

# nicefilelist.sty

## `\listfiles` Alignment for Connoisseurs\*

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### Abstract

While `longnamefilelist.sty` improves L<sup>A</sup>T<sub>E</sub>X's `\listfiles` with respect to long base filenames only, `nicefilelist.sty` can keep separate columns for (i) date, (ii) version, and (iii) “caption” (don't write caption text in date column), their alignment not being disturbed by short filename extensions such as `.fd`. This is achieved basing on the `monofill` package.

`v0.7` offers a package option `[wrap]` for automatic word wrapping within the caption column (using the `hardwrap` package), so filenames and captions can be quite long without disturbing alignment.

As opposed to the `dateiliste` package, this is about the *plain text* output in the `.log` file or, with `myfilist`, as a stand-alone plain text file.

**Related packages::** Cf. `latexfileinfo-pkgs`.

**Keywords:** Package management, document management, plain text output

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\*This document describes version [v0.9a](#) of `nicefilelist.sty` as of 2023/01/08.

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## 1 Features and Usage

Additionally or also “complementarily” to the presentation given here, the functionality of the package is summarized in the file `latexfileinfo_pkgs.htm` from the `latexfileinfo-pkgs`, in a comparison with packages resembling `nicefilelist` in certain respects.

### 1.1 Relation to `longnamefilelist.sty`

`longnamefilelist.sty` equips `\listfiles` with an optional argument for the maximum number of characters in the base filename. By contrast, `nicefilelist` does not provide arguments for `\listfiles`, rather column widths for `basename`, `extension`, and `version number` are determined by `templates` using `monofill.sty`. As a “template” for doing this, see the initial settings in section 2.2. (Such settings must precede the `\listfiles` command) So `nicefilelist`’s *user interface* (at present) does not *extend* `longnamefilelist`’s user interface.

Using `monofill` is a very different approach than the one of `longnamefilelist`. `nicefilelist` is more powerful than `longnamefilelist`, but is not based on it in any way. It does not make sense to load both packages, they just overwrite each other’s behaviour of `\listfiles`.

`longnamefilelist` may become “obsolete” by the present package, unless one finds that its version of `\listfiles` looks fine enough and it is easier to understand and to use than `nicefilelist`.

### 1.2 Installing

The file `nicefilelist.sty` is provided ready, installation only requires putting it somewhere where `TEX` finds it (which may need updating the filename data base).

### 1.3 Calling

Below the `\documentclass` line(s) and above `\begin{document}`, you load `nicefilelist.sty` (as usually) by

```
\usepackage{nicefilelist}
```

or by

```
\usepackage[<options>]{nicefilelist}
```

where *<options>* may be `r`, `wrap`, and/or `autolength`—see summaries in sections 1.4 and 2.4 on the package options and an example in section 1.5.2. Alternatively—e.g., for use with `myfilist` from the `fileinfo` bundle (in a “`TeX` script”), see section 1.5, or in order to include the `.cls` file in the list—you may load it by

```
\RequirePackage{nicefilelist}
```

or by

```
\RequirePackage[<options>]{nicefilelist}
```

before `\documentclass` or when you don’t use `\documentclass`.

### 1.4 Choosing Settings

#### 1.4.1 The Columns, Their Widths, and Their “Missing” Content

The `nicefilelist` package considers the listing from ‘`\listfiles`’ a five-column table, the columns being (reserved for)

- (i) the base filename,
- (ii) the filename extension,
- (iii) the date,
- (iv) the version (or with option ‘`[r]`’: the release) number, and
- (v) the caption

of a `LaTeX` source file. The filename base column is right-adjusted, the other ones are left-adjusted. Date, version, and caption are made up from the *<f-info>* argument in

```
\Provides<f-type>{<f-base>.<f-ext>}[<f-info>]
```

where *<f-type>* is ‘`Class`’, ‘`Package`’, or ‘`File`’.

The fixed usual format ‘`YYYY/MM/DD`’ or ‘`YYYY-MM-DD`’ (accepted by `LaTeX` since 2017-03-08) for the date is assumed; in fact, when *<f-info>* doesn’t start according to this format, it is assumed that no date is given, and some “missing” text will appear in the “date” column, determined by a macro `\NFLnodate`.

Using the `filemod` package, it is possible to use the date of a file which does not explicitly declare a date:

```
\makeatletter
\RequirePackage{filemod}%
\renewcommand*\thefilemoddate[3]{#1-#2-#3}
\renewcommand*\NFLnodate{\filemodprintdate{%
    \filename@area\filename@base.\filename@ext}}
\makeatother
\renewcommand*\NFLnotfound{%
    \NFLnodate\NFLspaceII\NFLnversion\NFLspaceIII}
```

The version number (or “string”) must follow in format ‘ $v\langle digit \rangle.\langle digits \rangle$ ’, otherwise some “missing” text appears in the “version” column, determined by a macro `\NFLnversion`. What remains is placed in the “caption” column. `\NFLnotfound` determines an alternative filling in the case that  $\langle f\text{-info} \rangle$  cannot be obtained. See the default settings for these “failure” texts in section 2.3.

The column widths for filename base and extension and the column width for version or release are determined using the `monofill` package. They have “field identifiers” `f-base`, `f-ext`, and `f-version` respectively. The respective widths are determined by templates  $\langle longest \rangle$  in

```
\MDfieldtemplate{\langle field-id \rangle}{\langle longest \rangle}
```

See section 2.2 for the default settings. Probably only adjusting the width for *base* filenames is required in real life, see the example in section 1.5.2. (But there exist extensions `.info` and `.mkii` and versions `v4.6.3.1` (`fontawesome.sty`)). Option ‘`autolength`’ measures the respective length of the field and writes it into the `.aux` file for use in the next compilation run. This option requires `LATEX` format-version at least 2022-11-01.

The spaces between the columns are determined by macros `\NFLspaceI`, `\NFLspaceII`, and `\NFLspaceIII`, see section 2.2 for the defaults.

### 1.4.2 The Caption Column

The width of the caption column (unfortunately) is determined by the stuff enumerated above and the width of the console output window or screen. With long filenames and long captions, the result may look poor. the *characters* that don’t fit into the line may continue at left end of the window or screen, disturbing the appearance of a “table”—unless you use package option `[wrap]`. The latter requires the `hardwrap` package by Will Robertson and Kevin Godby (“not invented here”). This package tries to determine the screen width by some subtle tests, and until it finds something better, it assumes a width of 80 characters (I suppose). `hardwrap` does *word wrapping*, i.e., it doesn’t just put *characters* not fitting into the next line, but entire *words*. Moreover, it allows inserting some “newline sequence” before the first word that is too much, and we use this feature here to put the next word into the *caption column* rather than at the beginning of the next line. (Details and implementation are in section 2.4.)

If you are not happy with the column width that `hardwrap` chooses, but want to assume your own width  $\langle max\text{-}line\text{-}chars \rangle$  (e.g., your width, measured by your doctor, divided by the width of one character), compute its difference  $\langle max\text{-}line\text{-}chars\text{-}minus\text{-}one \rangle$  to 1 (maybe by your electronic calculator, or an emulation, or a Lua script, cf. `lualatex-doc`, or by `bigintcalc`), and enter the `hardwrap` instruction

```
\setmaxprintline{\langle max-line-chars-minus-one \rangle}
```

when `hardwrap` or `nicefilelist` have been loaded *and* before the internal macro `\@dofilelist` is run (which happens at the end of the document or when `myfilist`'s `\ListInfos` is issued, for instance).

## 1.5 Usage and Samples with `myfilist.sty`

### 1.5.1 Basically

In order to get a reduced and/or rearranged list of file infos with the `myfilist` package, `nicefilelist.sty` must be loaded earlier than `myfilist.sty`. This is due to a kind of limitation of the latter, it *issues* `\listfiles` (**TODO**). Therefore `\listfiles` must be modified earlier—or *issued* earlier, in this case the `\listfiles` in `myfilist.sty` does nothing. The file `SrcFILES.txt` accompanying the—first—distribution of `nicefilelist` was generated by running the following file `srcfiles.tex` with L<sup>A</sup>T<sub>E</sub>X:

```
\ProvidesFile{srcfiles.tex}[2012/03/23
                                file infos -> SrcFILES.txt]
\RequirePackage{nicefilelist}
%% INSERT MODIFICATIONS OF INITIAL
%% 'nicefilelist'/'monofill' SETTINGS HERE!
\RequirePackage{myfilist}
%% documentation:
\ReadFileInfos{nicefilelist}
%% demonstration:
\ReadFileInfos{proonly.fd,wrong.prv,empty.f}
% \ReadFileInfos{utopia.xyz}
%% present file:
\ReadFileInfos{nicefilelist}
\ReadFileInfos{srcfiles}
\ListInfos[SrcFILES.txt]
```

Note the lines where to place **custom** modifications of settings for alignment (section 2.2) or failure displays (section 2.3).

The previous code mentions the following files:

`proonly.fd` has a proper `\ProvidesFile` line without date, for seeing what happens in the date and version columns. It also was a test for the case that there are fewer characters than a date has, and there is no blank space.

wrong.prv has a \ProvidesFile line with wrong file name.

empty.f just is an empty file.

utopia.xyz is not present at all, you get an error when you remove the comment mark.

Moreover, my .tex files have dates, but not version numbers, so you see what happens then:

```

*File List*
-----RELEASE.--- -- -- -- --
nicefilelist.RLS 2023/01/08 v0.9a ver@@; option autolength
-----PACKAGE.--- -- -- -- --
nicefilelist.sty 2023/01/08 v0.9a more file list alignment (UL)
-----DOCSRC.--- -- -- -- --
nicefilelist.tex 2023/01/08 -- documenting nicefilelist.sty
  srcfiles.tex 2023/01/08 -- file infos -> SrcFILES.txt
-----DEMO.--- -- -- -- --
  provonly.fd -- -- -- -- no date, no version, but a lot of info,
                                look how that is wrapped!

  wrong.prv * NOT FOUND *
  empty.f * NOT FOUND *
-----USED.--- -- -- -- --
  hardwrap.sty 2011/02/12 v0.2 Hard wrap messages
  myfilist.sty 2012/11/22 v0.71 \listfiles -- mine only (UL)
  readprov.sty 2012/11/22 v0.5 file infos without loading (UL)
  fifinddo.sty 2012/11/17 v0.61 filtering TeX(t) files by TeX (UL)
  makedoc.sty 2012/08/28 v0.52 TeX input from *.sty (UL)
  niceverb.sty 2015/11/21 v0.62 minimize doc markup (UL)
  texlinks.sty 2015/07/20 v0.83 TeX-related links (UL)
  makedoc.cfg 2013/03/25 -- documentation settings
  mdoccorr.cfg 2012/11/13 -- 'makedoc' local typographical corrections
-not-so-much.--- -- -- -- --
  kvsetkeys.sty 2022-10-05 v1.19 Key value parser (HO)
*****

```

```

List made at 2023/01/08, 00:00
from script file srcfiles.tex

```

### 1.5.2 More Generally and Shorthand

In the above example, the myfilist command ‘\EmptyFileList’ was missing—it was not intended there. Usually however, it *is* intended, i.e., the following sequence of lines is wanted:

```

\RequirePackage[r]{nicefilefilelist}
\MFfieldtemplate{f-base}[{\longest-name}]
\RequirePackage{myfilist}
\EmptyFileList[{\read-again-files}]

```

Here you also see usage of package option `[r]` for release numbers and the adjustment

```
\MFfieldtemplate{f-base}{(longest-name)}
```

according to section 2.2.

With v0.5, the last three code lines in the snippet above can be replaced by

```
\MaxBaseEmptyList{(longest-name)}[read-again-files]
```

—“optionally” without ‘`[read-again-files]`’. This may save the user from worrying about usage with `myfilist`.

`nicefilelist` formats file lists nicely even when base filenames have eight characters at most, what L<sup>A</sup>T<sub>E</sub>X’s original `\listfiles` was made for. v0.6 simplifies this case by a star version of `\MaxBaseEmptyList`:

```
\MaxBaseEmptyList*
```

works like `\MaxBaseEmptyList{nicefile}` (eight characters)—still, optional `[read-again-files]` may follow. This feature is demonstrated with `inputtrc v/r0.3`.

### 1.5.3 Sample with Wrapped Caption Column

The most recent version of the accompanying ‘`SrcFILES.txt`’ contains the following:

---

```
*File List*
-----RELEASE.---  --  --  --  --  --
nicefilelist.RLS  2023/01/08  v0.9a  ver@@; option autolength
-----PACKAGE.---  --  --  --  --  --
nicefilelist.sty  2023/01/08  v0.9a  more file list alignment (UL)
-----DOCSRC.---  --  --  --  --  --
nicefilelist.tex  2023/01/08  --     documenting nicefilelist.sty
srcfiles.tex     2023/01/08  --     file infos -> SrcFILES.txt
-----DEMO.---  --  --  --  --  --
provonly.fd      --  --  --  --  --     no date, no version, but a lot of info,
                                         look how that is wrapped!

      wrong.prv   * NOT FOUND *
      empty.f     * NOT FOUND *
-----USED.---  --  --  --  --  --
      hardwrap.sty 2011/02/12  v0.2   Hard wrap messages
      myfilist.sty 2012/11/22  v0.71  \listfiles -- mine only (UL)
      readprov.sty 2012/11/22  v0.5   file infos without loading (UL)
      fifinddo.sty 2012/11/17  v0.61  filtering TeX(t) files by TeX (UL)
      makedoc.sty  2012/08/28  v0.52  TeX input from *.sty (UL)
      niceverb.sty 2015/11/21  v0.62  minimize doc markup (UL)
      texlinks.sty 2015/07/20  v0.83  TeX-related links (UL)
      makedoc.cfg  2013/03/25  --     documentation settings
      mdoccorr.cfg 2012/11/13  --     ‘makedoc’ local typographical corrections
-not-so-much.---  --  --  --  --  --
      kvsetkeys.sty 2022-10-05  v1.19  Key value parser (HO)
*****
```

```
List made at 2023/01/08, 00:00
from script file srcfiles.tex
```

---

This exemplifies

1. **wrapping** of ‘proonly.fd’'s and kvsetkeys.sty file info within the **caption** column using nicefilelist’s ‘[wrap]’ option,
2. inserted “**comments**” from myfilist’s ‘\FileListRemark’,
3. a file ‘nicefilelist.RLS’ for a **release summary**. This is to track what has happened most recently, whether the most recent release has been installed (system-wide), or (for me) whether most recent versions of package and documentation have been released. When such an ‘.RLS’ file is installed together with packages in the ‘tex’ subtree of a TDS, the release summary can be accessed quickly as a **terminal display** by one of the packages ltxfileinfo, latexfileversion, or typeoutfileinfo. One aim of the ‘[wrap]’ option is allowing longer “release captions” (looking fine in the package file list) than fit into a small part of a single line.

The above ‘SrcFILES.txt’ has been generated from the following version of the T<sub>E</sub>X script ‘srcfiles.tex’:

---

```

\ProvidesFile{srcfiles.tex}
      [2023/01/08 file infos -> SrcFILES.txt]
\RequirePackage[r,wrap]{nicefilelist}
\RequirePackage{filedate}
\MaxBaseEmptyList{nicefilelist}
      [nicefilelist.sty,%
      readprov.sty,myfilist.sty,%
      hardwrap.sty]
\FileListRemark[ -- ]{-----RELEASE.---}
\ReadFileInfos{nicefilelist.RLS}
\FileListRemark[ -- ]{-----PACKAGE.---}
\ReadPackageInfos{nicefilelist}
\FileListRemark[ -- ]{-----DOCSRC.---}
\ReadFileInfos{nicefilelist,srcfiles.tex}
\FileListRemark[ -- ]{-----DEMO.---}
\ReadFileInfos{proonly.fd,wrong.prv,empty.f}
%\ReadFileInfos{utopia.xxx}
%\FileListRemark[ -- ]{DOCUTILITIES.---}
%\FileListRemark[ -- ]{usedNICETEXT.---}
\FileListRemark[ -- ]{-----USED.---}
\ReadPackageInfos{hardwrap,
      myfilist,readprov,
      fifinddo,makedoc,niceverb,texlinks}
\ReadFileInfos{makedoc.cfg,mdoccorr.cfg}
\FileListRemark[ -- ]{-not-so-much.---}

```



```

\ReadPackageInfos{kvsetkeys}
%\NoStopListInfos[SrcFILES.txt]
%\EqualityMessages
\CheckDateOfPDFmod{nicefilelist.sty}
\CheckDateOfPDFmod{nicefilelist.tex}
\CheckDateOfPDFmod{nicefilelist.RLS}
\CheckDateOfPDFmod{srcfiles.tex}
%\stop
\NoBottomLines \ListInfos[SrcFILES.txt]

```

---

## 2 Implementation

### 2.1 Package File Header (Legalese)

```

1 \NeedsTeXFormat{LaTeX2e}[1994/12/01]% Option autolength needs 2022-11-01!
2 \ProvidesPackage{nicefilelist}[2023/01/08 v0.9a
3     more file list alignment (UL)]
4 %% Copyright (C) 2012 Uwe Lück (deceased June 2020)
5 %%
6 %% This work may be distributed and/or modified under the
7 %% conditions of the LaTeX Project Public License, either
8 %% version 1.3c of this license or (at your option) any later
9 %% version. This version of this license is in
10 %% https://www.latex-project.org/lppl/lppl-1-3c.txt
11 %% and the latest version of this license is in
12 %% https://www.latex-project.org/lppl.txt
13 %% and version 1.3c or later is part of all distributions of
14 %% LaTeX version 2005-12-01 or later.
15 %%
16 %%
17 %%
18 %%

```

### 2.2 Alignment Settings

We use the `monofill` package for alignment of plain text:

```
19 \RequirePackage{monofill}[2012/10/29]
```

See its documentation for details. The `[wrap]` option provided by `nicefilelist` v0.7 requires `monofill` v0.2 as of 2012-10-29.

We support three alignment “fields” according to the terminology of `monofill`. Their ids are `f-base` for base file-names, `f-ext` for file-name extensions, and `f-version` for the revision version id of a file as read from `\ProvidesFile`, `\ProvidesPackage`, or `\ProvidesClass` command in the file. Initial settings for them are following. For modifying them, load `nicefilelist.sty`, then type your own settings, then issue `\listfiles` or load `myfilist.sty`.

```

20 \MFfieldtemplate{f-base}{nicefilelist}
21 \MFfieldtemplate{f-ext}{tex}
22 \MFfieldtemplate{f-version}{v0.11a}

```

`\NFLspaceI`, `\NFLspaceII`, and `\NFLspaceIII` determine the space between the four columns for names, dates, versions, and “captions”:

```

23 \newcommand*\NFLspaceI { \space}
24 \newcommand*\NFLspaceII { \space}
25 \newcommand*\NFLspaceIII{ }

```

### 2.3 Failure Displays

`\NFLnodate` is displayed in place of a file date if it seems not to be given (configurable):

```

26 \newcommand*\NFLnodate{ -- \space-- --}

```

`\NFLnoverision` likewise—however, for alignment, each wanted space must be specified as `\space` (not just a code blank space). It may need adjustment (by `\renewcommand`) when `\MFfieldtemplate{f-version}` is modified:

```

27 \newcommand*\NFLnoverision{\space--}

```

`\NFLnotfound` is for files with wrong or no `\Provides...` command:

```

28 \newcommand*\NFLnotfound{ * NOT FOUND *}

```

### 2.4 Package Options

v0.4 offers package option `[r]` that allows strings with `r` in place of `v`, for “release.” `\NFL@v@digit`’s definition therefore depends ... we use `\@listfiles` for a “message” there. For the original restricted functionality, it expands to `\NFL@false`.

```

29 \def\@listfiles{\noexpand\nFL@false}

```

Package option `[r]` carries out another test instead. See the accompanying file `SrcFILES.txt` to see the effect. TO DO: update example!?

```

30 \DeclareOption{r}{%
31   \def\@listfiles{%
32     {\noexpand\nFL@ifx@kbl##1r%
33       {\noexpand\nFL@digits##2\noexpand\@nnil}%
34     \noexpand\nFL@false}%
35   }%
36 }

```

v0.7 offers package option `[wrap]` for automatic wrapping within the “captions” column, based on Will Robertson’s and Kevin Godby’s `hardwrap` package. The difference between this option and the functionality without is controlled by the macro `\NFL@filerow`. *Without* it expands to `\typeout`

```

37 \newcommand*\NFL@filerow}{\typeout}
—\let doesn't work with myfilist's redefinition of \typeout. With [wrap],
  \NFL@filerow applies hardwrap's \HardWrap:
38 \newif\ifNFLwrap%
39 \DeclareOption{wrap}{%
40   \NFLwraptrue%
41   \renewcommand*\NFL@filerow}[1]{%
42     \HardWrap\typeout\hw@maxprintline\relax{^^J%
43       \MFrightinfield\space{f-base} %
44       \MLeftinfield \space{f-ext}}%
45     \NFLspaceI\@spaces\space\@spaces\space \NFLspaceII
46     \MFrightinfield\space{f-version}\NFLspaceIII}{%
47     #1}}%

```

Alignment of file-names with `hardwrap` seems to need

```

48 \renewcommand*\MFfileelement}{\MFotherspace}
from monofill v0.2.
49 }

```

The display width is controlled by `hardwrap`'s counter `|\hw@maxprintline|`. Unless `hardwrap` finds something special, its content is 79, corresponding to a display width of 80 characters (I believe—counting the leftmost character as ‘0’, as editors like to do). You can choose a different content value (*max-char-col*) by `hardwrap`'s

```
\setmaxprintline{max-char-col}
```

v0.9a offers package option `[autolength]` for automatic setting of lengths of base file-name, extension, and version.

```

50 \newif\ifNFLautolength
51
52 \DeclareOption{autolength}{% v0.9a 2023-01-08

```

We just measure the respective length and write it into the `.aux` file for use in the next compilation run. The `xstring` package requires e- $\TeX$ . `\AddToHook{enddocument/afterlastpage}` ensures that the `nicefilelist` package still works when `\AtEndDocument` would be gone. The `\ver@@`-fix for the file-list was introduced 2022. Thus instead of  $\LaTeX$  format version 1994/12/01 option `[autolength]` requires format-version 2022-11-01 or newer. (2018 might be sufficient, but testing was only done with a current format.)

```

53 \@ifl@t@r\fmtversion{2022/11/01}{
54   % would have understood
55   % \IfFormatAtLeastTF{2022-11-01}{<true code>}{<false code>}
56   \NFLautolengthtrue
57   }{\PackageError{nicefilelist}{%

```

```

58         Option autolength needs newer LaTeX format%
59         }{Needed LaTeX format version: 2022-11-01 or newer.\MessageBreak%
60         Found LaTeX format version: \fmtversion.\MessageBreak%
61         To use option autolength update your TeX distribution.%
62     }
63 }
64 }
65
66 \ProcessOptions
67

```

The next `\if` is to check whether `[wrap]` has been demanded and `hardwrap` is needed:

```

68 \ifNFLwrap\RequirePackage{hardwrap}\fi
69
70 \ifNFLautolength
71     \RequirePackage{xstring}[2021-07-21]% v1.84; needs e-TeX
72     \AddToHook{enddocument/afterlastpage}{%
73         \xdef\NFLbaselengthmax{nicefilelist}%
74         \xdef\NFLextlengthmax{sty}%
75         \xdef\NFLversionlengthmax{v0.9a}%
76         \xdef\NFLcaptionlengthmax{more file list alignment (UL)}%
77         \xdef\NFLbaselengthtmp{0}%
78         \xdef\NFLextlengthtmp{0}%
79         \xdef\NFLversionlengthtmp{0}%
80         \xdef\NFLcaptionlengthtmp{0}%
81         \xdef\NFLtotallengthtmp{0}%
82         \@for\currname:=\@filelist\do{%
83             % This starts the loop through the list of files.
84             \filename@parse\currname%
85             \StrLen{\filename@base}[\NFLbaselengthcurrent]%
86             \ifnum \NFLbaselengthcurrent > \NFLbaselengthtmp \relax%
87                 {\xdef\NFLbaselengthtmp{\NFLbaselengthcurrent}%
88                     \xdef\NFLbaselengthmax{\filename@base}%
89                 }%
90             \fi%
91             \StrLen{\filename@ext}[\NFLextlengthcurrent]%
92             \ifnum \NFLextlengthcurrent > \NFLextlengthtmp \relax%
93                 {\xdef\NFLextlengthtmp{\NFLextlengthcurrent}%
94                     \xdef\NFLextlengthmax{\filename@ext}%
95                 }%
96             \fi%
97             \expandafter\let\expandafter\@NFLtempb\csname ver@\filename@base.\filename@ext\endcsname%
98             \StrBetween[1,2]{\@NFLtempb}{ }{ }[\@NFLtempc]%
99             % assuming date space version space description
100            \IfBeginWith{\@NFLtempc}{v}{%
101                % fails if version omitted and description starts with v - evil!
102                \xdef\filename@version{\@NFLtempc}{%
103                % else: empty or unusual format

```

```

104     % Packages that \relax their \ver@... (e.g., fontenc)
105     % can use \ver@... to store the version information instead:
106     \expandafter\let\expandafter\NFLtempd\csname ver@{\filename@base.\filename@ext\endcsname}%
107     \StrBetween[1,2]{\NFLtempd}{ }{ }\NFLtempc}%
108     % assuming date space version space description again
109     \IfBeginWith{\NFLtempc}{v}{\xdef\filename@version{\NFLtempc}%
110     }{% else: no usual version found
111     \xdef\filename@version{}%
112     }%
113     }%
114     \StrLen{\filename@version}[\NFLversionlengthcurrent]%
115     \ifnum \NFLversionlengthcurrent > \NFLversionlengthtmp \relax%
116     {\xdef\NFLversionlengthtmp{\NFLversionlengthcurrent}%
117     \xdef\NFLversionlengthmax{\filename@version}%
118     }%
119     \fi%
120     \ifx\filename@version\empty\relax%
121     \StrBehind[1]{\NFLtempb}{ }\NFLtempc}%
122     \else%
123     \StrBehind[2]{\NFLtempb}{ }\NFLtempc}%
124     \fi%
125     \StrLen{\NFLtempc}[\NFLcaptionlengthcurrent]%
126     \ifnum \NFLcaptionlengthcurrent > \NFLcaptionlengthtmp \relax%
127     {\xdef\NFLcaptionlengthtmp{\NFLcaptionlengthcurrent}%
128     \xdef\NFLcaptionlengthmax{\NFLtempc}%
129     }%
130     \fi%
131     }%
132     \message{^^J^^J%
133     *****^^J%
134     Package nicefilelist Info:^^J}%
135     \@ifundefined{hw@maxprintline}{%
136     \IfPackageLoadedTF{hardwrap}{%
137     \message{\space\string\hw@maxprintline\space unknown.^^J}%
138     }{\message{\space\string\hw@maxprintline\space %
139     unknown because not loading the hardwrap package.^^J}%
140     }%
141     \message{\space Now guessing it to be 79.}%
142     \global\newcount\hw@maxprintline%
143     \hw@maxprintline=79\relax% the default value
144     }{% was already defined by hardwrap package or manually
145     }%
146     \StrLen{\NFLbaselengthmax .\NFLextlengthmax\NFLspaceI %
147     yyyy-mm-dd\NFLspaceII \NFLversionlengthmax \NFLspaceIII %
148     \NFLcaptionlengthmax}{\NFLtempc}%
149     \message{%
150     Longest base file-name: \NFLbaselengthmax\space - %
151     \NFLbaselengthtmp\space characters^^J%
152     Longest file extension: \NFLextlengthmax\space - %
153     \NFLextlengthtmp\space characters^^J%

```

```

154     Longest file version: \space\space\NFLversionlengthmax\space - %
155     \NFLversionlengthtmp\space characters^^J%
156     Longest file caption: \space\space\NFLcaptionlengthmax\space - %
157     \NFLcaptionlengthtmp\space characters^^J%
158     Total length of^^J%
159     base-filename.extension\string\NFLspaceI\space date%
160     \string\NFLspaceII\space version\string\NFLspaceIII\space %
161     caption:^^J
162     \@NFLtempc\space characters^^J%
163     Linewidth: \the\hw@maxprintline\space characters^^J%
164     }%

```

There exists “beamercolorthememetropolis-highcontrast.sty”.

```

165     \ifnum \@NFLtempc > \the\hw@maxprintline\relax%
166     \IfPackageLoadedTF{hardwrap}{%
167     \xdef\roomforcaption{%
168     \the\numexpr(\the\hw@maxprintline-(\@NFLtempc-\NFLcaptionlengthtmp))\relax}%
169     \ifnum\numexpr(2*\roomforcaption) < \NFLcaptionlengthtmp\relax%
170     \xdef\NFLmaybe{%
171     \the\numexpr(\NFLbaselengthtmp+(2*\roomforcaption-\NFLcaptionlengthtmp)+1)\relax}%
172     \gdef\NFLbaselengthmaybe{}%
173     \newcounter{NFLcounter}%
174     \loop%
175     \xdef\NFLbaselengthmaybe{A\NFLbaselengthmaybe}%
176     \addtocounter{NFLcounter}{1}%
177     \ifnum\value{NFLcounter}<\NFLmaybe%
178     \repeat%
179     \message{Warning:^^J%
180     Caption needs more than two lines, %
181     wrapping was not implemented for this.^^J%
182     Maybe set the lengths for base file-name, %
183     -extension, and -version manually^^J%
184     or increase the max_print_line.^^J%
185     Instead of using option autolength, after^^J%
186     \string\usepackage[<options>]{nicefilelist}^^J%
187     try adding^^J%
188     \string\MFfieldtemplate{f-base}{\NFLbaselengthmaybe}^^J%
189     \string\MFfieldtemplate{f-ext}{\NFLextlengthmax}^^J%
190     \string\MFfieldtemplate{f-version}{\NFLversionlengthmax}^^J%
191     and recompile twice - %
192     or look for the second longest file name^^J%
193     and use that for \string\MFfieldtemplate{f-base}.^^J}%
194     \fi%
195     }\message{Warning:^^J%
196     File information does not always fit into a single %
197     line; this might look ugly.^^J%
198     Maybe set the lengths for base file-name, %
199     -extension, and -version manually^^J%
200     or increase the max_print_line.^^J}%
201     }%

```

```

202     \fi%
203     \message{%
204     *****^J^J}%
205     \if@filesw%
206         \immediate\write\@auxout{\string\IfPackageLoadedTF{nicefilelist}{\string\relax}{%
207             \string\newcommand\string\MFfieldtemplate[2]{\string\relax}}}%
208         \immediate\write\@auxout{\string\MFfieldtemplate{f-base}{\NFLbaselengthmax}}%
209         \immediate\write\@auxout{\string\MFfieldtemplate{f-ext}{\NFLextlengthmax}}%
210         \immediate\write\@auxout{\string\MFfieldtemplate{f-version}{\NFLversionlengthmax}}%
211     \fi%
212     }
213 \fi

```

## 2.5 Safe Tests

For fairly safe tests, we briefly use an exotic version of Q (similarly to `ifmptarg` and `url`):

```
214 \catcode'\Q=7 \let\NFL@criterion=Q \catcode'\Q=11
```

It appears to me that expandable tests like the ones employed here never are perfectly safe; you only can say that it is safe with a source meeting certain conditions. `ffinddo` originally was made for “plain text,” to be read from files without assigning TeX’s special category codes. *Here* we assume that the source (text in `\Provides...` arguments) will never contain such a “funny Q”.

## 2.6 Redefining `\listfiles`

Similarly to original L<sup>A</sup>T<sub>E</sub>X, `\listfiles` carries almost everything that is needed for the file list only. 2012-10-29: little point in this, perhaps, in that the package should be loaded when running `\listfiles` is intended—TO-DO. Or maybe it is loaded *just in case*?

```

215 \renewcommand*\listfiles{%
216     \let\listfiles\relax

```

—this clears memory. Now L<sup>A</sup>T<sub>E</sub>X doesn’t collect file names for `\listfiles` when `\@listfiles` is undefined, therefore

```
217 % \let\@listfiles\relax
```

... postponed for future version...

`\@dofilelist` is executed by the standard L<sup>A</sup>T<sub>E</sub>X `\enddocument` macro or by `\ListInfos` from the `myfilelist` package.

```

218 \def\@dofilelist{%
    “Title:”
219     \typeout{^^J           %% trick 2012/03/29
220             \MFrightinfield{*File Lis}{f-base}t*}%
221     \@for\@currname:=\@filelist\do{%

```

This starts the loop through the list of files

```
222     \filename@parse\@currname
223     \edef\filename@ext{%
224     \ifx\filename@ext\relax tex\else\filename@ext\fi}%
```

Like L<sup>A</sup>T<sub>E</sub>X's `\reserved@b`:

```
225     \expandafter\let\expandafter\@tempb
226     \csname ver@\filename@base.\filename@ext\endcsname
```

Packages that `\relax` their `\ver@`... (e.g., fontenc) can use `\ver@@`... to store the version information instead:

```
227     \ifx\@tempb\relax%
228     \expandafter\let\expandafter\@tempb
229     \csname ver@@\filename@base.\filename@ext\endcsname
230     \fi%
```

According to `source2e.pdf`, `\filename@area` may be a directory. Trying support of this, it seems to be a new feature with v0.2 — not tested, TO-DO!

```
231     \edef\@tempa{\filename@area\filename@base}%
```

Actually I would like to be able to do even the file-name parsing in an expandable way — for all systems, `texsys.cfg`?! TO-DO

```
232     \NFL@filerow{%
```

Now all parsing and checking must be expandable.

```
233     \NFL@make@macro@arg\MFrightinfield\@tempa {f-base}.%
234     \NFL@make@macro@arg\MFleftinfield \filename@ext{f-ext}%
235     \NFLspaceI
236     \NFL@ifx@kbl\@tempb\relax\NFLnotfound{%
237     \NFL@make@macro@arg\NFL@space@split\@tempb
238     \NFL@maybe@three
239     \NFL@date@or@rest
240     }%
241     }%
242     }%
```

The line of stars:

```
243     \typeout{                               %% trick v 2012/03/29
244     \MFrightinfield{*****}{f-base}***^^J}%
```

TO-DO or more stars as with `longnamefilelist`?

```
245     }%
```

This finishes the definition of `\@dofilelist`.

```
\NFL@make@macro@arg⟨cmd-1⟩⟨cmd-2⟩
```

results in `⟨cmd-1⟩{⟨t-list⟩}` where `⟨t-list⟩` is the one-step expansion of `⟨cmd-2⟩`:



```
246 \def\NFL@make@macro@arg##1##2{\expandafter##1\expandafter{##2}}%
```

`\NFL@space@split{⟨token-list⟩}{⟨spaced⟩}{⟨unspaced⟩}` passes prefix and suffix as arguments to `⟨spaced⟩` if a space token is within `⟨token-list⟩`, otherwise `⟨unspaced⟩` gets the original `⟨token-list⟩` as single argument. The latter is useful here where `⟨token-list⟩` becomes visible only by an `\expandafter`. The following construction is discussed more generally in the `bitelist` package.

```
247 \def\NFL@space@split##1{%
248 \NFL@return@space@split##1\@nil: \NFL@criterion\@nil\@nil{##1}}%
```

`\NFL@return@spaces@split` essentially has *three* parameters delimited by `\@nil`, `\@nil`, and `\@nil` again.

```
249 \def\NFL@return@space@split##1 ##2\@nil##3\@nil##4##5##6{%
250 \NFL@ifx@kbl\NFL@criterion{##2}}%
```

If `##2` is empty, `\NFL@ifx@kbl` (as of v0.3) compares `\NFL@criterion` (criterion indicating “unspaced”) with `\expandafter`. This only happens when the space is the last thing in `⟨token-list⟩`, and `⟨spaced⟩` is chosen correctly.

```
251 {##6{##4}}{##5{##1}{##2}}}%
```

`\NFL@ifx@kbl{⟨token⟩}{⟨maybe-token⟩}{⟨ifx⟩}{⟨unlessx⟩}` as of v0.3 should save some tokens, in some longer run, especially if we want to add nestings—cf. `source2e.pdf` for “Kabelschacht”.

```
252 \def\NFL@ifx@kbl##1##2{%
253 \ifx##1##2\expandafter \@firstoftwo
254 \else \expandafter \@secondoftwo \fi}%
```

Dealing with `\NFL@date@or@rest{⟨token-list⟩}` before `\NFL@maybe@three`:

```
255 \def\NFL@date@or@rest##1{%
256 \NFL@if@dateS{##1}{##1}{%
257 \NFL@if@dateD{##1}{##1}{\NFL@no@date@version##1}%
258 }%
259 }%
```

`\NFL@if@dateS{⟨token-list⟩}{⟨yes⟩}{⟨no⟩}` ... slashes

```
260 \def\NFL@if@dateS##1{\NFL@slashes##1\NFL@xi xyzxyzxyz\@nil}%
```

`\NFL@slashes` checks that there are slashes at the expected places:

```
261 \def\NFL@slashes##1##2##3##4##5##6##7##8{%
262 \NFL@ifx@kbl##5/%
263 {\NFL@ifx@kbl##8/\NFL@ten@only\NFL@false}%
264 \NFL@false
```

This especially happens when `⟨token-list⟩` is empty. Digit candidates back:

```
265 {##1##2##3##4##6##7}}%
```

Since 2017-03-08 L<sup>A</sup>T<sub>E</sub>X accepts dates formatted as yyyy-mm-dd instead of yyyy/mm/dd. Currently both formats are valid. Therefore the nicefilelist package needs to also accept “-” (dash) instead of “/” (slash) as separator.

```

266 \def\NFL@if@dateD##1{\NFL@dashes##1\NFL@xi xyzxyzxyz\@nil}%
267 \def\NFL@dashes##1##2##3##4##5##6##7##8{%
268 \NFL@ifx@kbl##5-%
269 {\NFL@ifx@kbl##8-\NFL@ten@only\NFL@false}%
270 \NFL@false
271 {##1##2##3##4##6##7}}%

```

If the word is a date, we now have taken 6 of the 8 digits.

```
\NFL@ten@only{\<digits>}\<digit>\<digit>Q
```

takes the two remaining and then a thing that should be Q in the funny sense of Sec. 2.5.

```

272 \def\NFL@ten@only##1##2##3##4{%
273 \NFL@ifx@kbl\NFL@xi##4\NFL@digits\NFL@false

```

Finally checking digits:

```
274 ##1##2##3\@nnil}%
```

`\NFL@digits<token>` is a loop through single tokens:

```

275 \def\NFL@digits##1{%
276 \NFL@ifx@kbl##1\@nnil\NFL@true{%
277 \NFL@if@digit@code##1<0\NFL@false{%
278 \NFL@if@digit@code##1>9\NFL@false\NFL@digits
279 }%
280 }%
281 }%

```

```
\NFL@if@digit@code<char-1>\<relation>\<char-2>\<fits>\<bad>:
```

```

282 \def\NFL@if@digit@code##1##2##3{%
283 \ifnum'##1##2'##3 \expandafter \@firstoftwo
284 \else \expandafter \@secondoftwo \fi}%

```

`\NFL@false` skips further candidates and dummies and chooses *<no>*:

```
285 \def\NFL@false##1\@nil{\@secondoftwo}%
```

`\NFL@true` skips further candidates and dummies and chooses *<yes>*:

```
286 \def\NFL@true##1\@nil{\@firstoftwo}%
```

We don't support version without date, therefore run `\NFL@no@date@version` as soon as we find that the file info does not start with a date:

```

287 \def\NFL@no@date@version{%
288 \NFLnodate\NFLspaceII\NFLnoverion@\NFLspaceIII}%

```

`\NFLnversion@` adds filler to `\NFLnversion@`:

```
289 \def\nFLnversion@{%
290 \NFL@make@macro@arg\nFL@place@version\nFLnversion}%
```

`\NFL@maybe@three{<word-1>}{<rest>}` looks whether `<word-1>` is a date. If it is, it is written to screen, and then we look if `<rest>` contains a version id. Otherwise “`<word-1>_<rest>`” is considered a “caption” only.

```
291 \def\nFL@maybe@three##1##2{%
292 \NFL@if@dateS{##1}%
293     {##1\nFLspaceII
294     \NFL@space@split{##2}%
295     \NFL@maybe@version@rest
296     \NFL@version@or@rest}%
297 {\NFL@if@dateD{##1}%
298     {##1\nFLspaceII
299     \NFL@space@split{##2}%
300     \NFL@maybe@version@rest
301     \NFL@version@or@rest}%
302 {\NFL@no@date@version##1 ##2}}%
```

`\NFL@version@or@rest{<token-list>}`:

```
303 \def\nFL@version@or@rest##1{%
304 \NFL@if@version{##1}%
305     {\NFL@place@version{##1}}%
306     {\NFLnversion@\NFLspaceIII##1}}%
```

`\NFL@if@version{<token-list>}{<yes>}{<no>}`:

```
307 \def\nFL@if@version##1{\NFL@v@digit##1xy\nil}%
```

TO-DO: At applications you see how some tokens could be saved. On the other hand, the macros are more transparent in the present way.

`\NFL@v@digit{<t1>}{<t2>}{<rest>}` checks whether the first thing is a v and the second a digit—unless package option [r] was chosen. v0.4 uses `\edef` for choosing:

```
308 \edef\nFL@v@digit##1##2##3\nil{%
309 \noexpand\nFL@ifx@kbl##1v%
310 {\noexpand\nFL@digits##2\noexpand\nnil}}%
```

`\@listfiles` will either expand to the original `\NFL@false` or to a test on r:

```
311 \@listfiles
312 \noexpand\nil}%
313 \let\@listfiles\relax
```

`\NFL@place@version{<token-list>}` adds filler to version id:

```
314 \def\nFL@place@version##1{\MFlleftinfield{##1}{f-version}}%
```

```
\NFL@maybe@version@rest{\list-1}{\list-2}]:
```

```
315 \def\nfl@maybe@version@rest##1##2{%
316 \NFL@if@version{##1}%
317 \NFL@place@version{##1}\NFLspaceIII##2}%
318 {\NFLnversion@\NFLspaceIII##1 ##2}}%
319 }
```

## 2.7 Shorthand for myfilist

```
\MaxBaseEmptyList{\longest-name}[\read-again-files]
```

(v0.5) or

```
\MaxBaseEmptyList*[\read-again-files]
```

(v0.6) as described in Section 1.5.2:

```
320 \newcommand*\MaxBaseEmptyList{%
321 \@ifstar{\maxBaseEmptyList{abcdabcd}}\maxBaseEmptyList}
322 \newcommand*\maxBaseEmptyList[1]{%
323 \MFfieldtemplate{f-base}{#1}%
324 \RequirePackage{myfilist}\EmptyFileList}
```

So `\maxBaseEmptyList` is like former `\MaxBaseEmptyList` without expecting a star—available to users.

## 2.8 Leaving the Package File

```
325 \endinput
```

## 2.9 VERSION HISTORY

```
326 v0.1 2012/03/20 started
327      2012/03/22 almost ready
328      2012/03/23 debugging; \NFLspaceI etc.;
329      documentation completed
330 v0.2 2012/03/24 file info processed by \typeout - start
331      2012/03/25 trying, debugging
332      2012/03/26 continued; \NFL@place@version, \NFLnversion@;
333      works, reordered; another fix about Q -> \@empty
334      2012/03/27 undone the latter, explained; improved remarks on
335      \@listfiles
336      2012/03/29 alignment of title/stars with base<11
337 v0.30 2012/05/18f. \NFL@ifx@kbl in \NFL@return@space@split
338      2012/05/20 all \ifx reimplemented, old code kept
339      STORED INTERNALLY
340 v0.31 2012/05/20 removing old code - STORED INTERNALLY
341 v0.32 2012/05/20 removing \NFL@xpxpx; replacing \NFL@after@false
342      by \NFL@ifnum@kbl, keeping old code
343      STORED INTERNALLY
```

```

344 v0.33 2012/05/20 removing old code; added 3 %s
345         STORED INTERNALLY
346 v0.4  2012/05/20 option [r]
347 v0.5  2012/09/30 \MaxBaseEmptyList
348 v0.6  2012/10/03 \MaxBaseEmptyLists first arg. only optional
349         2012/10/11 ... bad with 2nd opt. arg., *
350 v0.7  2012/10/13 "updating" date in \Provides...!
351         2012/10/28 \HardWrap first try
352         2012/10/29 \HardWrap newline material -> [wrap]
353         sec:test below sec:opt, mentioning 'url'
354         2012/10/30 correcting \NFL@filerow without wrapping,
355         doc.: |...| in sec:opt
356 v0.7a 2012/12/12 doc. monospace -> monofill; archived at:
357         https://web.archive.org/web/20221205210517/
358         https://mirror.mwt.me/ctan/install/macros/
359         latex/contrib/nicefilelist.tds.zip
360 v0.8a 2022/12/05 Accepting also dashes instead of slashes in date
361         (one-time fix by H.-Martin Münch); archived at:
362         https://web.archive.org/web/20230106193203/
363         https://mirror.mwt.me/ctan/install/macros/
364         latex/contrib/nicefilelist.tds.zip
365 v0.9a 2023/01/08 now also regarding |ver@@| for version;
366         new option [autolength] (using .aux file)
367         (one-time fix by H.-Martin Münch)
368

```

### 3 Credits

1. It was MARTIN MÜNCH who pointed out the shortcomings of `longname-filelist` that the present package addresses—thanks!
2. For ALOIS KABELSCHACHT—whose idea in TUGboat 8 #2<sup>1</sup> is used for v0.3—cf. the `dowith` documentation.
3. Another idea from MARTIN MÜNCH: wrapping inside caption column. Implemented by UL with help of `hardwrap` as option `\wrap`.

### 4 Missing

The package once might provide `keyval`-style optional arguments for `\listfiles` or even call `\listfiles` automatically with `keyval` package options.

---

<sup>1</sup>“`\expandafter` vs. `\let` and `\def` in Conditionals and a Generalization of PLAIN’s `\loop`,” TUGboat Vol. 8 (1987), No. 2, pp. 184f. ([tug.org/TUGboat/tb08-2/tb18kabel.pdf](https://tug.org/TUGboat/tb08-2/tb18kabel.pdf))