



## 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]`

