## stmlistings package description

# Copyright © 2023 DLR SY STM v20230914

#### Martin Rädel

#### 2023-09-14

These are the listings definitions for stmlatex. It is build upon the listings package.

#### **Contents**

1.	Usag	ge														1
	1.1.	Load t	the whole stmlistin	gs pa	cka	ge		 								1
		1.1.1.	Description													1
		1.1.2.	Options													1
	1.2.	stmlis	stingsstyles					 								2
		1.2.1.	Description													2
		1.2.2.	Styles													2
	1.3.	stmlis	stingscommands					 								2
		1.3.1.	Description													2
		1.3.2.	Command \inline	code				 			٠					2
Α.	The	code														4
	A.1.	$\Lambda.1$ . stmlistings.sty						 								4
	A.2.	2. stmlistingscommands.sty						 								7
	A.3.	3. stmlistingsenvironments.st						 								9
			stingsstyles.sty.													

### 1. Usage

#### 1.1. Load the whole stmlistings 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 subsubsection 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}

commands=true is the default. It is used in case commands=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	verbgraycolor	Background color
3	$_{ m Style}$	optional	inlinecodestyle	Listings style
3	Content	$\operatorname{mandatory}$		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

```
2 % Header
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{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 Lightweight Systems
18 %
19 %
                             __/|__
20 %
                             /_/_/_/
21 %
                             |/ DLR
             www.dlr.de/sy/en
22 %
23 % Copyright (C) 2019-... DLR Lightweight Systems
24 %
26 % Content
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
     comment about what it's used for
33 \ProvidesPackage{stmlistings}[2023/02/12 STMs custom LaTeX listings
     definitions]
34
35 % -----
36 % Package
37 % -----
38
```

```
39 \Oifpackageloaded{listings}{}{\RequirePackage{listings}}%
40 \@ifpackageloaded{stmcolors}{}{\RequirePackage{stmcolors}}%
41 \@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%
43 % -----
44 % Options
45 % -----
46
47 \SetupKeyvalOptions{%
48
     family=stmlistings,%
49
     prefix=stmlistings@,%
50
     setkeys=\kvsetkeys,%
51 }
52
53 % Styles
54 \DeclareBoolOption[true] {styles}
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
     \@ifpackageloaded{stmlistingsstyles}{}{\RequirePackage{
71
      stmlistingsstyles}}%
72 \fi
73
74 % Environments
75 \ifstmlistings@environments
     \Oifpackageloaded{stmlistingsenvironments}{}{\RequirePackage{
      stmlistingsenvironments}}%
77 \fi
78
79 % Commands
80 \ifstmlistings@commands
```

```
\@ifpackageloaded{stmlistingscommands}{}{\RequirePackage{
81
     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
96
     97
    }%
98 \makeatother
99
101 % That's it
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

```
2 % Header
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 Lightweight Systems
18 %
                            __/|__
19 %
20 %
                            /_/_/_/
                            |/ DLR
21 %
            www.dlr.de/sy/en
22 %
23 % Copyright (C) 2019-... DLR Lightweight Systems
24 %
26 % Content
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
     comment about what it's used for
33 \ProvidesPackage{stmlistingscommands}[2023/02/12 STMs custom LaTeX
     listings definitions]
34
35 % -----
36 % Package
37 % -----
38
40 \ensuremath{\mbox{\sc NequirePackage{stmcolors}}}\
```

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

#### A.3. stmlistingsenvironments.sty

```
2 % Header
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}
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 Lightweight Systems
18 %
                              __/|__
19 %
20 %
                             /_/_/_/
                              |/ DLR
21 %
             www.dlr.de/sy/en
23 % Copyright (C) 2019-... DLR Lightweight Systems
24 %
26 % Content
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
     comment about what it's used for
33 \ProvidesPackage{stmlistingsenvironments}[2023/02/12 STMs custom LaTeX
     listings definitions]
34
35 % -----
36 % Package
37 % -----
38
39 \@ifpackageloaded{listings}{%
40 %
```

```
41 }{%
42
  \RequirePackage{listings}
43 }%
44
45 \ \ensuremath{\texttt{Qifpackageloaded\{stmcolors\}\{\%\ }}
46 %
47 }{%
  \RequirePackage{stmcolors}
48
49 }%
50
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
74 % That's it
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

```
2 % Header
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 Lightweight Systems
18 %
                            __/|__
19 %
20 %
                            /_/_/_/
                            |/ DLR
21 %
            www.dlr.de/sy/en
22 %
23 % Copyright (C) 2019-... DLR Lightweight Systems
24 %
26 % Content
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
     comment about what it's used for
33 \ProvidesPackage{stmlistingsstyles}[2023/02/12 STMs custom LaTeX listings
      style definitions]
34
35 % -----
36 % Package
37 % -----
38
40 \ensuremath{\mbox{\sc NequirePackage{stmcolors}}}\
```

```
41
42 % -----
43 % Styles
44 % -----
45
47
    backgroundcolor=\color{boxgraycolor},
48
    basicstyle=\ttfamily,
49
    columns=fullflexible,
50 }
51
52
  \lstdefinestyle{inlinecodestyle}{
    backgroundcolor=\color{boxgraycolor},
    basicstyle=\ttfamily,
54
55 }
56
style=basestyle,
    escapechar=\%,% char to escape out of listings and back to LaTeX
59
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
82 % That's it
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