

The `svninfo` package

Achim D. Brucker

brucker@member.fsf.org

<http://www.brucker.ch/>

March 23, 2010

Version 0.7.4

Abstract

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

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*, *Subversion*, or *svk*. This package assumes you are using either the *Subversion* or the *svk* system. To present the version information of a document, one needs to extract it from somewhere. For example, *svk* and *Subversion* offer several keywords that are expanded by the *Subversion* and *svk update* commands.¹ The most informative keyword is `$Id: svninfo.dtx 4705 2010-03-23 19:57:29Z brucker $` which contains a lot of useful information. This information is made available through this package. Additionally, the package allows one to extract also the information from the more specific keywords, e.g., `$Author$` or `$Date$`.

In this documentation we use *Subversion* in the examples; but the results should be similar if you are using *svk*. Note that you have to use the `svk` option if you use *svk*.

Moreover, one has to set the *Subversion* property for keywords expansion of that file, e.g., by executing:

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

Please consult the manual of *Subversion* (e.g., *h*) or *svk* for further details about keyword expansion.

The information obtained from the expanded `Id` string are

¹The expansion of keywords has to be enabled manually, e.g., `svn propset svn:keywords "Id" svninfo.dtx`.

- 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:

svk Use `svk` for parsing the Id information generated by *svk*.

today Set the date of `\today` 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 `\today`.

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 L^AT_EX 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.

scrpage Use `scrpage2` instead of `fancyhdr`.

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

margin Use `margin` for showing the version info in the margin area.

long If used together with `fancy / fancyhdr` the date string is printed in the long format as `\today` 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:

`\svnInfoId`

`\svnInfo$Id:$`

`\svnInfo$Id:$filerevYYYY-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--`.

| | |
|----------------------------------|--|
| <code>\svnInfoRevision</code> | • The revision number, of the <i>checked out</i> file. Default: <code>--revision--</code> . |
| <code>\svnInfoMinRevision</code> | • The minimum revision number of multi-file documents. Every file of the document must either include a <code>\svnInfo</code> or a <code>\svnKeyword \$Revision:\$</code> statement. This is information needs two runs of <code>L^AT_EX</code> to be correct. Default: <code>--minrevision--</code> . |
| <code>\svnInfoMaxRevision</code> | • The maximum revision number of multi-file documents. Every file of the document must either include a <code>\svnInfo</code> or a <code>\svnKeyword \$Revision:\$</code> statement. This is information needs two runs of <code>L^AT_EX</code> to be correct. Default: <code>--maxrevision--</code> . |
| <code>\svnInfoDate</code> | • The date in the form <code>YYYY-MM-DD</code> , when the file was <i>checked out</i> . Default: the current date. |
| <code>\svnInfoTime</code> | • The time, when the file was <i>checked out</i> . Default: <code>--time--</code> . |
| <code>\svnInfoOwner</code> | • The user name of the file owner. Default: <code>--owner--</code> . |
| <code>\svnInfoYear</code> | • The year <code>YYYY</code> of <code>\svnInfoDate</code> . Default: the current year. |
| <code>\svnInfoMonth</code> | • The month <code>MM</code> of <code>\svnInfoDate</code> . Default: the current month. |
| <code>\svnInfoDay</code> | • The day <code>DD</code> of <code>\svnInfoDate</code> . Default: the current day. |
| <code>\svnInfoLongDate</code> | • The date in the form of <code>\today</code> when the file was <i>checked out</i> . This is language depended. Default: the current date. |
| <code>\svnId</code> | • Mimics the behavior of the <code>\$Id\$</code> strings, i.e. it prints a string with a summary of the above described information. |
| <code>\svnToday</code> | • The date obtained from the <i>Subversion</i> information in the format <code>\today</code> is using. |
| <code>\svnInfoMaxToday</code> | • The date obtained from the latest <i>Subversion</i> revision in the format <code>\today</code> is using. |

3 Examples

`\svnInfo` not expanded, no colon

`\svnInfo Id`

| | | | |
|----------------------------------|-------------|-------------------------------|----------------|
| <code>\svnInfoFile</code> | svninfo.dtx | <code>\svnInfoYear</code> | 2010 |
| <code>\svnInfoRevision</code> | 4705 | <code>\svnInfoMonth</code> | 3 |
| <code>\svnInfoMinRevision</code> | 12 | <code>\svnInfoDay</code> | 23 |
| <code>\svnInfoMaxRevision</code> | 4705 | <code>\svnInfoLongDate</code> | March 23, 2010 |
| <code>\svnInfoDate</code> | 2010-03-23 | <code>\svnToday</code> | March 23, 2010 |
| <code>\svnInfoTime</code> | 19:57:29Z | <code>\svnInfoMaxYear</code> | 2010 |
| <code>\svnInfoOwner</code> | brucker | <code>\svnInfoMaxDay</code> | 23 |
| | | <code>\svnInfoMaxMonth</code> | 03 |
| | | <code>\svnInfoMaxToday</code> | March 23, 2010 |

`\svnId svninfo.dtx 4705 2010-03-23 19:57:29Z brucker`

```

\svnInfo not expanded, having colon
\svnInfo $Id:$
    \svnInfoFile    svninfo.dtx      \svnInfoYear    2010
    \svnInfoRevision 4705            \svnInfoMonth    3
    \svnInfoMinRevision 12            \svnInfoDay      23
    \svnInfoMaxRevision 4705          \svnInfoLongDate March 23, 2010
    \svnInfoDate      2010-03-23      \svnToday        March 23, 2010
    \svnInfoTime       19:57:29Z      \svnInfoMaxYear   2010
    \svnInfoOwner      brucker         \svnInfoMaxDay    23
                                         \svnInfoMaxMonth   03
                                         \svnInfoMaxToday   March 23, 2010
\svnId svninfo.dtx 4705 2010-03-23 19:57:29Z brucker

```

```

\svnInfo standard version
\svnInfo $Id: svninfo.dtx 4705 2010-03-23 19:57:29Z brucker $
    \svnInfoFile    svninfo.dtx      \svnInfoYear    2010
    \svnInfoRevision 4705            \svnInfoMonth    3
    \svnInfoMinRevision 12            \svnInfoDay      23
    \svnInfoMaxRevision 4705          \svnInfoLongDate March 23, 2010
    \svnInfoDate      2010-03-23      \svnToday        March 23, 2010
    \svnInfoTime       19:57:29Z      \svnInfoMaxYear   2010
    \svnInfoOwner      brucker         \svnInfoMaxDay    23
                                         \svnInfoMaxMonth   03
                                         \svnInfoMaxToday   March 23, 2010
\svnId svninfo.dtx 4705 2010-03-23 19:57:29Z brucker

```

```

\svnInfo standard version without owner
\svnInfo $Id: svninfo.dtx 4705 2010-03-23 19:57:29Z brucker $
    \svnInfoFile    svninfo.dtx      \svnInfoYear    2010
    \svnInfoRevision 4705            \svnInfoMonth    3
    \svnInfoMinRevision 12            \svnInfoDay      23
    \svnInfoMaxRevision 4705          \svnInfoLongDate March 23, 2010
    \svnInfoDate      2010-03-23      \svnToday        March 23, 2010
    \svnInfoTime       19:57:29Z      \svnInfoMaxYear   2010
    \svnInfoOwner      brucker         \svnInfoMaxDay    23
                                         \svnInfoMaxMonth   03
                                         \svnInfoMaxToday   March 23, 2010
\svnId svninfo.dtx 4705 2010-03-23 19:57:29Z brucker

```

```

\svnInfo standard version with
in the owner
\svnInfo $Id: svninfo.dtx 4705 2010-03-23 19:57:29Z brucker $

```

```

\svnInfoFile    svninfo.dtx      \svnInfoYear    2010
\svnInfoRevision 4705            \svnInfoMonth    3
\svnInfoMinRevision 12          \svnInfoDay      23
\svnInfoMaxRevision 4705        \svnInfoLongDate March 23, 2010
\svnInfoDate      2010-03-23    \svnToday        March 23, 2010
\svnInfoTime       19:57:29Z    \svnInfoMaxYear  2010
\svnInfoOwner      brucker      \svnInfoMaxDay   23
                                   \svnInfoMaxMonth  03
                                   \svnInfoMaxToday  March 23, 2010
\svnId svninfo.dtx 4705 2010-03-23 19:57:29Z 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 4705        \svnInfoLongDate April 19, 2002
\svnInfoDate      2002-04-19    \svnToday        April 19, 2002
\svnInfoTime       12:27:55    \svnInfoMaxYear  2010
\svnInfoOwner      brucker      \svnInfoMaxDay   23
                                   \svnInfoMaxMonth  03
                                   \svnInfoMaxToday  March 23, 2010
\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: svninfo.dtx 4705 2010-03-23 19:57:29Z brucker $` information we also provide a generic interface 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 `$\langle Keyword \rangle: \langle value \rangle$` (expanded), e.g.:

`\svnKeyword $Author: brucker $`

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

- | | |
|-------------------------------|---|
| <code>\svnInfoDate</code> | • <code>\svnKeyword \$Date:\$</code> updates the date and time information, e.g., <code>\svnInfoDate</code> , <code>\svnInfoMonth</code> , or <code>\svnInfoTime</code> . |
| <code>\svnInfoMonth</code> | • <code>\svnKeyword \$Revision:\$</code> updates <code>\svnInfoRevision</code> . |
| <code>\svnInfoTime</code> | • <code>\svnKeyword \$Author:\$</code> updates <code>\svnInfoOwner</code> . |
| <code>\svnInfoRevision</code> | • <code>\svnKeyword \$HeadURL:\$</code> updates <code>\svnInfoHeadURL</code> . |
| <code>\svnInfoOwner</code> | |
| <code>\svnInfoHeadURL</code> | |

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: svninfo.dtx 4705 2010-03-23 19:57:29Z brucker $` 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 Acknowledgments

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: Andreas Haller, Benjamin Hiller, Christophe Jacquet, Dries Kimpe, Jami Lawrence, Henning Lenz, Stefan Mann, Nigel Metherringham, Igor Nikolic, Michael Niedermair, Heiko Oberdiek, Oliver Pons, Bernd Raichle, Krzysztof Retel, Jörg, Sommer, Arnout Standaert, Daniel Trümper, Thomas Weber, and Uwe Ziegenhagen.

6 Copyright and License

Copyright (©) 1995 Dr. Jürgen Vollmer

Copyright (©) 2003–2010 Achim D. Brucker brucker@member.fsf.org

This program can be redistributed and/or modified under the terms of the L^AT_EX Project Public License Distributed from CTAN archives in directory `'macros/latex/base/lppl.txt'`; either version 1 of the License, or any later version.

Change History

| | | |
|--------|---|--|
| v0.1 | General: Initial version, mainly a modified version of the <code>rcsinfo</code> package. 1 | Also added support for <code>\</code> in keywords. 1 |
| v0.2 | General: Removed <code>L^AT_EX2HTML</code> build-dependency. 1 | v0.7 |
| v0.2.1 | General: Added <code>svnId</code> 1 | General: Added option <code>margin</code> for showing version info in the margins of the document; added option <code>svk</code> for supporting the keyword expansion of <code>svk</code> ; added command <code>svnMaxToday</code> ; and fixed the use of <code>fancyhdr</code> for single-sided documents. 1 |
| v0.3 | General: Added support for <code>\$Id:\$</code> keywords without owner information. 1 | v0.7.1 |
| v0.4 | General: Added new package options <code>draft</code> , <code>final</code> , <code>eso-foot</code> , and <code>scrpage</code> . Fixed problem with ‘_’ in file names. 1 | General: Fixed <code>svnMaxToday</code> and introduced <code>svnInfoMaxToday</code> as an alternative name. Improved documentation 1 |
| v0.5 | General: Removed support for <code>L^AT_EX2HTML</code> (it is non-free software and also seems to be unmaintained) and added new command <code>svnKeyword</code> for defining arbitrary svn keywords (e.g. <code>Author</code> :). 1 | v0.7.2 |
| v0.6 | General: Added <code>svnInfoMinRevision</code> and <code>svnInfoMaxRevision</code> together with the option <code>revrange</code> 1 | General: Fixed documentation: the option for using the <code>scrpage2</code> package is called <code>scrpage</code> . Fixed support for <code>svk</code> 1 |
| | | v0.7.3 |
| | | General: Fixed bug resulting in wrong date for maximal revision 1 |
| | | v0.7.4 |
| | | General: Fixed localization of date formats, e.g., <code>svnToday</code> 1 |

Index

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.

| | |
|-------------------------------------|---|
| S | <code>\svnInfoFile</code> 3 |
| <code>\svnId</code> 4 | <code>\svnInfoHeadURL</code> 7 |
| <code>\svnInfo</code> 3 | <code>\svnInfoLongDate</code> 4 |
| <code>\svnInfoDate</code> 4, 7 | <code>\svnInfoMaxRevision</code> 4 |
| <code>\svnInfoDay</code> 4 | <code>\svnInfoMaxToday</code> 4 |

| | | | |
|---------------------------|------|--------------------|------|
| \svnInfoMinRevision | 4 | \svnInfoTime | 4, 7 |
| \svnInfoMonth | 4, 7 | \svnInfoYear | 4 |
| \svnInfoOwner | 4, 7 | \svnKeyword | 6 |
| \svnInfoRevision | 4, 7 | \svnToday | 4 |