

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.