

Obtaining a local copy

```
svn checkout URL_rep
svn checkout URL_rep dir  use the local directory dir to store local copy
```

Adding files and directories

```
svn add file1 file2 ...
svn add dir           manage the directory dir and add all its content
svn add -N dir        manage the directory dir but not its content
```

Committing changes to the repository

```
svn commit -m "commit message"
```

Updating the local copy

```
svn update
```

Seeing differences between two versions

```
svn diff file          see differences between the local version of file and
                        the one on the repository
svn diff -rn1:n2 file  see differences between revisions n1 and n2 for file
```

Seeing commit messages

```
svn log
svn log file  see messages about file
```

Reverting local changes

```
svn revert file
svn revert      for all local changes
```

Files and directories status

When calling **svn status**, files and directories are listed with a character signifying:

```
?  file not versioned
A  file added
D  file removed
U  file updated
C  there are conflicts on the file
R  file has been replaced
G  file has been merged
!  file is missing or incomplete
```

Obtaining help

```
svn help command
```

Configuring editor

The editor used for commit messages etc. is managed by the EDITOR environment variable (gedit by default). To change it:

```
export EDITOR=path_to_editor
```

File conflicts syntax

```
<<<<<< .mine
What is in my local version
=====
What is in the repository
>>>>>> .rn
```

Resolving conflicts on file.txt

svn resolve --accept ARG file.txt	where ARG can be:
working	keep local version with <i>manual resolution</i>
mine-full	keep only local version
theirs-full	keep only repository version
mine-conflict	choose local version when conflict
theirs-conflict	choose repository version when conflict

References

- [1] *Apache Subversion*. URL: <http://subversion.apache.org/>.
- [2] B. Collins-Sussman, B. W. Fitzpatrick, and C. Michael Pilato. *Version control with Subversion*. O'Reilly, 2004. URL: <http://svnbook.red-bean.com/>.
- [3] The Subclipse Team. *Subclipse*. Plugin for Eclipse. 2014. URL: <http://subclipse.tigris.org/>.
- [4] The TortoiseSVN Team. *TortoiseSVN*. Graphical client for Windows. 2014. URL: <http://tortoisesvn.net/>.
- [5] The RabbitCSV Team. *RabbitCVS*. Graphical client for Linux. 2014. URL: <http://rabbitvcs.org/>.

Classical repository organization

trunk	main development line
branches	branches
tags	tags

Creating directories in repository

```
svn mkdir URL_repo/new_directory -m "commit message"
```

Managing branches

Managing branches or tags is just managing directories.

svn copy URL_repo/FROM URL_repo/DEST	copy directory FROM to directory DEST
svn checkout URL_repo/branches/BRANCH_NAME	checkout a branch/tag
svn merge URL_repo/branches/BRANCH_NAME	merge a branch/tag