

## Computer lab Numerical Algorithms

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Prof. Dr. M. Rumpf – B. Geihe, B. Heeren

### Introduction to Subversion

#### Subversion commands for Linux

|                |   |
|----------------|---|
| Checkout       | <code>svn co --username praktikum https://source-numod.ins.uni-bonn.de/webdav/praktWS1213/master [LocalFolder]</code><br>Here [LocalFolder] refers to the name of a local folder, which will be created. The password is given by: rjghb4 |
| Update         | <code>svn up</code><br>(call in the folder to be updated)   |
| current status | <code>svn st -u</code>  |
| view log file  | <code>svn log</code>  |
| view changes   | <code>svn diff modifiedFile</code>  |
| upload changes | <code>svn ci</code><br>(if you only want to commit certain files, state them explicitly; an editor is opened to enter a commit message, alternatively call:<br><code>svn ci modifiedFile -m "some message" )</code>                       |
| add file       | <code>svn add newFile</code>  |
| delete file    | <code>svn del wrongFile</code><br>(Caution! The file is also deleted locally!)  |
| Help!          | <code>svn help</code>   |

When calling “`svn st`” or “`svn up`” various symbols might appear in front of a filename:

- A *added*: file will be added to the repository at the next commit.
- D *deleted*: file will be removed from the repository at the next commit.
- M *modified*: changes will be transferred to the repository at the next commit.
- U *updated*: local copy has been updated.
- G *merged*: local changes have been merged with changes in the repository.
- C *conflict*: refers to a conflict that could not be solved automatically.  
Now inconsistent changes (i.e. local vs. global changes) are marked in the file separately and have to be corrected by hand. Afterwards call:  
`svn resolved conflictedFile`.
- ? This file is not under subversion control.

**Caution:** Subversion stores passwords by default. To avoid storing your password edit `~/.subversion/config` in the following way: `store-passwords = no`

## Using Subversion with Windows

- Step 1.** Install current version of TortoiseSVN from <http://tortoisesvn.net/downloads> and reboot your system.
- Step 2.** Create a directory where the code templates provided in the lab will be stored.
- Step 3.** Right-click on the folder and chose "SVN Checkout".
- Step 4.** Edit "URL of repository" by writing `https://source-numod.ins.uni-bonn.de/webdav/praktWS1213/master` and press "OK".

You can use the svn commands stated above by right-clicking on the corresponding file.