle}
71 }{}
72
73 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
74 % That's it %
75 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
76
77 % Finally, we'll use \endinput to indicate that LaTeX can stop reading
   this file. LaTeX will ignore anything after this line.
78 \endinput

```

#### A.4. stmlistingsstyles.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes listings definitions.
6 % Based upon the listings package:
7 %   https://ctan.org/pkg/listings
8 %
9 % Usage
10 % - Preamble:
11 %   - \usepackage{stmlistingsstyles}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               _ _/_/_
20 %               /_/_/_/_
21 %               www.dlr.de/fa/en   |/_ DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
24 %
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX version 2e.
30 \NeedsTeXFormat{LaTeX2e}
31
32 % Provide the name of your page, the date it was last updated, and a
33 %   comment about what it's used for
34 \ProvidesPackage{stmlistingsstyles}[2019/10/27 STMs custom LaTeX listings
35 %   style definitions]
36
37 % -----
38 % Package
39 % -----
40
41 \@ifpackageloaded{listings}{\RequirePackage{listings}}%
42 \@ifpackageloaded{stmcolors}{\RequirePackage{stmcolors}}%
```

```

41
42 % -----
43 % Styles
44 % -----
45
46 \lstdefinestyle{basestyle}{
47     backgroundcolor=\color{boxgraycolor},
48     basicstyle=\ttfamily,
49     columns=fullflexible,
50 }
51
52 \lstdefinestyle{inlinecodestyle}{
53     backgroundcolor=\color{boxgraycolor},
54     basicstyle=\ttfamily,
55 }
56
57 \lstdefinestyle{scriptstyle}{
58     style=basestyle,
59     escapechar=\%,% char to escape out of listings and back to LaTeX
60 }
61
62 \lstdefinestyle{texcodestyle}{
63     language=[LaTeX]TeX,
64     style=basestyle,
65     breaklines=true,
66     commentstyle=\color{codecommentgraycolor},
67 }
68
69 \lstdefinestyle{inlinetexcodestyle}{
70     language=[LaTeX]TeX,
71     style=basestyle,
72     upquote=true,% Important for copy-paste
73 }
74
75 \lstdefinestyle{texpackagedocstyle}{
76     style=texcodestyle,%
77     numbers=left,%
78     keepspaces=true,%
79 }
80
81 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
82 % That's it %
83 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
84

```

```
85 % Finally, we'll use \endinput to indicate that LaTeX can stop reading
    this file. LaTeX will ignore anything after this line.
86 \endinput
```