

The CLUMPY book

Version 1

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¹ for the entire CLUMPY team

Preface

The book is supposed to be of use for CLUMPY users and programmers. It is supposed to grow in time, as its content will grow. Comments and suggestions are highly welcome.

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Chapter 1

CLUMPY under SVN

The CLUMPY code is under revision control. The software used for revision control is SVN, also called "Subversion". The current chapter will address all you need to know about SVN in order to be able to use CLUMPY. For every new CLUMPY user this chapter is the perfect entry point to this book ("new" means "new since CLUMPY went under SVN").

Note: The sign # will denote the command prompt on your machine.

1.1 SVN basics

SVN stores the complete CLUMPY code, consisting of different files, in a central, shared *repository*. Any changes made to the code by programmers, are - after testing and debugging - stored as a new revision of the code in the repository. In the SVN terminology, a new revision is *committed* to the repository.

Once a new revision is in the repository, it can be immediately accessed by everyone, who has permission to the repository.

1.2 Checking out your working copy of CLUMPY

In order to be able to use the CLUMPY code, you will need to check out your own, private, local version of the code, called a *working copy* from the repository. Once you have your own working copy, you can do whatever you wish: play/work with the code, change things, etc. By doing so, you do not change anything in the central repository. You also do not disturb other users (all of them have their own working copies!). So, relax.

But first, check out your working copy from the repository.

Important note: Please follow the steps described here accurately. Due to security reasons, you have to take these steps. However, we've already made things pretty simple for you.

Check, whether you have SVN installed on your (Linux/UNIX) machine

```
#which svn
```

and whether you can see `/home67/` on you machine. If yes (both), skip the next step 'log in on newton', and continue with 'Change to your home directory'. Otherwise, continue here.

If SVN is not yet available on your machine (Brian will install SVN subsequently on alecto, tisiphone, and Moshe's Windows machine), please log in on newton. Also, when you cannot see `/home67/`, you will have to log in on newton

```
#ssh -l username newton.pa.uky.edu
```

Change to your home directory

```
#cd
```

Create a directory, where your private working copy will be created by SVN. Any directory inside of your home directory is possible. For instance, as a programmer, I have a directory `~/development/workingcopies/`, where all the codes under SVN control reside (i.e. my working copies of the codes!).

For this tutorial, let's assume you create a directory called `myworkingcopy/`

```
#mkdir myworkingcopy
```

Change to `myworkingcopy/`

```
#cd myworkingcopy/
```

Now, check out your working copy of CLUMPY from SVN

```
#svn checkout file:///home67/svn/clumpy
```

Watch SVN working...

While checking out your working copy, it reports all the filenames subsequently. Every file (and directory) is marked with a preceding `A`. That marks the files as being `[A]`dded to your working copy.

The whole operations end with a message `Checked out revision XX`, where `XX` is the number of the latest revision in the repository.

You will realize, that a directory `clumpy/` was created underneath `~/myworkingcopy/`, and that `~/myworkingcopy/clumpy/` contains the subdirectories

```
#dir  
.svn/  
branches/  
tags/  
trunk/
```

Never touch `.svn/` (with one exception, see section (1.3)), it exists for SVN's internal use!

The CLUMPY code itself is inside of `~/myworkingcopy/clumpy/trunk/`. Change to it

```
#cd ~/myworkingcopy/clumpy/trunk
```

Now, run the configuration script. It will create some user files for you, that are necessary to run CLUMPY, but are not under SVN revision control.

```
#!/configure
```

As a last step, read the file `README.first` and follow the instructions therein: to define your data output directory, and to compile the code.

If you are a CLUMPY user, you are ready to play/work with CLUMPY now. Congratulations!

If you are CLUMPY programmer, you're not ready yet. Go on and read section (1.4).

1.3 Deleting a working copy

You may delete your own working copy at any time. Whenever you wish, or whenever it becomes necessary to do so, go inside of your working copy directory

```
#cd ~/myworkingcopy
```

and delete the subdirectory `clumpy/` and all of its contents completely. Mind the hidden subdirectory `clumpy/.svn/`, delete it too!

That's it, your working copy is gone, and it's like it has never existed.

1.4 Notes for CLUMPY programmers

Coming soon...

Appendix A

References

The SVN book <http://svnbook.red-bean.com/>

