

# The `showexpl` package\*

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## 1 Introduction

The documentation of a L<sup>A</sup>T<sub>E</sub>X package is by far more readable if there are examples of the commands' and environments' usage. The best way to do that is to give a comparison of the L<sup>A</sup>T<sub>E</sub>X code and the formatted output. `showexpl` is a package for doing that comparison, it is based on the package `listings` which provides a good typesetted source code with emphasised keywords and so on.

## 2 Usage

You can use `showexpl` like every other package by putting the line

```
\usepackage{showexpl}
```

in your source code. `showexpl` doesn't know any options by itself, but all options for the underlying packages (`listings` and `graphicx`) will be passed to the respective packages.

`showexpl` provides one command and one environment:

- `\LTXinputExample` and
- `LTXexample`

`\LTXinputExample` The syntax of `\LTXinputExample` is given by

```
\LTXinputExample[<key val list>]{<file>}
```

`LTXexample` The syntax of the environment `LTXexample` is given by

```
\begin{LTXexample}[<key val list>]... \end{LTXexample}
```

The set of options represented by `<key val list>` is the same for both the command and the environment, the options are described in the following:

**attachfile** Boolean valued key, default value: false. If set to true the sourcecode will be attached to the `.pdf` file—presumed that the document is processed by `pdflatex`.

**codefile** Name of the (temporary) file that contains the code which will be formatted as source code. The default value is `\jobname.tmp`.

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\*This document corresponds to `showexpl` v0.3m, dated 2016/08/05.

**explpreset** A  $\langle key\ val\ list \rangle$  which serves for presetting the properties of the formatting of the source code, for values see the documentation of the `listings` package. The default value is

**graphic** Name of a (graphic) file. This file—if present—will be included and displayed instead of the formatted code. The default value is empty.

**hsep** Defines the horizontal distance between the source code and the formatted text.

**justification** Defines the justification of the formatted text: reasonable values are `\raggedleft`, `\raggedright`, `\centering`. The default value is `\raggedright`.

**overhang** A *dimen*-value that defines the amount by which the formatted text and the source code can overlap the print space. The default value is `0pt`.

**pos:** Defines the relative position of the formatted text relating to the source code. Allowed values are `t`, `b`, `l`, `r`, `o`, and `i` for top, bottom, left, right, outer, and inner. The last values give sense only for two-sided printing, where there are outer and inner margins of a page. The default value is `1`.

**preset** Any `TeX` code executed before the sample code but not visible in the `listings` area.

**rangeaccept** Boolean valued key, default value is false. If set to true, one can define ranges of lines that will be excerpted from the source code.

**rframe** Defines the form of the frame around the formatted text. With a non-empty value (e.g. “single”) a simple frame will be drawn. In the future more kinds of frames will be supported. The default value is empty (no frame).

**varwidth** Boolean valued key, default value is false. If set to true, the formatted text is set with its “natural” width instead of a fixed width as given by the value of the option `width`.

**hsep** Defines the vertical distance between the source code and the formatted text.

**wide** Boolean valued key, default value is false. If set to true, the source code and the formatted text overlap the print space and the margin area.

**width** A  $\langle dimen \rangle$  value that defines the width of the formatted text. The default value depends of the relative positions of the source code and the formatted text.

**scaled** Without a value the formatted text will be scaled to fit the given width of the result area. With a number as value the formatted text will be scaled by this number.

### 3 Implementation

```
1 \DeclareOption{final}{%
2   \PassOptionsToPackage{\CurrentOption}{graphicx}%
3   \PassOptionsToPackage{\CurrentOption}{listings}%
4 }%
5 \DeclareOption{draft}{%
6   \PassOptionsToPackage{\CurrentOption}{graphicx}%
7   \PassOptionsToPackage{\CurrentOption}{listings}%
8 }%
9 \DeclareOption{attachfiles}{%
10  \AtBeginDocument{\IfFileExists{attachfile.sty}{%
11    \RequirePackage{attachfile}}{\def\SX@attachfile{}}}}
12 }%
13 \DeclareOption*{\PassOptionsToPackage{\CurrentOption}{listings}}
14 \ProcessOptions\relax
15 \RequirePackage{listings,calc,ifthen,graphicx,varwidth}
```

We must activate code from package `listings` for writing files.

\SX@defaultWD Parameter #2 is a length or a number. Parameter #1 is a macro. After a call of \SX@defaultWD this macro contains the value of the length or the value of the number multiplied by \linewidth.

```
17 \newcommand*\SX@defaultWD[2]{%
18   \afterassignment\SX@def@WD\dimen@#2\linewidth\relax{#1}}
19 \newcommand*\SX@def@WD{%
20 \def\SX@def@WD#1\relax#2{\edef#2{\the\dimen@}}}
```

Additional keys.

```
21 \lst@Key{pos}\relax{\def\SX@pos{#1}}
22 \lst@Key{width}\relax{\def\SX@width{#1}}
23 \lst@Key{hsep}\relax{\tempdima=#1\relax\edef\SX@hsep{\the\tempdima}}
24 \lst@Key{vsep}\relax{\tempdima=#1\relax\edef\SX@vsep{\the\tempdima}}
25 \lst@Key{overhang}\relax{\def\SX@overhang{#1}}
26 \lst@Key{wide}f[t]{\lstKV@SetIf{#1}\if@SX@wide}
27 \lst@Key{rframe}\relax{\def\SX@rframe{#1}}
28 \lst@Key{preset}\relax{\def\SX@preset{#1}}
29 \newcommand*\SX@scaled{%
30 \lst@Key{scaled}{?}{!}{\def\SX@scaled{#1}}}

31 \lst@Key{explpreset}\relax{\def\SX@explpreset{#1}}
32 \lst@Key{codefile}\relax{\def\SX@codefile{#1}}
33 \newif\if@SX@rangeaccept \SX@rangeacceptfalse
34 \newif\if@SX@varwidth \SX@varwidthfalse
35 \newif\if@SX@wide \SX@widefalse
36 \newif\if@SX@attachfile \SX@attachfilefalse

37 \lst@Key{rangeaccept}f[t]{\lstKV@SetIf{#1}\if@SX@rangeaccept}

38 \lst@Key{varwidth}f[t]{\lstKV@SetIf{#1}\if@SX@varwidth}
39 \lst@Key{justification}\relax{\def\SX@justification{#1}}
40 \lst@Key{attachfile}f[t]{\lstKV@SetIf{#1}\if@SX@attachfile}
41 \newcommand*\SX@graphicname{}%
42 \newcommand*\SX@graphicparam{}%
```

```

43 \lst@Key{graphic}{}[]{%
44   \lstKV@OptArg[width=\linewidth]{#1}{%
45     \edef\SX@graphicparam{##1}\edef\SX@graphicname{##2}%
46   }%
47 }%
48 \newbox\SX@ResBox
49 \newcommand*\SX@pos{}%
50 \newcommand*\SX@width{}%
51 \newcommand*\SX@hsep{}%
52 \newcommand*\SX@vsep{}%
53 \newcommand*\SX@overhang{}%
54 \newcommand*\SX@rframe{}%
55 \newcommand\SX@preset{}%
56 \newcommand*\SX@explpreset{}%

57 \newcommand*\SX@explpreset{}%
58 \newcommand*\SX@codefile{}{\edef\SX@codefile{\jobname.tmp}%
59 \newcommand*\SX@justification{\raggedright}

```

**\SX@@preset** Contains some redefinitions of L<sup>A</sup>T<sub>E</sub>X macros and environments to do nothing. **\SX@@preset** will be called just before typesetting the result of the example code. More can be added with the user key “**preset=...**”.

```

60 \newcommand*\SX@@preset{%
61   \renewcommand\documentclass[2][]{\SX@eat@version}%
62   \renewcommand\usepackage[2][]{\SX@eat@version}%
63   \renewenvironment{document}{}{}%
64   \renewenvironment{figure}[1][]{\def\@capttype{figure}}{}%
65   \renewenvironment{table}[1][]{\def\@capttype{table}}{}%
66   \renewcommand\cite[1]{}%
67   \let\tableofcontents\relax \let\listoffigures\relax
68   \let\listoftables\relax \let\printindex\relax
69   \let\listfiles\relax \let\nofiles\relax
70   \let\index@\gobble \let\label@\gobble
71   \let\bibliography@\gobble
72   \let\pagestyle@\gobble \let\thispagestyle@\gobble
73   %%\let\immediate\relax \let\write@\gobbletwo
74   %%\let\closeout@\gobble \let\@input@\gobble
75   \renewcommand\marginpar[2]{}%
76   \renewcommand\footnote[2]{}%
77   \let\footnotetext@\gobble
78   %%\abovedisplayskip=\z@
79   %%\abovedisplayshortskip=\z@
80 }%
81 \newcommand*\SX@eat@version[1]{}%

```

**\isSX@odd** Parameter #1 is executed on odd pages, parameter #2 on even pages.

```

82 \newif\ifSX@wasodd
83 \if@twoside
84   \newcommand*{\isSX@odd}[2]{%
85     \ifthenelse{\isodd{\pageref{\SX@IDENT}}}{%
86       {\SX@wasoddtrue #1}{\SX@wasoddfalse #2}}
87   \else
88     \newcommand*{\isSX@odd}[2]{#1}\SX@wasoddtrue
89   \fi

```

The call of `\isSX@odd` sets also `\ifSX@wasodd` to true or false. If it's clear that no page break occurs, `\ifSX@wasodd` can be used.

```

90 \newcounter{ltxexample}
91 \newcommand*{\SX@IDENT}{\SX@number\value{ltxexample}}
92 \newcommand*\SX@attachfile{%
93   \if@SX@attachfile
94     \attachfile[mimetype=text/plain,subject={example \theltxexample}]%
95     {\SX@codefile}{}%
96   \fi
97 }
```

`\SX@put@t/b/l/r/o/i` Six macros for positioning #2 (result) and #3 (code). The result can be above, below, left or right of the code area or on the outer or inner side. Parameter #1 is the width of the result.

```

98 \newcommand*\SX@put@t[3]{%
99   \SX@ResultArea{\linewidth}{#2}\endgraf\pagebreak[2]%
100  \setlength{\tempdima}{\SX@vsep}\vskip\tempdima
101  \SX@CodeArea{\linewidth}{#3}%
102 }
103 \newcommand*\SX@put@b[3]{%
104   \SX@CodeArea{\linewidth}{#3}\endgraf\pagebreak[2]%
105  \setlength{\tempdima}{\SX@vsep}\vskip\tempdima
106  \SX@ResultArea{\linewidth}{#2}%
107 }
108 \newcommand*\SX@put@l[3]{%
109  \setlength{\tempdimc}{\linewidth-#1-\SX@hsep}%
110  \SX@ResultArea{#1}{#2}\hfill\SX@CodeArea{\tempdimc}{#3}%
111 }
112 \newcommand*\SX@put@r[3]{%
113  \setlength{\tempdimc}{\linewidth-#1-\SX@hsep}%
114  \SX@CodeArea{\tempdimc}{#3}\hfill\SX@ResultArea{#1}{#2}%
115 }
116 \newcommand*\SX@put@o[3]{%
117  \@nameuse{SX@put@}\ifSX@wasodd r\else l\fi{#1}{#2}{#3}%
118 }
119 \newcommand*\SX@put@i[3]{%
120  \@nameuse{SX@put@}\ifSX@wasodd 1\else r\fi{#1}{#2}{#3}%
121 }
122 \newcommand\SX@ResultArea[2]{%
123   \SX@justification\setlength{\tempdima{#1}}%
124   \%minipage\tempdima\endminipage
125   \parbox{\tempdima}{#2}%
126 }
127 \newcommand\SX@CodeArea[2]{%
128   \setlength{\tempdima{#1}}%
129   \sbox{\tempboxa}{\parbox{\tempdima}{#2}}%
130   \tempdima=\dp\tempboxa\usebox{\tempboxa}
131   \rlap{\raisebox{-\tempdima}[0pt][0pt]{\SX@attachfile}}%
132 }
133 \newcommand*\SX@KillAboveCaptionskip{%
134   \ifx\lst@caption\empty\else
```

```

135      \lst@ifSubstring t\lst@captionpos
136          {\vskip-\abovecaptionskip}{}
137      \fi
138 }
139 \newcommand*\SX@KillBelowCaptionskip{%
140   \ifx\lst@caption\empty\else
141     \lst@ifSubstring b\lst@captionpos
142         {\vskip-\belowcaptionskip}{}
143     \fi
144 }

```

#### LTXexample

```

145 \lstnewenvironment{LTXexample}[1] []
146 {%
147   \temptokena{\#1}%
148   \begingroup
For "codefile=..." /"graphic=..." if \theltxexample or \thelstlisting is part of
the filename.
149   \advance\c@ltxexample\@ne \advance\c@lstlisting\@ne
150   \expandafter\lstset\expandafter{\SX@explpreset,\#1}%
151   \edef\x{\endgroup
152     \def\noexpand\SX@codefile{\SX@codefile}%
153     \def\noexpand\SX@graphicname{\SX@graphicname}%
154     \def\noexpand\SX@graphicparam{\SX@graphicparam}}%
155   \x
156   \xdef\SX@@explpreset{\the\temptokena,codefile=\SX@codefile,
157   graphic={[\SX@graphicparam]\{\SX@graphicname\}}}}%
158   \setbox\tempboxa=\hbox\bgroup% Warum noetig?
159   \lst@BeginWriteFile{\SX@codefile}%
160 }
161 {%
162   \lst@EndWriteFile\egroup
163   \SX@put@code@result
164 }

```

#### \SX@put@code@result

```

165 \newcommand*\SX@put@code@result{%
166   \begingroup
167   \expandafter\lstset\expandafter{\SX@explpreset}%
168   \let\lst@float=\relax\let\SX@float=\relax
Without the following call \lst@beginfloat is undefined.
169   \expandafter\lstset\expandafter{\SX@@explpreset}%
170   \ifx\lst@float\relax\else
\lst@float must be \relax because the whole "example" should float but not
the listings part in addition.
171   \let\SX@float=\lst@float\let\lst@float=\relax
172   \g@addto@macro\SX@@explpreset{,float=false}%
173   \edef\tempa{\noexpand\lst@beginfloat[\lstlisting]{\SX@float}}%
174   \expandafter\tempa
175   \fi
176   \ifx\lst@caption\empty

```

```

177      \lstset{nolol=true}%
178      \fi
179      \if@SX@wide\def\SX@overhang{\marginparwidth+\marginparsep}\fi
180      \trivlist\item\relax
181      \stepcounter{ltxexample}\label{\$S@IDENT}%
Make \$S@width a real dimension if the unit is missing.
182      \$S@defaultWD\$S@width{\$S@width}%
Set the default width if necessary.
183      \ifdim\$S@width<\z@
184          \tempswattrue
185          \def@tempa{t}%
186          \ifx@\tempa\$S@pos\tempswafalse\fi
187          \def@tempa{b}%
188          \ifx@\tempa\$S@pos\tempswafalse\fi
189          \setlength@tempdima{\linewidth+\$S@overhang}%
190          \if@tempswa@tempdima=.5@tempdima\fi%
191          \edef\$S@width{\the@tempdima}%
192      \fi
Correct \$S@width if a frame is requested.
193      \ifx\$S@rframe\empty
194          \long\def\$S@frame##1##1}%
195      \else
196          \let\$S@frame\fbox
197          \setlength@tempdima{\$S@width-2\fboxsep-2\fboxrule}%
198          \edef\$S@width{\the@tempdima}%
199      \fi
200      \isSX@odd{\def@tempa{l}}{\def@tempa{r}}%
201      \makebox[\linewidth]{\@tempa}%
202          \parbox{\linewidth+\$S@overhang}%
\$S@codefile (\jobname.tmp) is not nessessary for the filelist.
203      \let@addtolist\@gobble
204      \let\lst@ifdisplaystyle\iftrue
205      \SX@KillAboveCaptionskip\lst@MakeCaption{t}%
206      \lst@belowskip=\z@
207      \let\lst@belowskip=\z@
Use the “natural” width of the result code if “varwidth” is true. .
208      \let\$S@MakeCaption\lst@MakeCaption
209      \let\lst@MakeCaption\@gobble{%
210          \setbox\$S@ResBox\hbox{%
211              \SX@frame{%
212                  \nameuse{\if@SX@varwidth varwidth\else minipage\fi}%
213                  \$S@width\relax
214                  \begin{group}
215                      \$S@resultInput
216                  \end{group}
217                  \nameuse{end\if@SX@varwidth varwidth\else minipage\fi}%
218                  \edef\$S@width{\the\wd\$S@ResBox}%
219                  \ifundefined{SX@put@\$S@pos}%
220                      {\@latex@error{Parameter ‘\$S@pos’ undefined}\@ehd}%
221                      \nameuse{SX@put@\$S@pos}%

```

```

222          {\SX@width}{\box\SX@ResBox}{\SX@codeInput}}%
223          \let\lst@MakeCaption\SX@MakeCaption
224          \lst@MakeCaption{b}\SX@KillBelowCaptionskip
225      }%
226  }%
227 \endtrivlist
228 \ifx\SX@float\relax\else\expandafter\lst@endfloat\fi
229 \gdef\SX@@explpreset{}%
230 \endgroup
231 }

232 \newcommand\SX@SkipToFirst{%
233   \ifeof\@inputcheck\else
234     \ifnum \lst@lineno=\lst@firstline\else
235       \readline\@inputcheck to\SX@tempa
236       \typeout{IGNORE (\the\lst@lineno)}%
237       \global\advance\lst@lineno\@ne
238       \SX@SkipToFirst
239     \fi
240   \fi
241 }
242 \newcommand\SX@ProcessResult{%
243   \ifeof\@inputcheck
244     \let\SX@tempb\relax
245   \else
246     \let\SX@tempb\SX@ProcessResult
247     \ifnum \lst@lineno>\lst@lastline\relax
248       \ifx\lst@linerange\@empty
249         \let\SX@tempb\relax
250       \else
251         \lst@GetLineInterval
252         \SX@SkipToFirst
253       \fi
254     \else
255       \readline\@inputcheck to\SX@tempa
256       \typeout{READ (\the\lst@lineno)}%
257       \expandafter\g@addto@macro
258         \expandafter\SX@lines\expandafter{\SX@tempa^^J}%
259       \global\advance\lst@lineno\@ne
260     \fi
261   \fi
262   \SX@tempb
263 }

\SX@input
264 \newcommand\SX@input[1]{%
265   \begingroup
266   \IfFileExists{#1}{}{%
267   {}%
268   \filename@parse{#1}%
269   \ifx\filename@ext\relax \def\filename@ext{tex}\fi
270   \@latexerr{File
271     '\filename@area\filename@base.\filename@ext' not found.^^J^^J}\@ehd%
272   }%

```

```

273   \openin\@inputcheck#1
274   \lsthk@PreSet\let\lst@linerange\empty\global\lst@lineno\@ne
275   \expandafter\lstset\expandafter{\SX@\explpreset}%
276   \ifx\lst@linerange\empty
277     \edef\lst@linerange{\{\\lst@firstline}-{\lst@lastline},}%
278   \fi
279   \lst@GetLineInterval
280   \SX@Info
281   \newlinechar='\^J\relax
282   \SX@SkipToFirst\let\SX@lines\empty
283   \SX@ProcessResult
284   \closein\@inputcheck
285   \scantokens\expandafter{\SX@lines}%
286   \endgroup
287 }

288 \newcommand*\SX@Info{%
289   \typeout{-----}%
290   \typeout{pos=\SX@pos}%
291   \typeout{width=\SX@width}%
292   \typeout{hsep=\SX@hsep}%
293   \typeout{vsep=\SX@vsep}%
294   \typeout{overhang=\SX@overhang}%
295   \typeout{rframe=\SX@rframe}%
296   \typeout{codefile=\SX@codefile}%
297   \@ifundefined{lst@firstline}{}{%
298     {\typeout{\string\lst@firstline=\lst@firstline}}%
299   \ifundefined{lst@lastline}{}{%
300     {\typeout{\string\lst@lastline=\lst@lastline}}%
301   \ifundefined{lst@linerange}{}{%
302     {\typeout{\string\lst@linerange=\lst@linerange}}%
303   \typeout{\string\if@SX@wide=\if@SX@wide TRUE\else FALSE\fi}%
304   \typeout{\string\if@SX@rangeaccept=\if@SX@rangeaccept TRUE\else FALSE\fi}%
305   \typeout{\string\if@SX@varwidth=\if@SX@varwidth TRUE\else FALSE\fi}%
306   \typeout{graphicfile=\SX@graphicname, graphicparameter=[\SX@graphicparam]}%
307   \typeout{-----}%
308 }
309 \providecommand*\MakePercentIgnore{\catcode`\%9\relax}
310 \providecommand*\MakePercentComment{\catcode`\%14\relax}

\SX@resultInput
311 \newcommand*\SX@resultInput{%
312   \ifx\SX@graphicname\empty
313     \begingroup
314       \MakePercentComment\makeatother\catcode`\^M=5\relax
315       \SX@@preset\SX@preset
316       \if@SX@rangeaccept
317         \let\SX@tempa=\SX@input
318       \else
319         \let\SX@tempa=\input
320       \fi
321       \if\SX@scaled ?
322         \let\SX@tempb=@firstofone
323       \else

```

```

324      \if\SX@scaled !%
325          \def\SX@tempb##1{\resizebox{\SX@width}{!}{##1}}%
326      \else
327          \def\SX@tempb##1{\scalebox{\SX@scaled}{##1}}%
328      \fi
329  \fi
330  \SX@tempb{\SX@tempa{\SX@codefile}}\par
331  \endgroup
332 \else
333     \expandafter\includegraphics\expandafter[\SX@graphicparam]%
334     {\SX@graphicname}%
335 \fi
336 }

\SX@codeInput
337 \newcommand*\SX@codeInput{%
Without a caption entry the command \lstinputlisting adds the filename to
the “list of listings” (lol). This should be avoided.
338 \begingroup
The default parameters for all examples.
339 \expandafter\lstset\expandafter{\SX@explpreset}%
If ”numbers=none” then margin dimensions should be zero.
340 \expandafter\lstset\expandafter{\SX@@explpreset}%
341 \ifx\lst@PlaceNumber\empty
342     \g@addto@macro\SX@@explpreset{,xleftmargin=0pt,xrightmargin=0pt}%
343 \fi
344 \SX@Info
345 \expandafter\lstinputlisting\expandafter%
346 [\SX@@explpreset,nolol=true,caption={}]{\SX@codefile}%
347 \endgroup
348 }%

349 \newcommand*\LTXinputExample[2][]{%
350 \g@addto@macro\SX@@explpreset{#1,codefile=#2}%
351 \SX@put@code@result}%

All the default values.
352 \lstset{explpreset={numbers=left,numberstyle=\tiny, numbersep=.3em,
Negative width means defaults.
353 xleftmargin=1em,columns=flexible,language=[LaTeX]TEX, pos=1, width=-99pt,
354 overhang=0pt,hsep=\columnsep,vsep=\bigskipamount,rframe=single}

.
355 \AtBeginDocument{%
356 \def\theHlstnumber{\thelstlisting.\arabic{lstnumber}. \lst@neglisting}%
357 }

Changing the defaults possible in showexpl.cfg.
358 \InputIfFileExists{showexpl.cfg}{}{}
```

## Change History

v0.1a		v0.3a																				
General: “hpos” and “vpos” added, “pos” removed (RN). . . . .	3	\SX@attachfile: Attach file functionality (with pdfTEX) added (RN). . . . .	5																			
Initial version . . . . .	1	General: “attachfile” added (RN). . . . .	3																			
v0.1b	\SX@put@t/b/1/r/o/i: Positioning the captions more independent of the result and code area (RN). . . . .	5	v0.3b	\SX@resultInput: Input of result code now inside a group; \makeatother added (RN). . . . .	9																	
v0.1c	\SX@put@t/b/1/r/o/i: Commands \SX@KillAboveCaptionskip and \SX@KillBelowCaptionskip added (RN). . . . .	5	v0.3c	\SX@resultInput: Wrong catcode for newline char corrected (RN). . . . .	9																	
v0.1f	General: “lspreset” added. (RN). . . . .	3	v0.3d	\SX@resultInput: Missing \par added (RN). . . . .	9																	
v0.1h	General: “codefile” added. (RN). . . . .	3	v0.3e	\SX@opreset: More redefinitions added (RN). . . . .	4																	
	“lspreset” renamed to “explpreset” (RN). . . . .	3	v0.3g	General: \SX@ProcessResult is now working correctly using \readline and \scantokens. Thanks to Ulrich Diez for help (RN). . . . .	8																	
	\LTXexample: Renamed from “example” to “LTXexample” (RN). . . . .	6		Missing \newcommand for \SX@opreset added (RN). . . . .	4																	
v0.1i	General: Better caption positioning and correct distance between the parts (RN). . . . .	6	v0.3h	General: New Option ‘attachfiles’ (RN). . . . .	3																	
v0.1j	\SX@input: For ranges of lines (RN). . . . .	8	v0.3j	\SX@put@code@result: Setting \lstd@MakeCaption to was a bad idea for hyperlinks. Group added to varwidth environment. (Suggestions by Ulrike Fischer.). . . . .	7																	
	General: “rangeaccept” added (RN). . . . .	3	v0.3k	\SX@put@code@result: Setting \lstd@MakeCaption to \@gobble again (prevent multiply defined labels; label key) . . . . .	7																	
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