

# Subversion Quick Reference Card

\$Rev: 28 \$

**Subversion** is a version control system that is a replacement for CVS. It has most of CVS's features. Generally, Subversion's interface to a particular feature is similar to CVS's, except where there's a compelling reason to do otherwise.

## Quick start

```
svnadmin create /var/svnroot
svn import LocalDir file:///var/svnroot/ProjectName
svn checkout file:///var/svnroot/ProjectName
cd ProjectName
svn help [command]
```

## Subversion URLs

**file://** Direct repository access (on local disk).  
**http://** Access via WebDAV protocol to Subversion-aware Apache server.  
**https://** Same as **http://**, but with SSL encryption.  
**svn://** Access via custom protocol to an **svnserve** server.  
**svn+ssh://** Same as **svn://**, but through an SSH tunnel.

## svn subcommands

**add** Adds files and directories.  
**blame** (**praise**, **annotate**, **ann**) Shows author and revision information in-line for the specified files or URLs.  
**cat** Outputs the contents of the specified files or URLs.  
**checkout** (**co**) Checks out a working copy from a repository.  
**cleanup** Recursively clean up the working copy.  
**commit** (**ci**) Send changes from your working copy to the repository.  
**copy** (**cp**) Copy a file or directory in a working copy or in the repository.  
**delete** (**del**, **remove**, **rm**) Delete an item from a working copy or the repository.  
**diff** (**di**) Display the differences between two paths.  
**export** Exports a clean directory tree.  
**help** Prints help text.  
**import** Recursively commit a copy of local dir into a repository.  
**info** Print information about PATHs.  
**list** (**ls**) List directory entries in the repository.  
**log** Displays commit log messages.

**merge** Apply the differences between two sources to a working copy path.  
**mkdir** Create a new directory under version control.  
**move** (**mv**, **rename**, **ren**) Move a file or directory.  
**propdel** (**pdel**, **pd**) Remove a property from an item.  
**propedit** (**pedit**, **pe**) Edit the property of one or more items under version control.  
**propget** (**pget**, **pg**) Prints the value of a property.  
**proplist** (**plist**, **pl**) Lists all properties.  
**propset** (**pset**, **ps**) Sets a property on files, directories, or revisions.  
**resolved** Remove conflicted state on working copy files or directories.  
**revert** Undo all local edits.  
**status** (**stat**, **st**) Print the status of working copy files and directories.  
**switch** (**sw**) Update working copy to a different URL.  
**update** (**up**) Updates your working copy.

## svn switches

**--config-dir DIR**  
Read configuration from *DIR* instead of *~/.subversion*.  
**--diff-cmd CMD**  
Use external program *CMD* for generating **diff** output instead of internal diff engine.  
**--diff3-cmd CMD**  
Use external program *CMD* for merging files.  
**--dry-run**  
Run the command without changing anything.  
**--editor-cmd CMD**  
Use external program *CMD* for editing files.  
**--encoding ENC**  
Instructs Subversion to use encoding *ENC* to store log messages.  
**--extensions ARG (-x)**  
Additional arguments for external diff, eg.: **svn --diff-cmd diff -x --normal diff main.c**.  
**--file FILE (-F)**  
Use the contents of file *FILE* as an argument for a given subcommand.  
**--force**  
Forces a particular subcommand to run.  
**--force-log**  
Forces a suspicious parameter passed to the **--message** options to be accepted as valid.  
**--help (-h or -?)**  
Prints help for a given command or general help text.

**--ignore-ancestry**  
Ignore ancestry when calculating differences (rely on path contents alone).  
**--incremental**  
Prints output in a format suitable for concatenation.  
**--message (-m) MSG**  
Specify a commit message *MSG*.  
**--no-auth-cache**  
Prevents caching of authentication information.  
**--no-auto-props**  
Disable **auto-props**, overriding the **enable-auto-props** directive in the config file.  
**--no-diff-deleted**  
Prevents Subversion from printing differences for deleted files.  
**--no-ignore**  
Shows files in the status listing that would normally be omitted since they match a pattern in the **svn:ignore** property.  
**--non-interactive**  
Prevents prompting for authentication information.  
**--non-recursive (-N)**  
Stops a subcommand from recursing into subdirectories.  
**--notice-ancestry**  
Pay attention to ancestry when calculating differences.  
**--old ARG**  
Uses *ARG* as the older target.  
**--password PASS**  
Password for authentication.  
**--quiet (-q)**  
Print only essential information while performing an operation.  
**--recursive (-R)**  
Makes a subcommand recurse into subdirectories.  
**--relocate FROM TO [PATH...]**  
Used with the **svn switch** subcommand, changes the location of the repository that your working copy references.  
**--revision REV (-r)**  
Supply a revision *REV* (or range of revisions) for a particular operation.  
**--revprop**  
Operates on a revision property instead of a Subversion property specific to a file or directory (requires **--revision** switch).  
**--show-updates (-u)**  
Causes the client to display information about which files in your working copy are out-of-date.

**--stop-on-copy**  
Stop harvesting historical information when a copy is encountered.

**--strict**  
Causes Subversion to use strict semantics.

**--targets *FILE***  
Get the list of files that you wish to operate on from the file *FILE*.

**--username *NAME***  
Username for authentication.

**--verbose (-v)**  
Verbose mode.

**--version**  
Prints the client version info.

**--xml**  
Prints output in XML format.

## svnadmin subcommands

**list-unused-dblogs**  
Ask Berkeley DB which log files can be safely deleted.

**create**  
Create a new, empty repository.

**dump**  
Dump the contents of filesystem to stdout.

**help**  
Help.

**hotcopy**  
Makes a hot copy of a repository.

**load**  
Read a dumpfile-formatted stream from stdin.

**lstxns**  
Print the names of all uncommitted transactions.

**recover**  
Recovers any lost state in a repository.

**rmtxns**  
Deletes transactions from a repository.

**setlog**  
Set the log-message on a revision.

## svnadmin switches

**--bypass-hooks**  
Bypass the repository hook system.

**--copies**  
Follow copy history when examining a path.

**--in-repos-template *ARG***  
Specify a template for the repository structure when creating a new repository.

**--incremental**  
Dump a revision only as a diff against the previous revision, instead of the usual fulltext.

**--on-disk-template *ARG***  
Specify a template to use for the on-disk structure of the repository you want to create.

**--revision *ARG* (-r)**  
Specify a particular revision to operate on.

## svnlook subcommands

**author**  
Prints the author.

**cat**  
Print the contents of a file.

**changed**  
Print the paths that were changed.

**date**  
Print the date stamp.

**diff**  
Prints differences of changed files and properties.

**dirs-changed**  
Print the directories that were themselves changed.

**help**  
Help.

**history**  
Print information about the history of a path in the repository.

**info**  
Print the author, date stamp, log message size, and log message.

**log**  
Print the log message.

**proplist**  
Print the names and values of versioned file and directory properties.

**tree**  
Print the tree.

**youngest**  
Print the youngest revision number.

## svnlook switches

**--no-diff-deleted**  
Prevents svnlook from printing differences for deleted files.

**--revision *REV* (-r)**  
Specify a particular revision number that you wish to examine.

**--transaction *TID* (-t)**  
Specify a particular transaction id *TID* that you wish to examine.

**--show-ids**  
Show the filesystem node revision IDs for each path in the filesystem tree.

## File status

**U** File was updated.

**A** File was added.

**D** File was deleted.

**R** File was replaced.

**G** File was merged.

**C** Conflicting changes.

**?** Resource is not under version control.

**!** Resource is missing or incomplete (removed by another tool than Subversion).

## Special properties

**svn:executable** Executable file permission.

**svn:mime-type** MIME type of a file.

**svn:ignore** List of file patterns which certain Subversion operations will ignore. Full list may be obtained by **svn status --no-ignore**.

**svn:eol-style** Possible values are: **native**, **CRLF**, **LF**, **CR**.

**svn:externals** Instructions for Subversion to populate a versioned directory with one or more other checked-out Subversion working copies.

**svn:keywords** List of keywords that will be substituted during commit:

**\$Date\$** date of the last modification

**\$Rev\$** revision number

**\$Author\$** the last user who changed the file

**\$URL\$** full URL to the latest version of the file in the repository

**\$Id\$** compressed combination of keywords above

## Client configuration

File `~/subversion/config`:

```
[helpers]
editor-cmd = vim

[miscellany]
log-encoding = iso-8859-2
enable-auto-props = yes

[auto-props]
*.sh = svn:executable
*.bat = svn:eol-style=CRLF
*.c = svn:eol-style=native;svn:keywords=Id
```

Autocompletion in **bash**:

```
shopt -s extglob progcomp
. /usr/share/subversion/.../bash_completion
```

## Other sources of information

<http://subversion.tigris.org>  
Home page of the Subversion project.

<http://svnbook.red-bean.com>  
*Version Control with Subversion* — a book on Subversion.

<http://tortoisesvn.tigris.org/>  
TortoiseSVN is a Windows client for Subversion implemented as a windows shell extension.