



## What is?

- Atomic Commit – Collection of modifications either goes into the repository completely or not at all.
- Branch – A line of development that exists independently of another line yet shares a common history.
- Property – Name/value pairs associated with an element (directory or file) or a revision (unversioned).
- Repository – A central store of data stored in the form of a filesystem tree (a typical hierarchy of files and directories).
- Revision – The state of the repository after a single atomic commit with an associated global revision number.
- Tag – A snapshot of a project in time that is given a human-friendly name.
- URL – Path to the repository or a working copy
  - file:// Direct repository access (on local disk)
  - http:// WebDAV access 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.
- Working copy – A user's own local copy of portions of the repository where they can make changes.

## svn Command Syntax Legend

- URL – Subversion Repository URL
- WCPATH – Working copy path
- TARGET – Working copy path or URL
- ... – Multiple files, directories, TARGETS
- REV – Revision number or revision keyword
- OPREV:PEGREV – Revision range, using an operative revision and peg revision.
- @PEGREV – Revision range, using peg revisions.

## How do I?

### Basics

- Get help online? `svn help [SUBCOMMAND]`
- Create a working copy? `svn checkout URL`
- Update working copy? `svn update [WCPATH...]`
- Add a file(s) and/or directory(ies)? `svn add [WCPATH]`
- Delete a file(s)/directory(ies)? `svn delete WCPATH \ URL`
- Move/rename file(s) and/or directory(ies)? `svn move SRC DST`
- Revert all my local changes? `svn revert WCPATH...`
- Copy a file(s) or directory(ies)? `svn copy SRC DST`
- Commit changes to the repository? `svn commit [WCPATH...]`
- If my commit fails due to a crash, cleanup my working copy to retry? `svn cleanup [WCPATH...]`
- How do I lock a file/directory? `svn lock TARGET...`
- How do I unlock a file/directory? `svn unlock TARGET...`

### Reporting

- Display commit logs? `svn log [WCPATH] | URL [WCPATH...]`
- Determine who made what changes? `svn blame TARGET`
- Get the status of my working copy? `svn status [WCPATH...]`
- Get a list of directories in the repository? `svn list [TARGET...]`
- Get information on PATHs? `svn info [TARGET...]`

### Branch, Merge, Tag

- Create a tag? `svn copy here /tags/newtag`
- Create a branch? `svn copy TARGET /branches/newbranch`
- Merge file changes from one branch to another? `svn merge frombranchfile[ targetbranchfile]`
- Merge trunk changes to branch? `svn merge TRUNKURL`

- Merge a branch to trunk? `svn merge --reintegrate BRANCHURL`
- Indicate that merge conflicts have been resolved? `svn resolved WCPATH...`
- Display the differences between two revisions of a file? `svn diff` (\* see command for exact syntax)

### Properties

- Create a property on file/dir/rev? `svn propset PROPNAME`
- Edit a property value? `svn propedit PROPNAME`
- Get the value of a property? `svn propget PROPNAME`
- List properties? `svn proplist`
- Delete a property from an item? `svn propdel PROPNAME`
- Define the MIME type for a file? `svn propset svn:mime-type`
- Which file patterns will Subversion ignore? `svn propget svn:ignore`
- Is a file listed as executable? `svn propget svn:executable`
- Populate a working copy from another repo? `svn propset svn:externals` (\*see command for exact syntax)

### Miscellaneous

- Update WC to another branch/tag/rev? `svn switch URL [WCPATH]`
- Import dirs and files from file system? `svn import [WCPATH] URL`
- Export dir without Subversion admin dirs/files? `svn export`
- Set a keyword? `svn propset svn:keywords`
- Set end of line style? `svn propset svn:eol-style`
- Output the file contents from a repository? `svn cat URL`

### 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.
- E File existed.
- ? Resource is not under version control.
- ! Resource is missing or incomplete

### Standard Keywords

- \$Date\$ Date of the last modification
- \$Rev\$ Revision Number
- \$Author\$ Last user who changed the item
- \$URL\$ Full URL to the latest repository version of the file
- \$ID\$ Compressed combo of all keywords except \$URL\$

### End of Line Styles

- Native Use the standard EOL style of the client OS
- CRLF Typical EOL style for Windows platform
- LF Typical EOL style for Unix platform
- CR Old Macintosh EOL style not likely to be used

### svn Command Syntax

- `add WCPATH`
  - Switches: --targets, --non-recursive, --depth, --quiet, --config-dir, --force, --no-ignore, --auto-props, --no-auto-props.
- `blame TARGET[@REV] ...`
  - Switches: --revision, --verbose, --incremental, --xml, --extensions [[--unified] [--ignore-space-change] [--ignore-all-space] [--ignore-eol-style]], --force, --username, --password, --no-auth-cache, --non-interactive, --use-merge-history, --config-dir
- `cat TARGET[@REV] ...`
  - Switches: --revision, --username, --password, --no-auth-cache; --non-interactive, --config-dir

- `changelist MYCHANGE foo.c bar.h`
  - Switches: --remove
- `checkout URL[@REV]...[WCPATH]`
  - Switches: --revision, --quiet, --non-recursive, --depth, --username, --password, --no-auth-cache; --non-interactive, --config-dir, --ignore-externals
- `cleanup [WCPATH...]`
  - Switches: --diff3-cmd, --config-dir
- `commit [WCPATH...]`
  - Switches: --quiet, --non-recursive, --depth, --targets, no-unlock, --message, --file, --changelist, --force-log, --editor-cmd, --encoding, --username, --password, --no-auth-cache, --non-interactive, --config-dir
- `copy SRC DST`
  - Switches: --revision, --quiet, --message, --file, --force-log, --editor-cmd, --encoding, --username, --password, --no-auth-cache, --non-interactive, --config-dir
- `delete WCPATH | URL`
  - Switches: --force, --quiet, --targets, --message, --file, --force-log, --editor-cmd, --encoding, --username, --password, --no-auth-cache, --non-interactive, --config-dir
- `diff`
  - `diff [-r N[:M]] [TARGET[@REV]...]`
  - `diff [-r N[:M]] --old OLD-TGT[@OLDREV] [--new NEW-TGT[@NEWREV]] [WCPATH...]`
  - `diff OLD-URL[@OLDREV] NEW-URL[@NEWREV]`
  - Switches: --revision, --change, --old, --new, --changelist, --non-recursive, --depth, --diff-cmd, --extensions [--unified] [--ignore-space-change] [--ignore-all-space] [--ignore-eol-style], --no-diff-deleted, --notice-ancestry, --summarize, --force, --username, --password, --no-auth-cache, --non-interactive, --config-dir
- `export [-r rev] URL[@PEGREV] | WCPATH1[@PEGREV] [WCPATH]`
  - Switches: --revision, --quiet, --non-recursive, --depth, --force, --username, --password, --no-auth-cache, --non-interactive, --config-dir arg, --native-eol arg, --ignore-externals
- `help [SUBCOMMAND...]`
  - Switches: --config-dir import [WCPATH] URL
  - Switches: --quiet, --non-recursive, --auto-props, --no-auto-props, --message, --file, --force-log, --editor-cmd, --encoding, --no-ignore, --username, --password, --no-auth-cache, --non-interactive, --config-dir arg
- `import [PATH] URL`
  - Switches: --depth, --quiet, --force, --username, --password, --no-auth-cache, --non-interactive, --config-dir, --message, --file, --force-log, --editor-cmd, --encoding, --with-revprop, --auto-props, --no-auto-props, --no-ignore
- `info [TARGET...]`
  - Switches: --revision, --recursive, --depth, --targets, --changelist, --incremental, --xml, --username, --password, --no-auth-cache, --non-interactive, --config-dir
- `list [TARGET[@REV]...]`
  - Switches: --revision, --verbose, --recursive, --depth, --incremental, --xml, --username, --password, --no-auth-cache, --non-interactive, --config-dir arg
- `lock TARGET...`
  - Switches: --targets, --message, --file, --force-log, --encoding, --username, --password, --no-auth-cache, --non-interactive, --config-dir, --force
- `log`
  - `log [WCPATH]`

- log URL [WCPATH...]
- Switches: --revision, --quiet, --verbose, --targets, --stop-on-copy, --incremental, --xml, --username, --password, --no-auth-cache, --non-interactive, --config-dir, **--use-merge-history**, --limit

#### merge

- merge sourceURL1[@N] sourceURL2[@M] [WCPATH]
- merge sourceWCPATH1[@N] sourceWCPATH2[@M] [WCPATH]
- merge -r N:M SOURCE[@REV] [WCPATH]
- Switches: --revision, --change, --non-recursive, **--depth**, --quiet, --force, **--record-only**, **--reintegrate**, --dry-run, --diff3-cmd arg, --extensions [--unified | --ignore-space-change | --ignore-all-space | --ignore-eol-style], --ignore-ancestry, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### mergeinfo WCPATH

Switches: --revision, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### mkdir WCPATH | URL ...

Switches: --quiet, --message, --file, --force-log, --editor-cmd, --encoding, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### move SRC DST

Switches: --revision, --quiet, --force, --message, --file, --force-log, --editor-cmd, --encoding, --username, --password, --no-auth-cache, --non-interactive, --config-dir arg

#### propdel PROPNAME [WCPATH...] | --revprop -r REV [URL]

Switches: --quiet, --recursive, **--depth**, --revision, --revprop, **--changelist**, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### propedit PROPNAME [WCPATH...] | --revprop -r REV [URL]

Switches: --revision, --revprop, --username, --password, --no-auth-cache, --non-interactive, --encoding, --editor-cmd, --force, --config-dir

#### propget PROPNAME [WCPATH...] | --revprop -r REV [URL]

Switches: --recursive, **--depth**, --revision, --revprop, **--changelist**, --strict, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### proplist [TARGET[@REV...]] | --revprop -r REV [URL]

Switches: --verbose, --recursive, **--depth**, --revision, --quiet, --revprop, **--changelist**, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### propset

- PROPNAME [PROPVAL | -F VALNAME] WCPATH...
- PROPNAME --revprop -r REV [PROPVAL | -F VALNAME] [URL]

Switches: --file, --encoding, --quiet, --revision, --targets, --recursive, **--depth**, --revprop, **--changelist**, --username, --password, --no-auth-cache, --non-interactive, --force, --config-dir

#### resolved WCPATH ...

Switches: --targets, --recursive, **--depth**, --quiet, --config-dir

#### revert WCPATH...

Switches: --targets, **--changelist**, --recursive, **--depth**, --quiet, --config-dir

#### status [WCPATH...]

Switches: --show-updates, --verbose, --non-recursive, **--depth**, **--changelist**, --quiet, --no-ignore, --incremental, --xml, --username, --password, --no-auth-cache, --non-interactive, --config-dir, --ignore-externals

#### switch URL [WCPATH] | --relocate FROM TO [WCPATH...]

Switches: --revision, --non-recursive, **--depth**, --quiet, --diff3-cmd, --relocate, --username, --password, --no-auth-cache, --non-interactive, --config-dir

#### unlock TARGET...

Switches: --targets, --username, --password, --no-auth-cache, --non-interactive, --config-dir, --force

#### update [WCPATH...]

Switches: --revision, --non-recursive, **--changelist**, **--depth**, --quiet, --diff3-cmd, --username, --password, --no-auth-cache, --non-interactive, --config-dir, --ignore-externals

### svn switches

#### change (c) ARG

The change made by revision ARG (like -r ARG-1:ARG). If ARG is negative this is like -r ARG:ARG-1

#### changelist ARG

Filters targets based upon the members of the changelist.

#### configdir DIR

Read configuration from DIR instead of ~/.subversion.

#### depth=[empty|files|immediates|infinity]

Sets depth values as it updates the working copy,

#### diffcmd CMD

Use external program CMD for generating diff output instead of internal diff engine.

#### diff3cmd CMD

Use external program CMD for merging files.

#### dryrun

Run the command without changing anything.

#### editorcmd CMD

Use external program CMD for editing files.

#### encoding ENC

Instructs Subversion to use encoding ENC to store log messages.

#### extensions ARG (x)

Default: '-u'. When Subversion is invoking an external diff program, ARG is simply passed along to the program. But when Subversion is using its default internal diff implementation, or when Subversion is displaying blame annotations, ARG could be any of the following:

--unified (-u)

Output 3 lines of unified context.

--ignore-space-change (-b)

Ignore changes in the amount of white space.

--ignore-all-space (-w)

Ignore all white space.

--ignore-eol-style

Ignore changes in EOL style

#### file FILE (F)

Use the contents of file FILE as an argument for a given subcommand.

#### force

Forces a particular subcommand to run.

#### forcelog

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.

#### ignoreancestry

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.

#### noauthcache

Prevents caching of authentication information.

#### noautoprops

Disable autoprops, overriding the enableautoprops directive in the config file.

#### nodiffdeleted

Prevents Subversion from printing differences for deleted files.

#### noignore

Shows files in the status listing that would normally be omitted since they match a pattern in the svn:ignore property.

#### noninteractive

Prevents prompting for authentication information.

#### nonrecursive (N)

Stops a subcommand from recursing into subdirectories.

#### noticeancestry

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.

#### record-only

Mark revisions as merged (use with -r).

#### recursive (R)

Makes a subcommand recurse into subdirectories.

#### reintegrate

Used when merging a branch back to trunk

#### 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 revision (or range of revisions) for the operation.

#### revprop

Operates on a revision property instead of a Subversion property specific to a file or directory (requires revision switch).

#### showupdates (u)

Causes the client to display information about which files in your working copy are out-of-date.

#### stoponcopy

Stop harvesting historical information when a copy is encountered.

#### strict

Causes Subversion to use strict semantics.

#### summarize

Show a summary of the results

#### 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.