0.0

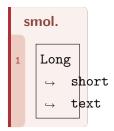
# Last successful compile: 2025-09-23 07:44:37Z This file is a compilation of various uses of the listing boxes generated with \ModifiedNewTCBListing and \ModifiedNewTCBInputListing. In this way, robustness checks are performed to ensure they function correctly—as bug-free as possible. Text. Hello (a) \arabic{code}: 1 (b) \eqboxwidth{⟨tag⟩} ⟨tag⟩ $\verb|codetitlewidth: 0pt|\\$ codeupperwidth: 383.60588pt \_ ${\tt codelowerwidth:}\ 0pt$ (c) \l\_\_listings\_autowidth\_\(component\)\_dim ⟨component⟩ title: 0.0pt0.0ptupper: 0.0ptlower: (d) \g\_\_listings\_autowidth@core\_measured\_text\_width\_dim: 0.0pt (e) $\g_{\text{listings}}$ autowidth@core\_measured\_width\_dim: 0.0pt(f) \g\_\_listings\_autowidth@core\_max\_tcb\_text\_width\_dim: 0.0pt (g) \g\_\_listings\_autowidth@core\_max\_tcb\_width\_dim: 416.83289pt

CHAPTER

## ModifiedNewTCBListing

#### 1.1 One Autowidth Option Selected

- (a) autowidth = title
  - (i) \l\_\_listings\_autowidth\_title\_dim <= \linewidthoutside</p>
    This box should be of width \l\_\_listings\_autowidth\_title\_dim



(ii) \l\_\_listings\_autowidth\_title\_dim > \linewidthoutside
This title should break and be of width \linewidthoutside

Long short text

(b) autowidth = upper

Julia.

1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 313.45552pt



heh

Hello hewwo heh

#### 1.2 Two Autowidth Options Selected

- (a) autowidth = title + upper
  - (i) \l\_\_listings\_autowidth\_title\_dim <= \linewidthoutside

    This box should be of width \l\_\_listings\_autowidth\_title\_dim

smol.

1 Long short text

(ii) \l\_\_listings\_autowidth\_title\_dim > \linewidthoutside
This title should break and be of width \linewidthoutside

Long short text

(iii) i.

Julia.

1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 289.9374pt

ii.

This should have breaklines disabled.

1

This should also have breaklines disabled (But the title should break).

1

iii.

```
This should have breaklines enabled.
                This should also have breaklines disabled (But the title should
                 break).
(b) autowidth = title + lower
       (i) \l__listings_autowidth_title_dim <= \linewidthoutside
          This box should be of width \l__listings_autowidth_title_dim
                                smol.
                                  Long short text
      (ii) \l__listings_autowidth_title_dim > \linewidthoutside
          This title should break and be of width \linewidthoutside
            long long long long long long title.
              Long short text
      (iii) \l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}
          The following box should have width equal to the linewidth.
            T<sub>E</sub>X.
              Hello\\ hewwo \hspace{10cm} heh
            Hello
            hewwo
      (iv) \l__listings_autowidth_title_dim >= \l__listings_autowidth_lower_dim
                                                 \eqboxwidth{codeupperwidth\arabic{codeupperwidth}
          The following box should have width equal to the width of the title
```

```
Two Autowidth Options Selected
            Long long long long long long long long title.
             Hello\\ hewwo \hspace{5cm} heh
            Hello
                                               heh
            hewwo
(v) \l__listings_autowidth_lower_dim < \eqboxwidth{codeupperwidth\arabic{code}}
   The following box should have width equal to that of the \tcblower.
                                  T<sub>E</sub>X.
                                  Hello\
                                      hewwo\\
```

(c) autowidth = upper + lower

```
Julia.
  \xdef\mywidth{\the\linewidth}\mywidth
  \mbox{mywidth} = 310.41388pt
```

heh

Hello hewwo heh

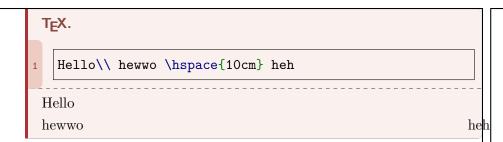
(i)

should have breaklines disabled. \hspace{\mywidth}

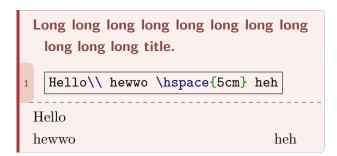
(ii)

This should have breaklines enabled. \hspace{\mywidth+0.00001pt}

(iii) \l\_\_listings\_autowidth\_lower\_dim >= \l\_\_listings\_autowidth\_upper\_dim The following box should have width equal to the linewidth.

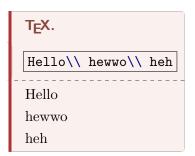


(iv) \l\_\_listings\_autowidth\_lower\_dim >= \l\_\_listings\_autowidth\_upper\_dim
The following box should have width equal to the width of the \tcblower



(v) \l\_\_listings\_autowidth\_lower\_dim < \l\_\_listings\_autowidth\_upper\_dim

The following box should have width equal to that of the width of the upper.



#### 1.3 (All) Three Autowidth Options Selected

(a) \l\_\_listings\_autowidth\_upper\_dim >= \l\_\_listings\_autowidth\_\title, lower\\_dim
This box should be of width \l\_\_listings\_autowidth\_upper\_dim



(b) \l\_\_listings\_autowidth\_lower\_dim >= \l\_\_listings\_autowidth\_\title, upper\\_dim
This box should be of width \l\_\_listings\_autowidth\_lower\_dim

```
smol.

1 \hspace{10cm}
```

```
(c) \l__listings_autowidth_title_dim >= \l__listings_autowidth_\langle upper, \dim
     This title should break and be of width \linewidthoutside
        Long short text\\
          Test \hspace{8.5cm} testo
  (d) \l__listings_autowidth_title_dim > \linewidthoutside
     This title should break and be of width \linewidthoutside
       long long long long long long title.
        Long short text\\
        Test \hspace{10cm} testo
  (e)
       Julia.
         \xdef\mywidth{\the\linewidth}\mywidth
         \mbox{mywidth} = 348.53072pt
                    This should have breaklines disabled.
                      \hspace{\mywidth}
  (f)
                    This should have breaklines enabled.
                      \hspace{\mywidth+0.00001pt}
                              Text.
                                test
(a) \arabic{code}: 35
(b) \eqboxwidth{\langle}
       \(\tag\)
  codetitlewidth: Opt
```

	codeupperwidth: 22.99493pt	
	codelowerwidth: $0 \mathrm{pt}$	
(c)	\llistings_autowidth_\(component\)_dim	
	(component)	
	title: 0.0pt	
	upper: 22.99493pt	
	lower: 0.0pt	
(d)	\glistings_autowidth@core_measured_text_width_dim: 22.99493pt	
(e)	\glistings_autowidth@core_measured_width_dim: 56.22194pt	
(f)	\glistings_autowidth@core_max_tcb_text_width_dim: 383.60588pt	
(g)	\glistings_autowidth@core_max_tcb_width_dim: 416.83289pt	

# ModifiedNewTCBInputListing

#### 2.1 One Autowidth Option Selected

- (a) autowidth = title
  - (i) \l\_\_listings\_autowidth\_title\_dim <= \linewidthoutside

    This box should be of width \l\_\_listings\_autowidth\_title\_dim

(ii) \l\_\_listings\_autowidth\_title\_dim > \linewidthoutside
This title should break and be of width \linewidthoutside

```
Long short text
(b) autowidth = upper
            Text.
               \xdef\mywidth{\the\linewidth}\mywidth
               \mbox{mywidth} = 313.45552pt
       (i)
            Text.
                   ,Title=This should have breaklines disabled
                   ,autowidth = upper
              ]{Julia}
      (ii)
            Text.
                   ,Title=This should have breaklines enabled
                   ,autowidth = upper
              ]{Julia}
(c) autowidth = lower
       (i) \l__listings_autowidth_lower_dim >= \eqboxwidth{codeupperwidth\arabic{code}}
          The following box should have width equal to the linewidth.
             Text.
                    ,width=346.68253pt
                   ,autowidth = lower
                   % ,no number
                   ,listing and text
```

```
5 []{\TeX}
6 Hello\\ hewwo \hspace{10cm} heh
```

(ii) \l\_\_listings\_autowidth\_lower\_dim >= \eqboxwidth\codeupperwidth\arabic{code}}

The following box should have width equal to the width of the \tcblower

(iii) \l\_\_listings\_autowidth\_lower\_dim < \eqboxwidth{codeupperwidth\arabic{code}}

The following box should have width equal to that of the \tcblower.

```
Text.

1     ,autowidth = lower

2     ,no number

3     ,listing and text

4  ]{\TeX}

Hello\\ hewwo\\ heh
```

#### 2.2 Two Autowidth Options Selected

- (a) autowidth = title + upper
  - (i) \l\_\_listings\_autowidth\_title\_dim <= \linewidthoutside

    This box should be of width \l\_\_listings\_autowidth\_title\_dim

(ii) \l\_\_listings\_autowidth\_title\_dim > \linewidthoutside
This title should break and be of width \linewidthoutside

(iii) i.

```
Text.

1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 289.9374pt
```

ii.

```
Text.

1  ,Title=This should have breaklines disabled

2  ,autowidth = title

3  ,autowidth = upper

4  ]{Julia}
```

```
Text.
                          ,Title=This should also have breaklines
                          \,\,\hookrightarrow\,\,\,\text{disabled}
                         ,OTitle=But the title should break
                         ,autowidth = title
                         ,autowidth = upper
                    ]{Julia}
            iii.
                  Text.
                         ,Title=This should have breaklines enabled
                          ,autowidth = title
                         ,autowidth = upper
                    ]{Julia}
                  Text.
                          ,Title=This should also have breaklines
                          \,\,\hookrightarrow\,\,\, \text{disabled}
                         ,OTitle=But the title should break
                         ,autowidth = title
                         , autowidth = upper
                    ]{Julia}
(b) autowidth = title + lower
```

(i) \l\_\_listings\_autowidth\_title\_dim <= \linewidthoutside</p>
This box should be of width \l\_\_listings\_autowidth\_title\_dim

(ii) \l\_\_listings\_autowidth\_title\_dim > \linewidthoutside
This title should break and be of width \linewidthoutside

(iii) \l\_\_listings\_autowidth\_lower\_dim >= \eqboxwidth{codeupperwidth\arabic{code}}

The following box should have width equal to the linewidth.

```
Text.

1     ,width=346.68253pt

2     ,autowidth = title

3     ,autowidth = lower

4     ,listing and text

5     ]{\TeX}

Hello\\ hewwo \hspace{10cm} heh
```

```
Two Autowidth Options Selected
    \l__listings_autowidth_title_dim >= \l__listings_autowidth_lower_dim
                                         >= \eqboxwidth{codeupperwidth\arabic{codeupperwidth}
   The following box should have width equal to the width of the title
      Text.
            ,Title=Long long long long long long long
             \hookrightarrow long title
            ,width=346.68253pt
            ,autowidth = title
            ,autowidth = lower
            ,listing and text
        ]{\TeX}
            Hello\\ hewwo \hspace{5cm} heh
(v) $$ \label{lower_dim} < \eqboxwidth{codeupperwidth} \arabic{code} $$
   The following box should have width equal to that of the \tcblower.
      Text.
            ,autowidth = title
            ,autowidth = lower
            ,no number
            ,listing and text
        ]{\TeX}
```

```
(c) autowidth = upper + lower
```

Hello\\ hewwo\\ heh

```
Text.

1 \xdef\mywidth{\the\linewidth}\mywidth
2 \mywidth = 310.41388pt
```

(i)

```
Text.
```

```
,Title=This should have breaklines disabled
,autowidth = upper
,autowidth = lower

J{Julia}
hspace{\mywidth}
```

(ii)

```
,Title=This should have breaklines enabled
,autowidth = upper
```

,autowidth = lower

]{Julia}

hspace{\mywidth+0.00001pt}

(iii) \l\_\_listings\_autowidth\_lower\_dim >= \l\_\_listings\_autowidth\_upper\_dim
The following box should have width equal to the linewidth.

```
Text.
```

```
1    ,width=346.68253pt
2    ,autowidth = upper
3    ,autowidth = lower
4    ,listing and text
5  ]{\TeX}
6    Hello\\ hewwo \hspace{10cm} heh
```

(iv) \l\_\_listings\_autowidth\_lower\_dim >= \l\_\_listings\_autowidth\_upper\_dim

The following box should have width equal to the width of the \tcblower

```
Text.
```

```
,width=346.68253pt
       ,autowidth = upper
       ,autowidth = lower
       ,listing and text
   ]{\TeX}
6
       Hello\ hewwo \hspace{5cm} heh
```

(v) \l\_\_listings\_autowidth\_lower\_dim < \l\_\_listings\_autowidth\_upper\_dim The following box should have width equal to that of the width of the upper.

```
Text.
      ,autowidth = upper
      ,autowidth = lower
      ,no number
      ,listing and text
  ]{\TeX}
      Hello\\ hewwo\\ heh
```

### 2.3 (All) Three Autowidth Options Selected

(a) \l\_\_listings\_autowidth\_upper\_dim >= \l\_\_listings\_autowidth\_\langle title, \langle ower \langle dim This box should be of width \l\_\_listings\_autowidth\_upper\_dim

```
Text.
      ,Title=smol
      ,autowidth = title
      ,autowidth = upper
      ,autowidth = lower
  ]{\TeX}
  Long short text
```

(b) \l\_\_listings\_autowidth\_lower\_dim >= \l\_\_listings\_autowidth\_\langle title, \upper \\_dim

This box should be of width \l\_\_listings\_autowidth\_lower\_dim Text. ,Title=smol ,autowidth = title ,autowidth = upper ,autowidth = lower ]{\TeX} 5

(c) \l\_\_listings\_autowidth\_title\_dim >= \l\_\_listings\_autowidth\_\langle upper, \langle ower \langle dim This title should break and be of width \linewidthoutside

\hspace{10cm}

```
Text.
       ,Title=Super long long long long long long long
        \rightarrow long long title
       ,autowidth = title
       ,autowidth = upper
       ,autowidth = lower
   ]{\TeX}
5
   Long short text\\
   Test \hspace{8.5cm} testo
```

(d) \l\_\_listings\_autowidth\_title\_dim > \linewidthoutside This title should break and be of width \linewidthoutside

```
Text.
   \rightarrow long long title
   ,autowidth = title
   ,autowidth = upper
   ,autowidth = lower
 ]{\TeX}
```

```
Long short text\\
       Test \hspace{10cm} testo
(e)
     Text.
       \xdef\mywidth{\the\linewidth}\mywidth
        \mbox{mywidth} = 348.53072pt
     Text.
            ,Title=This should have breaklines disabled
            ,autowidth = title
            , autowidth = upper
            ,autowidth = lower
       ]{Julia}
       \hspace{\mywidth}
(f)
     Text.
            ,Title=This should have breaklines enabled
            ,autowidth = title
            , autowidth = upper
            ,autowidth = lower
       ]{Julia}
       \hspace{\mywidth+0.00001pt}
```