Tutorial of Software Engineering Course SE2AA4, McMaster University, 2007

Subversion Quick Start Guide

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A Minimal Procedure to Submit your Assignment with svn

Let's assume that you are sitting at home with a Windows computer, and you want to submit your assignment. Following is one of the approaches.

1. Start your VPN Client, most likely form Start-menu.



2. After following the instructions, you will get connected, and your computer can work the same as it is in McMaster University campus.



3. Start your SSH Client, most likely from Start-menu.

🛅 Kaspersky Anti-Virus 6.0	License Agreement	
🥖 Internet Explorer	🧧 🚰 Secure File Transfer Cl	ient
📷 SSH Secure Shell	🕨 🗐 Secure Shell Client	

4. Connect to birkhoff.cas.mcmaster.ca

👜 birkhoff.cas.mcmaster.ca - default - SSH Secure Shell 📃 🔍				
	<u>W</u> indow <u>H</u> elp			
Conn	ect to Remote Host		×	
🛛 🔊 Quick 📑	Host Name:	birkhoff.cas.mcmaster.ca	Connect	
SSH Secu	User Name:		Cancel	<u> </u>
Copyrigh	Port Number:	22		//www.ssh.com/
This cop and pers	Authentication Method:	Password 💌		у,
Any commercia	ni use requires a s	eparace incense.		I

5. Lets assume that you already have your assignment 1 done, and the assignment files are in a sub-directory of your home folder: ~/working/ass1/. You cd into the ~/working/ folder.

huangs3@birkhoff:~ cd working huangs3@birkhoff:~/working ls ass1/ huangs3@birkhoff:~/working ls ass1 file1 file2 huangs3@birkhoff:~/working

6. Then you use **svn import** command to import ass1 into your repository folder. Before and after the importing you use **svn list** to check what is in your repository folder.

huangs3@birkhoff:~/working svn list https://websvn.mcmaster.ca/se2aa4/yourfolder --username huangs3 --verbose huangs3@birkhoff:~/working svn import ./ass1 https://websvn.mcmaster.ca/se2aa4/yourfolder/ass1 --username huangs3 --message "update" Adding ass1/file1 Adding ass1/file2 Committed revision 9. huangs3@birkhoff:~/working svn list https://websvn.mcmaster.ca/se2aa4/yourfolder --username huangs3 --verbose 9 huangs3 Jan 17 11:23 ass1/ huangs3@birkhoff:~/working

Note that for the svn option –username you will use your **MacID**, and you will be asked for password. The password is initialized to be identical with your **CAS ID Passowrd**. When you submit your assignment, the folder name **yourfolder** in above example will be replaced with the actually fold name for you in repository, which is your **MacID**. You will need to put all the files of your assignment 1 in the folder **ass1** under your repository folder, your assignment 2 in **ass2**, etc.

If you find that your submission misses some file, you can adapt the above procedure to add any file to your repository folder.

How to delete a folder in Repository

If you want to delete any thing in repository, you can use **svn delete** command. For example, following shows how you can delete **ass1**/ in your repository folder. Deleting a single file is similar.

 $huangs 3 @ birkhoff: \sim /working \ svn \ delete \ https://websvn.mcmaster.ca/se2aa4/yourfolder/ass1 \ --username \ huangs 3 \ --message \ "delete"$

Committed revision 10. huangs3@birkhoff:~/working svn list https://websvn.mcmaster.ca/se2aa4/yourfolder --username huangs3 --verbose huangs3@birkhoff:~/working

If you find that you submit the wrong files for your assignment, you can **svn delete** anything you want, and **svn import** the correct file. With **svn import** and **svn delete**, you now have a workable way to make sure you submit the assignments correctly.

Where to get Windows SSH client and VPN client

SSH client:

- Go to <u>http://www.mcmaster.ca/uts/rswelcom.html</u>
- Get into the link of "Student"
- Login with your MacID and MUGSI password
- Download the SSH client

VPN client: http://www.mcmaster.ca/uts/network/vpn/

Use svn to Help your work

With **svn import** and **svn delete**, you have a workable way to submit assignments for this course. However, **svn** does not really help you to work reliably and efficiently if you only use it this way. Actually **svn** can do much more for you. We will see a simple example.

Let's assume that after deleting all files from your repository folder and all other copies, you regret and want to get them back. You can do the following steps.

1. Find the revision number of the revision having the file you want in the repository with svn log.

huangs3@birkhoff:~/working svn log https://websvn.mcmaster.ca/se2aa4/yourfolder --username huangs3 --verbose r10 | huangs3 | 2007-01-17 11:28:00 -0500 (Wed, 17 Jan 2007) | 1 line Changed paths: D /yourfolder/ass1 delete

r9 | huangs3 | 2007-01-17 11:23:04 -0500 (Wed, 17 Jan 2007) | 1 line Changed paths: A/yourfolder/ass1 A/yourfolder/ass1/file1 A/yourfolder/ass1/file2

In this case you find that revision 9 is what you want.

2. use svn checkout to get the files you just deleted.

 $huangs 3 @ birkhoff: \sim / working \ svn \ checkout \ https://websvn.mcmaster.ca/se2aa4/yourfolder/ass 1 @ 9 \ ./ass 1 \ ./ass$

- A ass1/file1
- A ass1/file2

Checked out revision 9.

More Resources

TortoiseSVN: <u>http://tortoisesvn.tigris.org/</u> This is a graphical svn client for Windows.

Svn-book: <u>http://svnbook.red-bean.com/</u> This is a book for Subversion.