

Subversion (SVN) Quick Start

What is Subversion?

Subversion is a free/open source version control system. That is, Subversion manages files and directories, and the changes made to them, over time. This allows you to recover older versions of your data or examine the history of how your data changed. In this regard, many people think of a version control system as a sort of “time machine.”¹

For this course, Subversion will be used to distribute and collect assignments. It is important that you commit your work in progress to the server periodically, as this provides many advantages over keeping the only copy of your work on your personal computer. Instructors and their assistants will have access to the work you’ve saved on the server, without your having to directly provide them with a copy of your work. This will allow them to easily assist you should you have problems or questions.

Instructions for Mac OS X

Initialization

You will only need to perform these steps once.

1. Download and install svnX at:

<http://www.lachoseinteractive.net/en/community/subversion/svnx/download/>

2. Create a folder on your computer to hold your local working copies of assignments.

3. Launch svnX. If the “Repositories” window does not automatically open, select it from the “Window” menu.

4. In the “Repositories” window, click on the “+” button.

5. In the edit window, enter the following information:

Name: CS Assignments (this is a suggestion; it can be anything you like)

Path: <https://cs.fit.edu/smsvn/><tracks>

User: <tracks>

Pass: <password>

Substitute your TRACKS username (the portion before @my.fit.edu for your email address, e.g. “jsmith” for “jsmith@my.fit.edu”) and password for <tracks> and <password>

6. Double-click on the listing in the “Repositories” window to browse the repository.

7. In the window that opens (it should be titled with the name you provided in step 5), select the topmost (latest) item. Click on the “svn checkout” button.

8. A file dialog will open. Navigate to the folder you created in step 2, and click “Open”

¹ <http://svnbook.red-bean.com/en/1.5/svn.intro.whatis.html>

9. Your assignments will be downloaded to the local folder. They will be organized by term and course.

10. You will see your local folder now listed under the “Working Copies” window in svnX. You can access this window from the “Window” menu.

Committing Files

You will need to perform these steps whenever you have work you want to save to the server.

1. Launch svnX. If the “Working Copies” window does not automatically open, select it from the “Window” menu.
2. Double-click on the working copy created in step 10. of initialization to open the local browser. You may need to click on the “refresh” button on the window to bring it up to date.
3. You will see changes to your working copy listed. Files with an “M” in the left-most column are files which you’ve modified. Files with a “?” are files which you’ve added since the last commit.
4. Select all the new files (with a “?” in the leftmost column) and click on “Add”.
5. Select all the files (you can use ⌘-A) and click on “Commit”.
6. In the text window that appears, enter your commit message. It should describe the changes you’ve made in this revision. Click on “Commit” to send your changes to the repository.

Updating Your Working Copy

You will need to perform these steps whenever your instructor releases a new assignment.

1. Launch svnX. If the “Working Copies” window does not automatically open, select it from the “Window” menu.
2. Double-click on the working copy created in step 10. of initialization to open the local browser. You may need to click on the “refresh” button on the window to bring it up to date.
3. Click on the “Update” button. You will be asked to confirm the update.
4. If you would like to see which files were downloaded from the server to your computer, click on the “Show output” button.

Instructions for Windows

Initialization

You will only need to perform these steps once.

1. Download and install TortoiseSVN at:

<http://tortoisesvn.net/downloads.html>

You do not have to change any of the installation options; the default install will provide all that is needed.

2. Select where you want to place your working files. Right click inside this directory, and select “SVN Checkout”
3. A dialog will appear. Enter “https://cs.fit.edu/smsvn/<tracks>” for “URL of repository”. Substitute your TRACKS username (the portion before @my.fit.edu for your email address, eg ‘jsmith’ for ‘jsmith@my.fit.edu’) for <tracks>. Click “OK”.
4. You will be prompted for your TRACKS username and password. Enter them and click on “OK”.
5. Your assignments will be downloaded to the folder you selected. They will be organized by term and course.

Committing Files

You will need to perform these steps whenever you have work you want to save to the server.

1. Right-click on the working copy you created during initialization and select “SVN Commit...”
2. You will see a window with a text box, and a listing of changed and new files. Enter your commit message, which should describe the changes you’ve made to this revision, and check off any new files which you wish to add to the repository. Click on OK.
3. You will be prompted for your TRACKS username and password. Enter them and click on “OK”.

Updating Your Working Copy

You will need to perform these steps whenever your instructor releases a new assignment.

1. Right-click on the working copy you created during initialization and select “SVN Update”.
2. You will be prompted for your TRACKS username and password. Enter them and click on “OK”.
3. If you would like to see the files which were downloaded, click on the “Show log...” button.