Svn

Contents

1 Introduction

SVN is use to share sources by:

- boudry
- gastaldi
- ggrenier
- gvouters
- nroche
- rcornat
- combaret
- muriel
- Check out sources:

```
All:    $ svn co svn+ssh://svn-calice/calice (enter password twice)
Tagged: $ svn co svn+ssh://svn-calice/calice/online-sw/tags/libLDA-0.0
Last:   $ svn co svn+ssh://svn-calice/calice/online-sw/trunk/libLDA
Branche:$ svn co svn+ssh://svn-calice/calice/online-sw/branches/libLDA-SDHCAL-Cern-2011
```

- Update to last version:

```
$ svn update
$ svn info
Last Changed Rev: 1828
```

- Check local modifications:

```
$ svn status
$ svn diff {PATH}
Last Changed Rev: 1828
```

- Revert files:

```
$ svn revert {PATH}
```

- Commit changes:

```
$ svn add {PATH}
$ svn commit -m "{TEXT}"
```

- Update to an older revision:

```
$ svn info
Last Changed Rev: 1828
$ svn update -r 1800
```

- Tag a version:

```
$ svn cp trunk/libLDA tags/libLDA-0.2
A         tags/libLDA-0.2
$ svn commit
```

- Make a branch:

```
svn cp libLDA/ ~/svn/calice/online-sw/branches/libLDA-SDHCAL-Cern-2011
A         /home/nroche/svn/calice/online-sw/branches/libLDA-SDHCAL-Cern-2011
$ cd  ~/svn/calice/online-sw/branches/libLDA-SDHCAL-Cern-2011
$ svn commit -m "Création d'une branche à partir du code \
  se trouvant sur lyosdhcal4 vendredi 23/09/2011 à 10h"
```

- Erase a bad commit in trunk:

```
$ cd trunk/...
$ svn merge -r 2118:2116 .
$ svn commit
$ svn update
```

- Move a bad commit in trunk to an existing branch:

```
$ cd branches/...
$ svn merge -r 2109:2118 ../../trunk/libLDA
tf...
$ diff + cp
$ svn commit
$ svn update
```

2 Using svn client

2.1 Using command Lines

`$ svn ...`

- `$ svn info`
- `$ svn status`
- `$ svn diff --diff-cmd /usr/bin/diff -x -q`
- `$ svn diff`
- `$ svn update`

- `$ svn revert {PATH}`
- `$ svn add {PATH}`
- `$ svn del {PATH}`
- `$ svn commit -m "{TEXT}"`
- `$ svn mv {PATH} {PATH}`
- `$ svn mkdir {DIR}`
- `$ svn rmdir {DIR}`
- `$ svn cp {PATH}`
- `$ svn proplist`
- `$ svn propget`
- `$ svn propset`
- SVN use tags/branches that simply are copies of the main directory.
- SVN use FSFS BD (recommanded) or Berkley DB.

2.2 Using "svn-status mode" under emacs

`M-x svn-status`

C-h m	Display the keys binding
g	status update
U	update
a	add file
A	add file recursively
c	commit (C-x cc)
m	mark file
u	unmark file

2.3 Browsing the forge

diff on the forge: https://forge.in2p3.fr/projects/calice/repository/revisions/1609/diff

```
$ svn diff -r BASE:1606 | diffstat
$ svn diff -r BASE:1606 > myPatch
$ patch -p0 < myPatch   (see man patch)
```

3 Configuration

There is help here

For read-write access people must create there own key and send the public one. Next we must provide it to Loïc Tortay with a login and precise it is for Calice project.

Next, we can test the key doing:

```
$ ssh svn-calice
```

Here is a link to add building keys (there are english explanations too on the same web site).

3.1 Read Only access

For read-only access send the private key with instructions. Remind that consulation is granted via viewvc.

We need to build the *~/.ssh/config* file:

```
Host svn-calice-group svn-calice
        Hostname svn.in2p3.fr
        User calice
        IdentityFile ~/.ssh/id_rsa_group_ro_cvs-in2p3-fr
```

3.2 Read/Write from personnal account

We need to build the *~/.ssh/config* file:

```
Host svn-calice
    Hostname svn.in2p3.fr
    User nroche
    PasswordAuthentication no
    IdentityFile ~/.ssh/svnNRoche_dsa
    IdentitiesOnly yes
    RSAAuthentication yes
    PubkeyAuthentication yes
    ForwardX11 no
    ForwardAgent no
```

Finaly, we can use SVN:

```
<< ubuntu
# aptitude install subversion
==
# yum install subversion
>> slc
$ svn co svn+ssh://svn-calice/calice (enter password twice)
```

3.3 Read/Write from shared calice account

Provide theses files:

```
$ find /home/calice/Applications/nroche/ -type f
/home/calice/Applications/nroche/etc/ssh_config
/home/calice/Applications/nroche/etc/.ssh/id_rsa_nroche_cvs-in2p3-fr
/home/calice/Applications/nroche/bin/ssh
```

- *~/Applications/nroche/etc/ssh_config* file:

  ```
  Host svn-calice
  Hostname svn.in2p3.fr
  User nroche
  IdentityFile ~/Applications/nroche/etc/.ssh/id_rsa_nroche_cvs-in2p3-fr
          IdentitiesOnly yes
  ```

- *~/Applications/nroche/bin/ssh* file:

  ```
  #! /bin/sh
  exec /usr/bin/ssh -F $HOME/Applications/nroche/etc/ssh_config "$@"
  ```

Provide also theses files for confort:

```
$ find /home/calice/Desktop/outils\ svn/ -type f
/home/calice/Desktop/outils svn/svn_gastaldi.desktop
/home/calice/Desktop/outils svn/svn_nroche.desktop
/home/calice/Desktop/outils svn/README.txt
```

- */Desktop/outils svn/svn_nroche.desktop* file:

```
[Desktop Entry]
Version=1.0
Type=Application
Terminal=false
Icon[en_US]=gnome-network-properties
Name[en_US]=svn terminal nroche
Exec=sh -c 'cd "$HOME/Sources/calice" && \
env "PATH=$HOME/Applications/nroche/bin:$PATH" \
EDITOR=/usr/bin/gedit \
/usr/bin/gnome-terminal --profile=nroche'
Name=nroche svn
Comment=Terminal to issue svn commits for nroche
Icon=gnome-network-properties
```

Now we can test:

```
$ PATH=$HOME/Applications/nroche/bin:$PATH
$ ssh -v svn-calice

debug1: Reading configuration data /home/calice/Applications/nroche/etc/ssh_config
debug1: identity file /home/calice/Applications/nroche/etc/.ssh/id_rsa_nroche_cvs-in2p3-fr type -1
debug1: Trying private key: /home/calice/Applications/nroche/etc/.ssh/id_rsa_nroche_cvs-in2p3-fr
Enter passphrase for key '/home/calice/Applications/nroche/etc/.ssh/id_rsa_nroche_cvs-in2p3-fr':
```