## The svninfo package

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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.<sup>1</sup> 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

<sup>&</sup>lt;sup>1</sup>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 \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 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,L0]{\leftmark}
\fancyhead[LE,R0]{\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}

(apphenage (arar t)

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\_YYY-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 <i>checked out</i> 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 <i>YYYY-MM-DD</i> , when the file was <i>checked out</i> . Default: the current date.
\svnInfoTime	• The time, when the file was <i>checked out</i> . Default:time
\svnInfoOwner	• The user name of the file owner. Default:owner
\svnInfoYear	• The year <i>YYYY</i> of \svnInfoDate. Default: the current year.
\svnInfoMonth	• The month $MM$ of <b>\svnInfoDate</b> . Default: the current month.
\svnInfoDay	• The day <i>DD</i> of \svnInfoDate. Default: the current day.
\svnInfoLongDate	• The date in the form of <b>\today</b> when the file was <i>checked out</i> . This is language depended. Default: the current date.
\svnId	• Mimics the behavior of the <b>\$Id\$</b> strings, i.e. it prints a string with a summary of the above described information.
\svnToday	• The date obtained from the <i>Subversion</i> information in the format <b>\today</b> is using.
\svnInfoMaxToday	• The date obtained from the latest <i>Subversion</i> revision in the format <b>\today</b> is using.

# 3 Examples

\svnInfo not expanded, no colon				
\svnInfo \$Id\$				
$\svnInfoFile$	$\operatorname{svninfo.dtx}$	$\svnInfoYear$	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 not expanded, having colon
\svnInfo $Id:$
                                                         2010
        \svnInfoFile
                        svninfo.dtx
                                          \svnInfoYear
    \svnInfoRevision
                        4705
                                         \svnInfoMonth
                                                         3
 \svnInfoMinRevision
                        12
                                           \svnInfoDay
                                                         23
 \svnInfoMaxRevision
                        4705
                                     \svnInfoLongDate
                                                         March 23, 2010
                        2010-03-23
        \svnInfoDate
                                             \svnToday
                                                         March 23, 2010
                        19:57:29Z
                                      \svnInfoMaxYear
         \svnInfoTime
                                                         2010
       \svnInfoOwner
                                        \svnInfoMaxDay
                                                         23
                        brucker
                                     \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
                                         \svnInfoMonth
    \svnInfoRevision
                        4705
                                                         3
 \svnInfoMinRevision
                                                         23
                        12
                                           \svnInfoDay
 \svnInfoMaxRevision
                        4705
                                     \svnInfoLongDate
                                                         March 23, 2010
         \svnInfoDate
                        2010-03-23
                                             \svnToday
                                                         March 23, 2010
         \svnInfoTime
                        19:57:29Z
                                       \svnInfoMaxYear
                                                         2010
                                                         23
       \svnInfoOwner
                        brucker
                                        \svnInfoMaxDay
                                                         03
                                     \svnInfoMaxMonth
                                     \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
                                     \svnInfoLongDate
                                                         March 23, 2010
                        4705
                        2010-03-23
                                                         March 23, 2010
         \svnInfoDate
                                             \svnToday
                        19:57:29Z
                                       \svnInfoMaxYear
                                                         2010
         \svnInfoTime
                                                         23
        \svnInfoOwner
                        brucker
                                        \svnInfoMaxDay
                                     \svnInfoMaxMonth
                                                         03
                                     \svnInfoMaxToday
                                                         March 23, 2010
\svnId svninfo.dtx 4705 2010-03-23 19:57:29Z brucker
   \svnInfo standard version with
```

\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 2	2010-03-23 19:	57:29Z brucker	
	<u>_</u>		
\svnInfo no leading \$	5		
\svnInfo Id: svninfo.dtx 12	2 2002-04-19 12	2:27:55 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
		(b thin on an ion on	00

\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  $\langle Keyword \rangle$ :  $\langle value \rangle_{\sqcup}$  (expanded), e.g.:

\svnKeyword

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

- \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: 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 Metheringham, 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

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

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

# Change History

v0.1 General: Initial version, mainly a modified version of the	Also added support for $\setminus$ in keywords 1 v0.7
rcsinfo package 1 v0.2 General: Removed LATEX2HTML build-dependency 1 v0.2.1 General: Added svnId 1 v0.3	General: Added option margin for showing version info in the margins of the document; added option svk for support- ing the keyword expansion of svk; added command svnMaxToday; and fixed the use of fancyhdr for single-
General: Added support for <b>\$Id:\$</b> keywords without owner infor-	sided documents 1
<ul> <li>keywords without owner information.</li> <li>w0.4</li> <li>General: Added new package options draft, final, eso-foot, and scrpage. Fixed problem with '_' in file names.</li> <li>v0.5</li> <li>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 :).</li> <li>v0.6</li> </ul>	<ul> <li>v0.7.1 <ul> <li>General: Fixed</li> <li>svnMaxToday and introduced</li> <li>svnInfoMaxToday as an alternative name. Improved documentation</li> <li>v0.7.2</li> <li>General: Fixed documentation:</li> <li>the option for using the scrpage2 package is called</li> <li>scrpage. Fixed support for svk.</li> <li>v0.7.3</li> <li>General: Fixed bug resulting in wrong date for maximal revision</li> <li>sion</li> </ul></li></ul>
General: Added svnInfoMinRevision and svnInfoMaxRevision together with the option revrange.	v0.7.4 General: Fixed localization of date formats, e.g., svnToday 1

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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.

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