UNIX and Subversion Tips

CSC207 Winter 2015

Computer Science
UNIVERSITY OF TORONTO

Q&A (from last week)

Q. Is it possible to edit the SVN log messages?

A. In the default SVN configuration, editing log messages is not possible. It is possible, though, for a system administrator to enable that feature: http://subversion.apache.org/faq.html#change-log-msg

Q. Is it possible to find out what has changed in the master without actually running `svn update`?

A. Yes. This was part of Lab 1: `svn status --show-updates`

If a newer version of the item exists in the master, it is marked with `*`.

Hidden Files

Hidden files and directories are not displayed when showing the directory listing using `ls`.

On UNIX, hidden files and directories have names that begin with . and are sometimes called *dotfiles*.

These files typically are not created by the user and are often used to store configuration or preferences.

To have hidden files included in the directory listing, use: `ls -a`.

.svn directories

Each directory in a local copy of an SVN repository contains a hidden directory named `.svn`.

These .svn subdirectories are what distinguishes the local copy from other ordinary directories.

Important: do not move part or all of your local copy from one directory without using the appropriate SVN commands.

```
jen@laptop:~/c2campbe$ ls
E1 lab1 svndemo
jen@laptop:~/c2campbe$ ls -a
.  ..   .svn E1 lab1 svndemo
```

Setting `SVN_EDITOR` on CDF

It is possible to automatically set the `SVN_EDITOR` environment variable each time a new terminal window is launched.

For those using the default shell on CDF (with prompt `%`):

• Change to your home directory

• Open the hidden file named `.login` using a text editor (e.g., `nedit .login`)

• Add this to the bottom of that file:
  `setenv SVN_EDITOR nedit`

  (For those using bash shell with prompt `$`, edit hidden file `.bash_profile` by adding this to the end of that file:
  `export SVN EDITOR=nedit`)

Setting `SVN_EDITOR` on Mac, Windows

For Mac, you can follow the same approach as described on the previous slide for CDF.

For Windows, go to Control Panel, then to System Properties, select the Advanced tab, and click the Environment Variables button. Set the SVN_EDITOR environment variable to the path of your favourite editor.

Common Pitfalls

"not a working copy"

The situation: issuing **svn add** on a file from a directory that is not part of the local copy.

Resulting error message:

`svn: EXXXXXX: [PATH] is not a working copy`

Another possible error message that indicates that the parent directory is not under version control:

`svn: EXXXXXX: [PATH] is not a working copy`
`svn: EXXXXXX: The node [parent directory PATH] was not found.`

A similar error messages will occur when running **svn status**, **svn list**, etc. on a file that is not part of the local copy.

"not under version control"

The situation: issuing `svn commit` on a file that is not part of the local copy.

Resulting error message:

```
svn: EXXXXXX: Commit failed (details follow):
svn: EXXXXXX: [PATH] is not under version control
```

Skipped paths

The situation: issuing `svn update` on a directory that is not part of the local copy.

Resulting message:

Skipped '.'

Summary of conflicts:

  Skipped paths: 1

Location matters

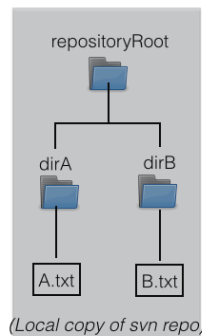The local copy of the repository is a directory tree.

The effect of issuing an SVN command will vary depending on which directory it is issued from.

For example:

Assume that both files `A.txt` and `B.txt` are under version control and have been modified.

Issuing `svn commit` from within directory:

- `repositoryRoot`: will commit modifiations to both `A.txt` and `B.txt`

- `dirA`: will commit only the modifications to `A.txt`

- `dirB`: will commit only the modifications to `B.txt`

repositoryRoot

dirA   dirB

A.txt   B.txt

(Local copy of svn repo)

Recursive SVN commands

By default, commands like `svn add` and `svn commit` are recursive.

For example:

- `svn add newDir` from `repositoryRoot` will mark `newDir`, `subDir`, and `file.txt` for addition.

- to add only `newDir`, instead issue:
`svn -N add newDir`

There is also a `-N` (non-recursive) flag for `svn commit`.

repositoryRoot

(Local copy of svn repo)

newDir

subDir

file.txt