

svn—Subversion Command-Line Client

svn is the official command-line client of Subversion. It offers no small number of subcommands and options. Subcommands and other non-option arguments must appear in a specified order on the command line used to invoke *svn*. Options, on the other hand, may appear anywhere on the command line (after the program name, of course), and in general, their order is irrelevant. For example, all of the following are valid ways to use *svn status*, and are interpreted in exactly the same way:

```
$ svn -vq status myfile
$ svn status -v -q myfile
$ svn -q status -v myfile
$ svn status -vq myfile
$ svn status myfile -qv
```

svn Options

While Subversion has different options for its subcommands, all options exist in a single namespace—that is, each option is guaranteed to mean the same thing regardless of the subcommand you use it with. For example, `--verbose` (`-v`) always means “verbose output,” regardless of the subcommand you use it with.

The *svn* command-line client usually exits quickly with an error if you pass it an option which does not apply to the specified subcommand. But as of Subversion 1.5, several of the options which apply to all—or nearly all—of the subcommands have been deemed acceptable by all subcommands, even if they have no effect on some of them. They appear grouped together in the command-line client's usage messages as global options. This was done to assist folks who write scripts which wrap the command-line client. These global options are as follows:

`--config-dir DIR`

Instructs Subversion to read configuration information from the specified directory instead of the default location (*.subversion* in the user's home directory).

`--config-option FILE:SECTION:OPTION=[VALUE]`

Sets, for the duration of the command, the value of a runtime configuration option. *FILE* and *SECTION* are the runtime configuration file (either *config* or *servers*) and the section thereof, respectively, which contain the option whose value you wish to change. *OPTION* is, of course, the option itself, and *VALUE* the value (if any) you wish to assign to the option. For example, to temporarily disable the use of the automatic property setting feature, use `--config-option=config:miscellany:enable-auto-props=no`. You can use this option multiple times to change multiple option values simultaneously.

`--no-auth-cache`

Prevents caching of authentication information (e.g., username and password) in the Subversion runtime configuration directories.

`--non-interactive`

Disables all interactive prompting. Some examples of interactive prompting include requests for authentication credentials and conflict resolution decisions. This is useful if you're running Subversion inside an automated script and it's more appropriate to have Subversion fail than to prompt for more information.

`--password PASSWD`

Specifies the password to use when authenticating against a Subversion server. If not provided, or if incorrect, Subversion will prompt you for this information as needed.

`--trust-server-cert`

When used with `--non-interactive`, instructs Subversion to accept SSL server certificates issued by unknown certificate authorities without first prompting the user. For security's sake, you should use this option only when the integrity of the remote server and the network path between it and your client is known to be trustworthy.

`--username NAME`

Specifies the username to use when authenticating against a Subversion server. If not provided, or if incorrect, Subversion will prompt you for this information as needed.

The rest of the options apply and are accepted by only a subset of the subcommand. They are as follows:

`--accept ACTION`

Specifies an action for automatic conflict resolution. Possible actions are `postpone`, `base`, `mine-full`, `theirs-full`, `edit`, and `launch`.

`--auto-props`

Enables auto-props, overriding the `enable-auto-props` directive in the *config* file.

`--change (-c) ARG`

Used as a means to refer to a specific “change” (a.k.a. a revision). This option is syntactic sugar for “`-r ARG-1:ARG`”.

`--changelist ARG`

Instructs Subversion to operate only on members of the changelist named *ARG*. You can use this option multiple times to specify sets of changelists.

`--cl ARG`

An alias for the `--changelist` option.

`--depth ARG`

Instructs Subversion to limit the scope of an operation to a particular tree depth. *ARG* is one of `empty`, `files`, `immediates`, or `infinity`.

`--diff-cmd CMD`

Specifies an external program to use to show differences between files. When *svn diff* is invoked without this option, it uses Subversion's internal diff engine, which provides unified diffs by default. If you want to use an external diff program, use `--diff-cmd`. You can pass options to the diff program with the `--extensions (-x)` option (more on that later in this section).

`--diff3-cmd CMD`

Specifies an external program to use to merge files.

`--dry-run`

Goes through all the motions of running a command, but makes no actual changes—either on disk or in the repository.

--editor-cmd *CMD*

Specifies an external program to use to edit a log message or a property value. See the `editor-cmd` section in [the section called “Config”](#) for ways to specify a default editor.

--encoding *ENC*

Tells Subversion that your commit message is encoded in the charset provided. The default is your operating system's native locale, and you should specify the encoding if your commit message is in any other encoding.

--extensions (-x) *ARG*

Specifies an argument or arguments that Subversion should pass to an external diff command. This option is valid only when used with the `svn diff` or `svn merge` commands, with the `--diff-cmd` option. If you wish to pass multiple arguments, you must enclose all of them in quotes (e.g., `svn diff --diff-cmd /usr/bin/diff -x "-b -E"`).

--file (-F) *FILENAME*

Uses the contents of the named file for the specified subcommand, though different subcommands do different things with this content. For example, `svn commit` uses the content as a commit log, whereas `svn propset` uses it as a property value.

--force

Forces a particular command or operation to run. Subversion will prevent you from performing some operations in normal usage, but you can pass the force option to tell Subversion “I know what I'm doing as well as the possible repercussions of doing it, so let me at 'em.” This option is the programmatic equivalent of doing your own electrical work with the power on—if you don't know what you're doing, you're likely to get a nasty shock.

--force-log

Forces a suspicious parameter passed to the `--message (-m)` or `--file (-F)` option to be accepted as valid. By default, Subversion will produce an error if parameters to these options look like they might instead be targets of the subcommand. For example, if you pass a versioned file's path to the `--file (-F)` option, Subversion will assume you've made a mistake, that the path was instead intended as the target of the operation, and that you simply failed to provide some other—unversioned—file as the source of your log message. To assert your intent and override these types of errors, pass the `--force-log` option to subcommands that accept log messages.

--help (-h or -?)

If used with one or more subcommands, shows the built-in help text for each. If used alone, it displays the general client help text.

--ignore-ancestry

Tells Subversion to ignore ancestry when calculating differences (rely on path contents alone).

--ignore-externals

Tells Subversion to ignore externals definitions and the external working copies managed by them.

--incremental

Prints output in a format suitable for concatenation.

`--keep-changelists`

Tells Subversion not to delete changelists after committing.

`--keep-local`

Keeps the local copy of a file or directory (used with the *svn delete* command).

`--limit (-l) NUM`

Shows only the first *NUM* log messages.

`--message (-m) MESSAGE`

Indicates that you will specify either a log message or a lock comment on the command line, following this option. For example:

```
$ svn commit -m "They don't make Sunday."
```

`--new ARG`

Uses *ARG* as the newer target (for use with *svn diff*).

`--no-auto-props`

Disables auto-props, overriding the `enable-auto-props` directive in the *config* file.

`--no-diff-deleted`

Prevents Subversion from printing differences for deleted files. The default behavior when you remove a file is for *svn diff* to print the same differences that you would see if you had left the file but removed all the content.

`--no-ignore`

Shows files in the status listing that would normally be omitted since they match a pattern in the `global-ignores` configuration option or the `svn:ignore` property. See [the section called “Config”](#) and [the section called “Ignoring Unversioned Items”](#) for more information.

`--no-unlock`

Tells Subversion not to automatically unlock files (the default commit behavior is to unlock all files listed as part of the commit). See [the section called “Locking”](#) for more information.

`--non-recursive (-N)`

Deprecated. Stops a subcommand from recursing into subdirectories. Most subcommands recurse by default, but some subcommands—usually those that have the potential to remove or undo your local modifications—do not.

`--notice-ancestry`

Pays attention to ancestry when calculating differences.

`--old ARG`

Uses *ARG* as the older target (for use with *svn diff*).

--parents

Creates and adds nonexistent or nonversioned parent subdirectories to the working copy or repository as part of an operation. This is useful for automatically creating multiple subdirectories where none currently exist. If performed on a URL, all the directories will be created in a single commit.

--quiet (-q)

Requests that the client print only essential information while performing an operation.

--record-only

Marks revisions as merged, for use with --revision (-r).

--recursive (-R)

Makes a subcommand recurse into subdirectories. Most subcommands recurse by default.

--reintegrate

Used with the *svn merge* subcommand, merges all of the source URL's changes into the working copy. See [the section called “Keeping a Branch in Sync”](#) for details.

--relocate *FROM TO [PATH...]*

Used with the *svn switch* subcommand, changes the location of the repository that your working copy references. This is useful if the location of your repository changes and you have an existing working copy that you'd like to continue to use. See [svn switch](#), for more details and an example.

--remove *ARG*

Disassociates *ARG* from a changelist

--revision (-r) *REV*

Indicates that you're going to supply a revision (or range of revisions) for a particular operation. You can provide revision numbers, keywords, or dates (in curly braces) as arguments to the revision option. If you wish to offer a range of revisions, you can provide two revisions separated by a colon. For example:

```
$ svn log -r 1729
$ svn log -r 1729:HEAD
$ svn log -r 1729:1744
$ svn log -r {2001-12-04}:{2002-02-17}
$ svn log -r 1729:{2002-02-17}
```

See [the section called “Revision Keywords”](#) for more information.

--revprop

Operates on a revision property instead of a property specific to a file or directory. This option requires that you also pass a revision with the --revision (-r) option.

--set-depth *ARG*

Sets the sticky depth on a directory in a working copy to one of *exclude*, *empty*, *files*, *immediates*, or *infinity*.

--show-revs *ARG*

Used to make *svn mergeinfo* display either merged or eligible revisions.

--show-updates (-u)

Causes the client to display information about which files in your working copy are out of date. This doesn't actually update any of your files—it just shows you which files will be updated if you then use *svn update*.

--stop-on-copy

Causes a Subversion subcommand that traverses the history of a versioned resource to stop harvesting that historical information when a copy—that is, a location in history where that resource was copied from another location in the repository—is encountered.

--strict

Causes Subversion to use strict semantics, a notion that is rather vague unless talking about specific subcommands (namely, *svn propget*).

--targets FILENAME

Tells Subversion to get the list of files that you wish to operate on from the filename that you provide instead of listing all the files on the command line.

--use-merge-history (-g)

Uses or displays additional information from merge history.

--verbose (-v)

Requests that the client print out as much information as it can while running any subcommand. This may result in Subversion printing out additional fields, detailed information about every file, or additional information regarding its actions.

--version

Prints the client version info. This information includes not only the version number of the client, but also a listing of all repository access modules that the client can use to access a Subversion repository. With **--quiet (-q)** it prints only the version number in a compact form.

--with-all-revprops

Used with the **--xml** option to *svn log*, instructs Subversion to retrieve and display all revision properties—the standard ones used internally by Subversion as well as any user-defined ones—in the log output.

--with-no-revprops

Used with the **--xml** option to *svn log*, instructs Subversion to omit all revision properties—including the standard log message, author, and revision timestamp—from the log output.

--with-revprop ARG

When used with any command that writes to the repository, sets the revision property, using the *NAME=VALUE* format, *NAME* to *VALUE*. When used with *svn log* in **--xml** mode, this displays the value of *ARG* in the log output.

--xml

Prints output in XML format.

svn Subcommands

Here are the various subcommands for the *svn* program. For the sake of brevity, we omit the global options (described in [the section called “svn Options”](#)) from the subcommand descriptions which follow.

You are reading *Version Control with Subversion* (for Subversion 1.6), by Ben Collins-Sussman, Brian W. Fitzpatrick, and C. Michael Pilato.

This work is licensed under the [Creative Commons Attribution License v2.0](#).

To submit comments, corrections, or other contributions to the text, please visit <http://www.svnbook.com/>.