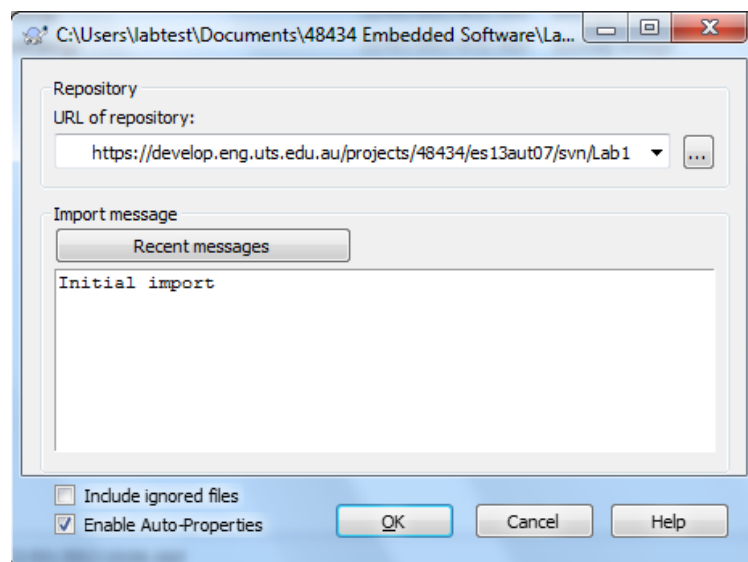# Tortoise SVN - Quick Reference Guide

To get started using Tortoise SVN, follow the steps below:

The Initial Import

1. Download `Lab1.zip` from the Embedded Software web site, and save it to a sensible and readily accessible location, such as:

   `H:\48434 Embedded Software`

2. Unzip `Lab1.zip` into a `Lab1` folder, and then delete `Lab1.zip`.

3. Right-click on the `Lab1` folder and choose `TortoiseSVN→Import…` from the pop-up menu.

4. In the `Import` dialog box, type the URL of your repository and add `/Lab1` to the end to create a new folder called `Lab1` in the repository. Fill in the import message. For example:
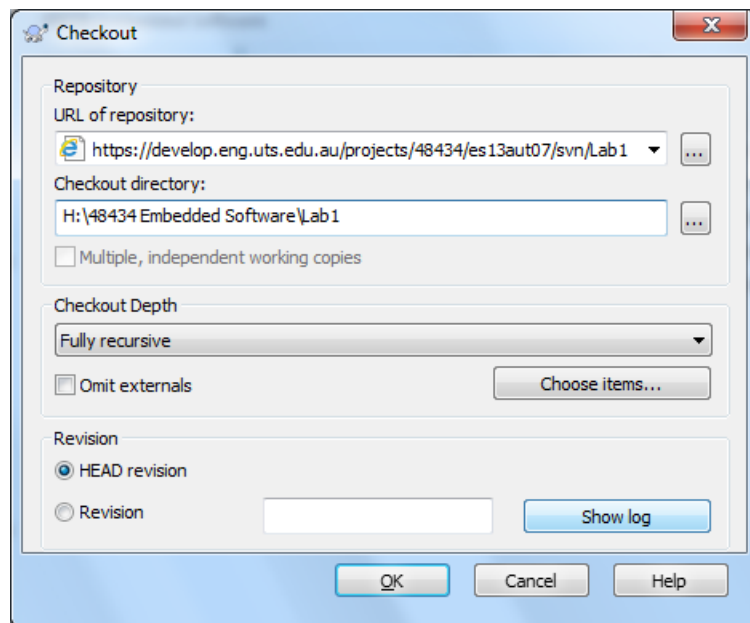

   Click `OK`.

5. When the authentication dialog box pops up, enter your Username, Password, and check "Save authentication". Click `OK`. Your `Lab1` folder will be imported into the repository. Click `OK`.
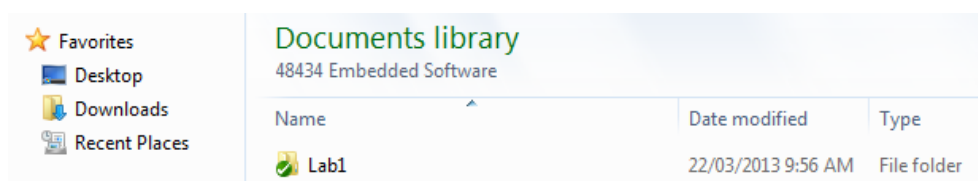
T.2

Checking out a Working Copy

To obtain a working copy you need to do a *checkout* from a repository.

1. Right-click on the `Lab1` folder and choose `SVN Checkout…`.

2. In the `Checkout` dialog box, type the URL of your repository, and add `/Lab1` to the end. Click the `...` button next to `Checkout directory:` and choose `H:\48434 Embedded Software\Lab1`. For example:
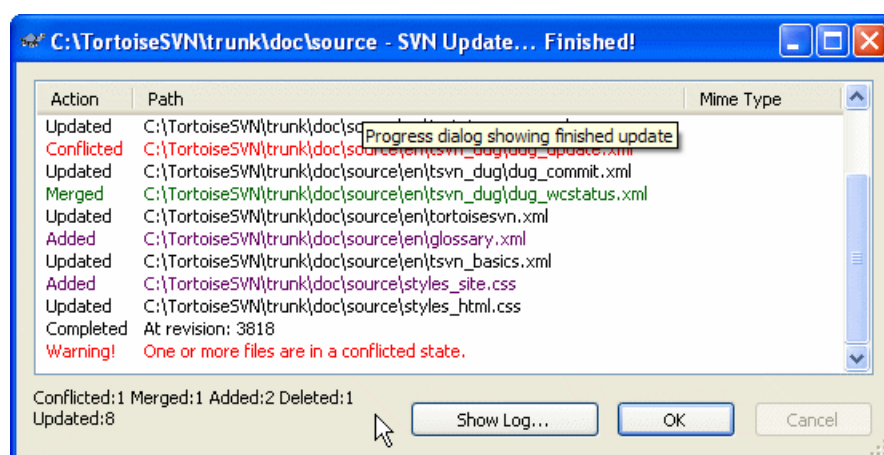

3. Click `OK`. A warning message will appear saying that the target folder is not empty, since we are creating a "working copy" over the original. Click `Yes`.

4. The repository will checkout over the existing folder and create a *version controlled working copy*. When the checkout operation is finished, click `OK`.

5. Windows Explorer will then update the file and folder icons to indicate their version status – in this case, up to date!

Updating

Periodically, you should ensure that changes done by others get incorporated into your local working copy. The process of getting changes from the server to your local copy is known as _updating_. Updating may be done on single files, a set of selected files, or recursively on entire directory hierarchies.

1. Select the files and/or directories you want, then right click and select
   `SVN Update`.

2. A window will pop up displaying the progress of the update as it runs.

Changes done by others will be merged into your files, keeping any changes you may have done to the same files. The repository is _not_ affected by an update.
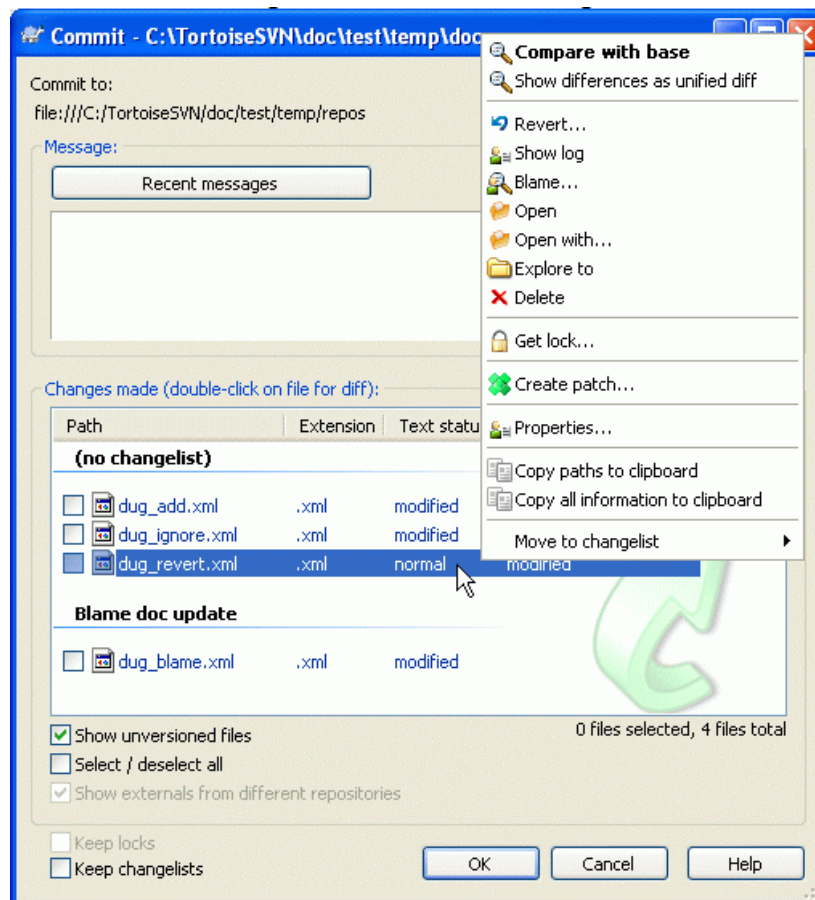
3. If you get any _conflicts_ during an update (this can happen if others changed the same lines in the same file as you did and those changes don't match) then the dialog shows those conflicts in red. You can **double click** on these lines to start the external merge tool to resolve the conflicts.

T.4

Committing

Sending the changes you made to your working copy to the repository is known as *committing* the changes. If your working copy is up to date and there are no conflicts, you are ready to commit your changes.

1. Select the files and/or directories you want to commit, then right click and select `SVN Commit…`.
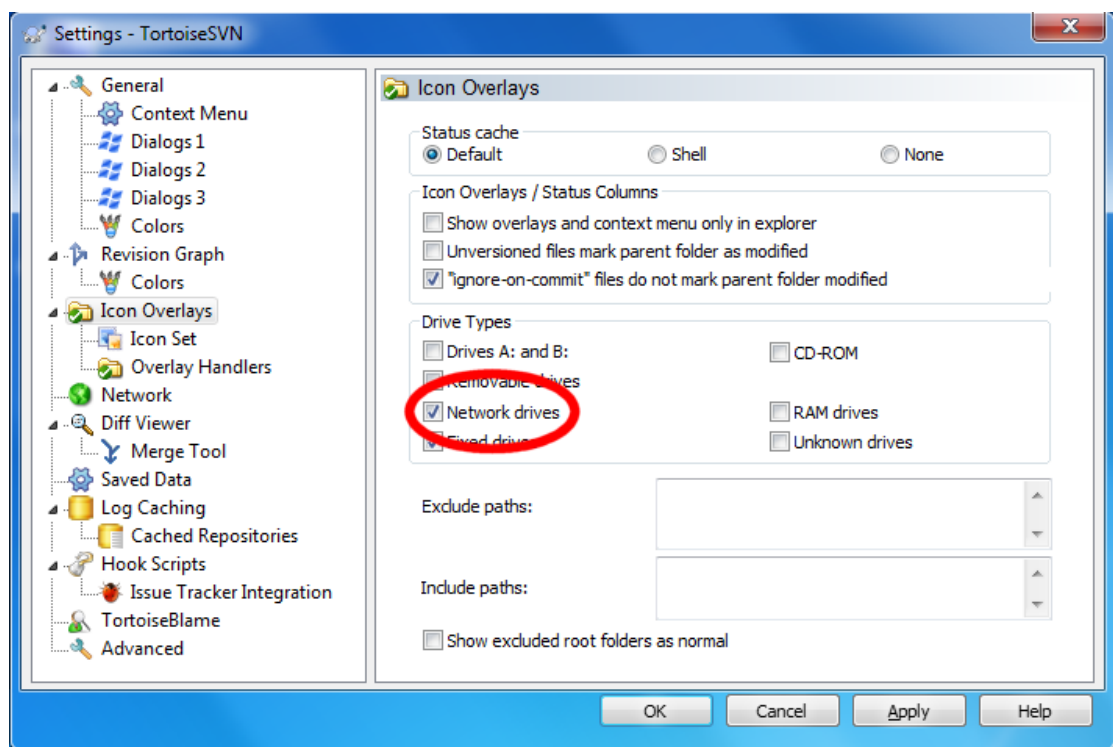

2. The commit dialog will show you every changed file, including added, deleted and unversioned files. **Double clicking** on any modified file in the commit dialog will launch the external diff tool to show your changes. The right-click context menu will give you more options.

3. In the `Message:` box, you should type detailed comments that document the changes made to your files since the last commit.

Settings

If you want to see the special Tortoise SVN icons in Windows Explorer on a network drive (such as in the lab), then you will need to adjust the settings.

1. Right-click in Windows Explorer and choose `TortoiseSVN→Settings` from the pop-up menu. A dialog box will be displayed for the settings.

2. In the left pane, choose "Icon Overlays". In the "Drive Types" group box, make sure there is a checkmark next to "Network drives".

3. Even though the setting is "permanent", to see the change after checking the box, you will have to log out and then back in.