The `svninfo` package

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Abstract

This package is used to extract the revision and file information provided by the *Subversion* revision control system (`http://subversion.tigris.org`).

1 Introduction

To maintain different versions of a document or to keep track on the development of one, the document is kept under a revision control system like *SCCS*, *CVS*, or *Subversion*. This package assumes you are using the *Subversion* system. To present the version information of a document, one needs to extract it from some kind of text inserted by the revision control system. *Subversion* offers therefore several keywords that are expanded by the *Subversion update* command. The most informative keyword is `$Id$` which contains a lot of useful information. This information is made available through this package. Additionally, the package allows one to extract also the information from the more specific keywords, e.g., `$Author$` or `$Date$`.

The information obtained from the expanded `$Id$` string are

- the filename,

- the revision number,

- the date and time of the last *Subversion co* command, and

- name of the user who has done this action.

For each of these items a macro is defined. When *updating* a file, the *Subversion* keywords should be contained in the *updated* source. Further, one has to set the *Subversion*property for keyword expansion of that file, e.g.

```
svn propset svn:keywords "Id" svninfo.dtx
```

See the *Subversion* documentation for more details.

If you want to read about the implementation, put a % before `\Only-Description` in the code marked with `<*driver>` in the file `svninfo.dtx`.

2 User Interface

2.1 Options

Options for this package are:

today Set the date of \svnToday to the date obtained by the *Subversion* information. If the Id string is not expanded (see below), the current date is used.

notoday Don't use the *Subversion* date for \svnToday.

revrange For multi-file documents, display minimum and maximum revision. Every file of the document must either include a \svnInfo or a \svnKeyword $Revision:$ statement. This is information needs two runs of LaTeX to be correct.

fancyhdr We use the fancyhdr package to fill the footline with *Subversion* information: filename, revision-number and date.

> If the fancyhdr package is not already loaded, it will be loaded by this package. To use the footnotes, put something like:
>  ```
>  \pagestyle{fancyplain}
>  \fancyhead[RE,LO]{\leftmark}
>  \fancyhead[LE,RO]{\thepage}
>  ```
> in the preamble.

nofancy We don't define the footline. The fancyhdr package is not loaded.

scrpage2 Use scrpage2 instead of fancyhdr.

eso-foot Use eso-pic for showing a tiny info line at the bottom line of the paper.

long If used together with fancy / fancyhdr the date string is printed in the long format as \svnToday returns it. If fancy / fancyhdr is not used, nothing.

short If used together with fancy / fancyhdr the date string is printed in the short format *YYYY-MM-DD*. If fancy / fancyhdr is not used, nothing.

final Don't define the footline. If you want the *Subversion* in the final document, please use
\usepackage{draft}

draft If nofancy is not used, show a footline with *Subversion* information.

If the babel package is used, the \svnToday string is language dependent.

The default options are: *draft,today,long*. You may also configure the default fancy heading packages in the configuration file svninfo.cfg.

2.2 Commands

2.2.1 Defining the *Subversion* Id information

\svnInfo There is only one macro to define the information: \svnInfo. Since it must collaborate with *Subversion* it has an "unusual" calling sequence: The arguments are prefaced with a '$' and completed with a '$␣' (note the final space or carriage return). The following arguments are valid:

\svnInfo␣Id␣

\svnInfo␣$Id:$␣

\svnInfo␣$Id:␣*file*␣*rev*␣*YYYY-MM-DD*␣*hh:mm:ss*␣*owner*␣$␣

In the first two forms, *Subversion* has not expanded the Id string. This form will usually be used before the file is *checked in* the first time.

YYYY-MM-DD is a date, *hh:mm:ss* a time. Note: when you perform the *Subversion check out* command, the Id string is expanded by *Subversion* automatically.

To take effect, \svnInfo must follow the \begin{document}. If you are using multiple files for a document, you could place \svnInfo at the beginning of each file, so the information from the current file is obtained.

2.2.2 Accessing the *Subversion* Id information

There are the following macros to access the information provided by *Subversion*. If *Subversion* has not expanded the Id string, or no \svnInfo command is given, default values are returned.

\svnInfoFile
- The name of the source file. Default: --sourcefile--.

\svnInfoRevision
- The revision number, of the *checked out* file. Default: --revision--.

\svnInfoMinRevision
- The minimum revision number of multi-file documents. Every file of the document must either include a \svnInfo or a \svnKeyword $Revision:$ statement. This is information needs two runs of LaTeX to be correct. of LaTeX to be correct. Default: --minrevision--.

\svnInfoMaxRevision
- The maximum revision number of multi-file documents. Every file of the document must either include a \svnInfo or a \svnKeyword $Revision:$ statement. This is information needs two runs of LaTeX to be correct. Default: --maxrevision--.

\svnInfoDate
- The date in the form *YYYY-MM-DD*, when the file was *checked out*. Default: the current date.

\svnInfoTime
- The time, when the file was *checked out*. Default: --time--.

\svnInfoOwner
- The user name of the file owner. Default: --owner--.

\svnInfoYear
- The year *YYYY* of \svnInfoDate. Default: the current year.

\svnInfoMonth
- The month *MM* of \svnInfoDate. Default: the current month.

\svnInfoDay	• The day *DD* of \svnInfoDate. Default: the current day.
\svnInfoLongDate	• The date in the form of \today when the file was *checked out.* This is language depended. Default: the current date.
\svnId	• Mimics the behavior of the Id strings, i.e. it prints a string with a summary of the above described information.
\svnToday	• The date obtained from the *Subversion* information in the format \today is using.

3 Examples

\svnInfo not expanded, no colon
\svnInfo Id

\svnInfoFile	–sourcefile–	\svnInfoYear	2006
\svnInfoRevision	–revision–	\svnInfoMonth	5
\svnInfoMinRevision	12	\svnInfoDay	11
\svnInfoMaxRevision	1168	\svnInfoLongDate	May 11, 2006
\svnInfoDate	2006-05-11	\svnToday	May 11, 2006
\svnInfoTime	–time–		
\svnInfoOwner	–owner–		

\svnId –sourcefile– –revision– –time– –owner–

\svnInfo not expanded, having colon
\svnInfo $Id:$

\svnInfoFile	–sourcefile–	\svnInfoYear	2006
\svnInfoRevision	–revision–	\svnInfoMonth	5
\svnInfoMinRevision	12	\svnInfoDay	11
\svnInfoMaxRevision	1168	\svnInfoLongDate	May 11, 2006
\svnInfoDate	2006-05-11	\svnToday	May 11, 2006
\svnInfoTime	–time–		
\svnInfoOwner	–owner–		

\svnId –sourcefile– –revision– –time– –owner–

\svnInfo standard version
\svnInfo $Id: svninfo.dtx 1168 2005-04-08 06:18:47Z brucker $

\svnInfoFile	svninfo.dtx	\svnInfoYear	2005
\svnInfoRevision	1168	\svnInfoMonth	4
\svnInfoMinRevision	12	\svnInfoDay	8
\svnInfoMaxRevision	1168	\svnInfoLongDate	April 8, 2005
\svnInfoDate	2005-04-08	\svnToday	April 8, 2005
\svnInfoTime	06:18:47Z		
\svnInfoOwner	brucker		

\svnId svninfo.dtx 1168 2005-04-08 06:18:47Z brucker

\svnInfo standard version without owner

\svnInfo $Id: svninfo.dtx 1168 2005-04-08 06:18:47Z $

\svnInfoFile	svninfo.dtx	\svnInfoYear	2005
\svnInfoRevision	1168	\svnInfoMonth	4
\svnInfoMinRevision	12	\svnInfoDay	8
\svnInfoMaxRevision	1168	\svnInfoLongDate	April 8, 2005
\svnInfoDate	2005-04-08	\svnToday	April 8, 2005
\svnInfoTime	06:18:47Z		
\svnInfoOwner			

\svnId svninfo.dtx 1168 2005-04-08 06:18:47Z

\svnInfo standard version with
in the owner

\svnInfo $Id: svninfo.dtx 1168 2005-04-08 06:18:47Z brucker $

\svnInfoFile	svninfo.dtx	\svnInfoYear	2005
\svnInfoRevision	1168	\svnInfoMonth	4
\svnInfoMinRevision	12	\svnInfoDay	8
\svnInfoMaxRevision	1168	\svnInfoLongDate	April 8, 2005
\svnInfoDate	2005-04-08	\svnToday	April 8, 2005
\svnInfoTime	06:18:47Z		
\svnInfoOwner	infsec"brucker		

\svnId svninfo.dtx 1168 2005-04-08 06:18:47Z infsec"brucker

\svnInfo no leading $

\svnInfo Id: svninfo.dtx 12 2002-04-19 12:27:55 brucker $

\svnInfoFile	svninfo.dtx	\svnInfoYear	2002
\svnInfoRevision	12	\svnInfoMonth	4
\svnInfoMinRevision	12	\svnInfoDay	19
\svnInfoMaxRevision	1168	\svnInfoLongDate	April 19, 2002
\svnInfoDate	2002-04-19	\svnToday	April 19, 2002
\svnInfoTime	12:27:55		
\svnInfoOwner	brucker		

\svnId svninfo.dtx 12 2002-04-19 12:27:55 brucker

4 The generic *Subversion* keyword interface

In addition to the already presented \svnInfo macro which is specially built for analyzing the *Subversion* Id information we also provide a generic interface

\svnKeyword via \svnKeyword. This interface can be used to extract information from the remaining keywords:

- $Date$: The date of the last commit with changes. This information can also be accessed using the keyword $LastChangedDate$.

- `$Revision$`: The revision of the last commit with changes. This information can also be accessed using the keyword `$LastChangedRevision$` or `$Rev$`.

- `$Author$`: The author of the last commit with changes. This information can also be accessed using the keyword `$LastChangeBy$`.

- `$HeadURL$`: The the full URL to the latest version of the file in the repository. This information can also be accessed using the keyword `$URL$`.

These keywords can be accessed using the `\svnKeyword` macro. This macro accepts a single argument that should be of the form $\$\langle Keyword\rangle\$$ (unexpanded) or $\$\langle Keyword\rangle:_{\sqcup}\langle value\rangle_{\sqcup}\$$ (expanded), e.g.:

```
\svnKeyword $Author: brucker $
```

The `\svnKeyword` updates the corresponding *Subversion* Id information, e.g., our example updates `\svnInfoOwner`. In more detail:

\svnInfoDate
\svnInfoMonth
\svnInfoTime
\svnInfoRevision
\svnInfoOwner
\svnInfoHeadURL

- `\svnKeyword $Date:$` updates the date and time informations, e.g., `\svnInfoDate`, `\svnInfoMonth`, or `\svnInfoTime`.

- `\svnKeyword $Revision:$` updates `\svnInfoRevision`.

- `\svnKeyword $Author:$` updates `\svnInfoOwner`.

- `\svnKeyword $HeadURL:$` updates `\svnInfoHeadURL`.

Note, the parser used by `\svnKeyword` is not that powerful than the one used by `\svnInfo`. Thus it is advisable to use `\svnKeywordId` for the `$Id$` keyword and `\svnKeyword` only for the keywords described in this section.

Further, the `\svnKeyword` macro does not reset all keyword definitions globally, i.e., you can combine the `$Revision$` of one file, with the `$Author$` of another file. Please take care of that!

5   Acknowledgements

This package is based on `rcsinfo` from Dr. Jürgen Vollmer. The `rcsinfo` package is distributed via the CTAN archives ('`macros/latex/contrib/rcsinfo`').

The code for parsing generic *Subversion* keywords was taken from the `svn` packages written by Richard Lewis. The `svn` package is distributed via the CTAN archives ('`macros/latex/contrib/svn`').

Further I want to thank all the people that reported bugs and ideas for improvements, often including patches: Michael Niedermair, Heiko Oberdiek, Bernd Raichle, Jörg Sommer, Arnout Standaert, Thomas Weber, and Uwe Ziegenhagen.

6 Copyright and License

Change History

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Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.