

PANDA-MVD: Svn for the TDR

Ralf Kliemt

HISKP, Uni Bonn

Torino, 23.05.2011



① SVN

② LaTeX

③ Remarks

What is SVN?

Subversion (SVN) is a version controlling system

- Central storage/distribution place
- Transparent tracking of changes
- Merging mechanism for multiple editors per file

What is SVN?

Subversion (SVN) is a version controlling system

- Central storage/distribution place
- Transparent tracking of changes
- Merging mechanism for multiple editors per file

Hints:

- SVN Homepage: <http://subversion.apache.org>
- SVN Help Book: <http://svnbook.red-bean.com>
- Please use a version higher than 1.5
- Graphical clients are available (e.g. SmartSvn)

Usage of SVN

First:

Get your working copy:

```
svn checkout svn+ssh://<user>@svn02.hiskp.uni-bonn.de/home/svn/panda-mvd
```

SmartSvn

Steps

> Location

Details

Name

Add Repository Profile

Location

Select the protocol used for accessing the repository, provide the SVN server name and the path to the repository.

Protocol: ☐ HTTP ☐ HTTPS ☐ SVN ☒ SVN+SSH ☒ Prepend SSH login name to host (user@host)

Server Name:

Repository Path:

Note: this usually is not the absolute path of the repository!

Server Port: ☒ Default ☐ Non-Default:

Usage of SVN

First:

Get your working copy:

```
svn checkout svn+ssh://<user>@svn02.hiskp.uni-bonn.de/home/svn/panda-mvd
```

Typical working cycle:

Update your working copy:	<code>svn update</code>
Edit & manage files:	<code>svn add, delete, copy, move</code>
Examine your changes:	<code>svn status, diff, info</code>
Possibly undo some changes:	<code>svn revert</code>
Merge & resolve conflicts:	<code>svn update, resolve</code>
Commit your changes:	<code>svn commit</code>

Solving conflicts

When updating or viewing the status you might get (see svnbook.red-bean.com):

```
M  bar.tex      # the content in bar.tex has local modifications
?  foo.tex      # svn doesn't manage foo.tex
!  some_dir     # svn manages this, but it's either missing or incomplete
D  fish.tex     # this file is scheduled for deletion
A  bloo.tex     # this file is scheduled for addition
G  dodo.tex     # update has merged local and remote changes
C  lump.tex     # this file has conflicts from an update
```


A conflict in a file would look like this: →

To solve:

edit the file to your preferred state.

run `svn resolved <file>`

commit the change

\$ cat sandwich.txt

```
Top piece of bread
Mayonnaise
Lettuce
Tomato
Provolone
<<<<<<< .mine
Salami
Mortadella
Prosciutto
=====
Sauerkraut
Grilled Chicken
>>>>>>> .r2
Creole Mustard
Bottom piece of
bread
```

A conflict in a file would look like this: →

To solve:

edit the file to your preferred state.

run `svn resolved <file>`

commit the change

If changes were made in the repository you cannot commit:

```
$ svn commit --message "Add another rule"
```

Sending rules.txt

```
svn: Commit failed (details follow):
```

```
svn: Out of date: 'rules.txt' in  
transaction 'g'
```

→Run svn update

```
$ cat sandwich.txt
```

```
Top piece of bread  
Mayonnaise  
Lettuce  
Tomato  
Provolone  
<<<<<<< .mine  
Salami  
Mortadella  
Prosciutto  
=====  
Sauerkraut  
Grilled Chicken  
>>>>>>> .r2  
Creole Mustard  
Bottom piece of  
bread
```

LaTeX

Operating Systems

You need an installation with `pdflatex` and `bibtex`.

- Linux: Most distributions have a LaTeX
- Windows: There is MiKTeX and TexLive
- Mac: Use MacTeX or TexLive

Makefile

To create the pdf file type `make` in the `tdr` folder (Linux/Mac) or execute `build.bat` (Win). It runs `pdflatex` and `bibtex`.

Editors

You can use any editor. All *.tex files are plain text.

Some Editors provide typesetting & previews, e.g:

- Texmaker (Win, Mac, Linux) www.xm1math.net/texmaker
- TeXnicCenter (Win) www.texniccenter.org
- TeXShop (Mac) <http://pages.uoregon.edu/koch/texshop>
- Kile (Linux/KDE) <http://kile.sourceforge.net>

One of the many LaTeX tutorials on the web:

<http://sunsite.informatik.rwth-aachen.de/>

[ftp/pub/mirror/ctan/info/lshort/english/lshort.pdf](http://pub/mirror/ctan/info/lshort/english/lshort.pdf)

Definitions

There are predefined commands to make life easier. You can read them in `tldr/sty`:

`panda_commands.tex`:

Abbreviations of commands

`panda_detector.tex`:

Default names for all the detector components
(e.g. `\panda` makes $\overline{\text{PANDA}}$)

`panda_symbols.tex`:

Symbols (e.g. `\Lambda\overline{\Lambda}` becomes $\Lambda\overline{\Lambda}$)

Remarks

Policy for checking in:

- .tex files and pictures only
- Has to translate to a pdf
- Check with `svn status` if all new files are under svn control
- Don't forget adding references in the `tdr/*.bib` files

If you need an account or help, feel free to contact me.

`kliemt<at>hiskp<dot>uni-bonn.de`

Weblinks

SVN Homepage: **<http://subversion.apache.org>**

SmartSVN: **www.syntevo.com/smartsvn**

LaTeX:

- **<http://en.wikipedia.org/wiki/LaTeX>**
- **<http://en.wikipedia.org/wiki/MiKTeX>**
- **<http://en.wikipedia.org/wiki/MacTeX>**

LaTeX tutorial: **<http://sunsite.informatik.rwth-aachen.de/ftp/pub/mirror/ctan/info/lshort/english/lshort.pdf>**

Thanks for listening.