The `svninfo` package

Achim D. Brucker
brucker@freiburg.linux.de
http://www.brucker.ch/

August 9, 2008
Version 0.7.3

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 `$Id$` 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

[1] The 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 `\OnlyDescription` 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 `\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.

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 `\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. 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.

`\svnInfoMaxToday` • The date obtained from the latest *Subversion* revision in the format `\today` is using.

3 Examples

`\svnInfo` not expanded, no colon

`\svnInfo $Id$`

`\svnInfoFile`	–sourcefile–	`\svnInfoYear`	2008
`\svnInfoRevision`	–revision–	`\svnInfoMonth`	8
`\svnInfoMinRevision`	12	`\svnInfoDay`	10
`\svnInfoMaxRevision`	1168	`\svnInfoLongDate`	August 10, 2008
`\svnInfoDate`	2008-08-10	`\svnToday`	August 10, 2008
`\svnInfoTime`	–time–	`\svnInfoMaxYear`	2005
`\svnInfoOwner`	–owner–	`\svnInfoMaxDay`	08
		`\svnInfoMaxMonth`	04
		`\svnInfoMaxToday`	April 8, 2005

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

`\svnInfo` not expanded, having colon

```
\svnInfo $Id:$
```

`\svnInfoFile`	–sourcefile–	`\svnInfoYear`	2008
`\svnInfoRevision`	–revision–	`\svnInfoMonth`	8
`\svnInfoMinRevision`	12	`\svnInfoDay`	10
`\svnInfoMaxRevision`	1168	`\svnInfoLongDate`	August 10, 2008
`\svnInfoDate`	2008-08-10	`\svnToday`	August 10, 2008
`\svnInfoTime`	–time–	`\svnInfoMaxYear`	2005
`\svnInfoOwner`	–owner–	`\svnInfoMaxDay`	08
		`\svnInfoMaxMonth`	04
		`\svnInfoMaxToday`	April 8, 2005

`\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	`\svnInfoMaxYear`	2005
`\svnInfoOwner`	brucker	`\svnInfoMaxDay`	08
		`\svnInfoMaxMonth`	04
		`\svnInfoMaxToday`	April 8, 2005

`\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	`\svnInfoMaxYear`	2005
`\svnInfoOwner`		`\svnInfoMaxDay`	08
		`\svnInfoMaxMonth`	04
		`\svnInfoMaxToday`	April 8, 2005

`\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	\svnInfoMaxYear	2005
\svnInfoOwner	infsec“brucker	\svnInfoMaxDay	08
		\svnInfoMaxMonth	04
		\svnInfoMaxToday	April 8, 2005

\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	\svnInfoMaxYear	2005
\svnInfoOwner	brucker	\svnInfoMaxDay	08
		\svnInfoMaxMonth	04
		\svnInfoMaxToday	April 8, 2005

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

\svnKeyword

- $Date$: 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 $⟨*Keyword*⟩$ (unexpanded) or $⟨*Keyword*⟩:␣⟨*value*⟩␣$ (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 information, 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 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 Metheringham, Igor Nikolic, Michael Niedermair, Heiko Oberdiek, 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 (©) 2003–2008 Achim D. Brucker `brucker@freiburg.linux.de`
This program can be redistributed and/or modified under the terms of the LaTeX 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 `rcsinfo` package. 1
v0.2
General: Removed LaTeX2HTML build-dependency. 1
v0.2.1
General: Added `svnId`. 1
v0.3
General: Added support for `$Id:$` keywords without owner information. 1
v0.4
General: Added new package options `draft`, `final`, `eso-foot`, and `scrpage`. Fixed problem with '_' in file names. 1
v0.5
General: Removed support for LaTeX2HTML (it is non-free software and also seems to be unmaintained) and added new command `svnKeyword` for defining arbitrary svn keywords (e.g. *Author* :). 1
v0.6
General: Added `svnInfoMinRevision` and `svnInfoMaxRevision` together with the option `revrange`. Also added support for \ in keywords. 1
v0.7
General: Added option `margin` for showing version info in the margins of the document; added option `svk` for supporting the keyword expansion of svk; added command `svnMaxToday`; and fixed the use of `fancyhdr` for single-sided documents. 1
v0.7.1
General: Fixed `svnMaxToday` and introduced `svnInfoMaxToday` as an alternative name. Improved documentation 1
v0.7.2
General: Fixed documentation: the option for using the `scrpage2` package is called `scrpage`. Fixed support for `svk`. 1
v0.7.3
General: Fixed bug resulting in wrong date for maximal revision 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

`\svnId` *4*
`\svnInfo` *3*
`\svnInfoDate` *4*, *7*
`\svnInfoDay` *4*
`\svnInfoFile` *3*
`\svnInfoHeadURL` *7*
`\svnInfoLongDate` *4*
`\svnInfoMaxRevision` *4*
`\svnInfoMaxToday` *4*
`\svnInfoMinRevision` *4*
`\svnInfoMonth` *4*, *7*
`\svnInfoOwner` *4*, *7*
`\svnInfoRevision` *4*, *7*

\svnInfoTime 4, 7
\svnInfoYear 4
\svnKeyword 6
\svnToday 4