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.