

## CASE STUDY

1. Check your current working directory

```
meghana@3148c6658f7456b:~$ pwd
/home/meghana
```

2. Ensure that following tools are installed

Git

SVN

Git-svn

```
meghana@3148c6658f7456b:~$ sudo apt-get install git-svn
[sudo] password for meghana:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git-svn is already the newest version (1:2.43.0-1ubuntu7.2).
0 upgraded, 0 newly installed, 0 to remove and 56 not upgraded.

meghana@3148c6658f7456b:~$ git svn --version
git-svn version 2.43.0 (svn 1.14.3)
```

3. Create an empty directory for your new Git repository and initialize it:

```
meghana@3148c6658f7456b:~$ mkdir new-git-repo
meghana@3148c6658f7456b:~$ cd new-git-repo

meghana@3148c6658f7456b:~/new-git-repo$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in allhint:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/meghana/new-git-repo/.git/
```

4. Install subversion (SVN) to create a SVN repository

```
meghana@3148c6658f7456b:~/new-git-repo$ sudo apt-get install subversion
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
subversion is already the newest version (1.14.3-1build4).
0 upgraded, 0 newly installed, 0 to remove and 56 not upgraded.
```

5. Create a SVN repository and repository structure

```
meghana@3148c6658f7456b:~/new-git-repo$ svnadmin create my-svn-repo
```

```
meghana@3148c6658f7456b:~/new-git-repo$ svn mkdir file:///home/meghana/my-svn-repo/trunk file:///home/meghana/my-svn-repo/branches file:///home/meghana/my-svn-repo/tags -m "Initial structure"
Committing transaction...
Committed revision 1.
```

6. Create test directory called my-working-copy and add files like test-file.txt and file.txt.

```
meghana@3148c6658f7456b:~/new-git-repo$ mkdir /home/meghana/my-working-copy
meghana@3148c6658f7456b:~/new-git-repo$ cd /home/meghana/my-working-copy
meghana@3148c6658f7456b:~/my-working-copy$ svn checkout file:///home/meghana/my-svn-repo/trunk /home/meghana/my-working-copy
svn: E170013: Unable to connect to a repository at URL 'file:///home/meghana/my-svn-repo/trunk'
svn: E170000: Local URL 'file:///home/meghana/my-svn-repo/trunk' contains unsupported hostname
meghana@3148c6658f7456b:~/my-working-copy$ svn checkout file:///home/meghana/my-svn-repo/trunk /home/meghana/my-working-copy
Checked out revision 1.
meghana@3148c6658f7456b:~/my-working-copy$ echo "This is a test file" > test-file.txt
```

7. Add the new files to SVN and commit the changes using svn add and svn commit commands

```
meghana@3148c6658f7456b:~/my-working-copy$ svn add test-file.txt
A      test-file.txt
meghana@3148c6658f7456b:~/my-working-copy$ svn status
A      test-file.txt
meghana@3148c6658f7456b:~/my-working-copy$ svn commit -m "Added test-file.txt"
Adding      test-file.txt
Transmitting file data .done
Committing transaction...
Committed revision 2.
```

8. Verify the changes using svn log command and Checkout the repository to work locally

```
meghana@3148c6658f7456b:~/my-working-copy$ svn log file:///home/meghana/my-svn-repo
-----
r2 | meghana | 2025-01-31 04:48:29 +0000 (Fri, 31 Jan 2025) | 1 line
Added test-file.txt
-----
r1 | meghana | 2025-01-31 04:10:39 +0000 (Fri, 31 Jan 2025) | 1 line
Initial structure
-----
meghana@3148c6658f7456b:~/my-working-copy$ echo "Another change!" >> file.txt
meghana@3148c6658f7456b:~/my-working-copy$ svn add file.txt
A      file.txt
meghana@3148c6658f7456b:~/my-working-copy$ svn commit -m "Made changes to file.txt"
Adding      file.txt
Transmitting file data .done
Committing transaction...
Committed revision 3.

meghana@3148c6658f7456b:~/my-working-copy$ svn log file:///home/meghana/my-svn-repo
-----
r3 | meghana | 2025-01-31 04:50:23 +0000 (Fri, 31 Jan 2025) | 1 line
Made changes to file.txt
-----
r2 | meghana | 2025-01-31 04:48:29 +0000 (Fri, 31 Jan 2025) | 1 line
Added test-file.txt
-----
r1 | meghana | 2025-01-31 04:10:39 +0000 (Fri, 31 Jan 2025) | 1 line
Initial structure
-----
```

9. Import the files from test directory to your svn repository and verify the changes

```
meghana@3148c6658f7456b:~/my-working-copy$ svn import /home/meghana/my-working-copy file:///home/meghana/my-svn-repo/trunk -m "Initial commit"
Skipped '.svn/.svn'
svn: E160020: File already exists: filesystem 'c6b5f8e0-c4ec-47ef-a1e7-32fdd8a011fe', transaction '3-3', path '/trunk/file.txt'
meghana@3148c6658f7456b:~/my-working-copy$ svn lls file:///home/meghana/my-svn-repo/trunk
file.txt
test-file.txt
```

10. use svn-git to clone the SVN repository into your git repository new-git-repo

```
meghana@3148c6658f7456b:~/my-working-copy$ git svn clone file:///home/meghana/my-svn-repo --stdlayout /home/meghana/new-git-repo
r1 = c76e91e168975fdfb19421f4969f2ec603e3725 (refs/remotes/origin/trunk)
A      test-file.txt
r2 = 7e3b9f582169e9766faca4fd5d42aa369e4b62e2 (refs/remotes/origin/trunk)
A      file.txt
r3 = f63525f62ca67976428e6d58f054cce9657ed7ec (refs/remotes/origin/trunk)
Checked out HEAD:
file:///home/meghana/my-svn-repo/trunk r3
meghana@3148c6658f7456b:~/my-working-copy$
```

