

SVN

Goals

- What is subversion?
- Learn some of the useful SVN commands

What is subversion?

- Often referred to as SVN
- Centralized version control system
- Maintains current and old versions of files, such as source codes, web pages, documents, latex files, ...

Why is SVN useful?

- **Reverting:** after each commit, a revision is stored. You can always roll back to a previous version
- **Concurrent development:** multiple people can work on a project simultaneously.

Your subversion repository

- *<https://repo.seng.uvic.ca/svn/seng265/><netlink ID>*
- Your netlink ID and password
- Certificate warning

Check out

- Copy the contents of a remote repository to your local computer.
- Create a directory: **mkdir seng265**
- **cd seng265**

- *The following on one line*

```
svn checkout  
https://repo.seng.uvic.ca/svn/seng265/<netlink  
ID> seng265-svn
```

- Accept the certificate, choose “p” to permanently accept the certificate

*You may have to
accept r or t*

reject or temporary

Metadata

- Hidden metadata directory

- SVN uses this directory.

- `cd seng265-svn`
- `ls -a`

Add files/folders to your repository

- `cd to your working directory`
- Add a directory
- `mkdir dir1`
- `cd dir1`
- Add a file in your working copy
- `vi file1`
- Type a 1 in the first line, save and exit.
- `cd ..`
- `svn add dir1`
- The folder and the files inside it will be added to your repository

*You just created working
directory seng265-svn*

Commit

- After add/remove/modify, you always need to commit the changes:
- `svn commit -m "new folder and files added"`

(-m for comment)

Checkout a second copy

- Change directory to seng265
- `cd ../../`
- ```
svn checkout
https://repo.seng.uvic.ca/svn/seng265/<netlink
ID> seng265-svn-2
```

*From directory seng265 checkout a new working directory*

# Commit a change in second working directory

- `cd seng265-svn-2/`
- Change directory to `dir1`
- `vi f1`
- Add a 2 on the second line, save and exit
- Commit the changes:
- `cd ..`
- `svn commit -m "I edited f1"`

# Refresh your primary working copy

- Change directory to seng265-svn
- `svn update`
- Now, open file f1 and see the changes you made.

# Reverting to a previous revision

- `svn info f1`
- `svn log f1`
- `svn merge -r HEAD:<desired-revision> f1`
- `svn commit -m "reverted"`
- `svn update`
- `vi f1`

# Delete

- `svn delete f1`
- `svn commit -m "delete f1"`
- `svn update`
- `ls`
- `f1` doesn't exist anymore!

**You're all done!**