Git SVN HowTo

Please note: SVN updates (for all versions of Tiki) will stop in January 2023 when Tiki18 reaches end of life, so you should get your updates from Git

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Initialize local Git - SVN repo

Lets say we want to test and work with Tiki branch "users" first. Make new dir called users and cd into it: `mkdir users; cd users`

Now we `git svn init` the branch we want (the users branch) in the current dir with specified SF.net username:

```
[luci@vm5163 users]$ git svn init https://svn.code.sf.net/p/tikiwiki/code/ . --username=luciash --branches=users
```

Fetch all from SVN

Prepare lot of time and patience for this command, really:

```
[luci@vm5163 users]$ git svn fetch --no-follow-parent
```

This will take so loooooong time usually as it needs to map all the commits history to our local Git repo! Be patient or give up here! ;)

Getting list of local Git branches created

```
[luci@vm5163 users]$ git branch -r
```

Editing and commiting to local Git repo

Edit a test file:

```
[luci@vm5163 users]$ vim test.txt
```

Lets put there something:

```
This change was commited using the follwoing git svn command: git svn dcommit
```

```
[luci@vm5163 users]$ git commit -m "Test for git svn dcommit" .
[detached HEAD 8133175] Test for git svn dcommit
 Author: luciash <luci@...i.org>
 Committer: luci <luci@...s.net>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:

    git config --global user.name "Your Name"
    git config --global user.email you@example.com

If the identity used for this commit is wrong, you can fix it with:

    git commit --amend --author='Your Name <you@example.com>'

 1 files changed, 1 insertions(+), 0 deletions(-)
```

OK, lets amend that: luci@vm5163 users$ git commit ~~amend~~ author='luciash <luci@...i.org>'

In case you want to avoid the "configured automatically based on your username and hostname" message, do as they say:

```
[luci@vm5163 users]$ git config --global user.name "luciash d' being"
[luci@vm5163 users]$ git config --global user.email g...@...h.cz
```

Just check the status

```
[luci@vm5163 users]$ git status
# Not currently on any branch.
nothing to commit (working directory clean)
```

All looks clean. Just ignore the "Not currently on any branch" message. We are in fact still on the "luci" branch (more on switching branches later below).

To make sure there were no changes on the remote SVN in the meantime we made our local commits: {CODE()}
luci@vm5163 users$ git svn rebase --username=luciash
Current branch HEAD is up to date.

Using Git SVN dcommit

Now if we want to get our local changes we just made in Git to the central SVN repo, we need to use the `git svn dcommit` command:

```
[luci@vm5163 users]$ git svn dcommit --username=luciash
Committing to https://svn.code.sf.net/p/tikiwiki/code/users/luci ...
Authentication realm: <https://svn.code.sf.net:443> SourceForge User
Password for 'luciash':
        M       test.txt
Committed r59772
        M       test.txt
r59772 = bfb561315c58b3f7d015acbaf43b6536acee2aec (refs/remotes/luci)
No changes between current HEAD and refs/remotes/luci
Resetting to the latest refs/remotes/luci
```

```
[luci@vm5163 users]$ git svn rebase
Current branch HEAD is up to date.
```

Further examples

Fix something and commit that to SVN

Ah, there was a typo! Lets fix the typo:

```
[luci@vm5163 users]$ vim test.txt
```

See the diff:

```
[luci@vm5163 users]$ git diff
diff --git a/test.txt b/test.txt
index 0210543..dd98952 100644
--- a/test.txt
+++ b/test.txt
@@ -1 +1 @@
-This change was commited using the follwoing git svn command: git svn dcommit
+This change was commited using the following git svn command: git svn dcommit
```

Looks good, lets commit that to our local Git repo:

```
[luci@vm5163 users]$ git commit -m "[FIX] typo" .
[detached HEAD 91e929a] [FIX] typo
 1 files changed, 1 insertions(+), 1 deletions(-)
```

Then commit it to the central SVN repo using `git svn dcommit`:

```
[luci@vm5163 users]$ git svn dcommit --username=luciash
Committing to https://svn.code.sf.net/p/tikiwiki/code/users/luci ...
Authentication realm: <https://svn.code.sf.net:443> SourceForge User
```

```
Password for 'luciash':
        M       test.txt
Committed r60458
RA layer request failed: OPTIONS of 'https://svn.code.sf.net/p/tikiwiki/code': Could not
resolve hostname `svn.code.sf.net': Temporary failure in name resolution
(https://svn.code.sf.net) at /usr/libexec/git-core/git-svn line 2295
```

(the "RA layer request failed" error message seems safe to be ignored - temporary glitch?)

Then `git svn rebase` to make sure we are in "sync":

```
[luci@vm5163 users]$ git svn rebase
        M       test.txt
r60458 = 9f6a06bb109e68593a612d46a515583d3798bd73 (refs/remotes/luci)
First, rewinding head to replay your work on top of it...
Nothing to do.
```

Re-running the same command again will now say:

```
[luci@vm5163 users]$ git svn rebase
Current branch HEAD is up to date.
```

Switching branches

Checkout another local Git branch:

```
[luci@vm5163 users]$ git checkout cartograf
Previous HEAD position was 9f6a06b... [FIX] typo
HEAD is now at bd71231... Rename branch folder names to simplify
```

Rebase to get the latest changes from SVN into that branch:

```
[luci@vm5163 users]$ git svn rebase
        M       cartograf_tiki15/themes/CartoGraf/css/CartoGraf.css
r60128 = 508aa68ea5a221759e9b895adb82689a00e0f4cc (refs/remotes/cartograf)
        M       cartograf_tiki15/themes/CartoGraf/css/CartoGraf.css
r60129 = bf4781123b7de3c3c693547ff77402f86c9e2853 (refs/remotes/cartograf)
        M       cartograf_tiki15/themes/CartoGraf/css/CartoGraf.css
r60134 = bfe082cb8d2aeb039015a3607cdb74f7762aa554 (refs/remotes/cartograf)
        M       cartograf_tiki15/themes/CartoGraf/css/CartoGraf.css
r60383 = 6aa56731659088974ecd5f0e7535f2db7174f98d (refs/remotes/cartograf)
First, rewinding head to replay your work on top of it...
Fast-forwarded HEAD to refs/remotes/cartograf.
```

Switch local branch back to luci:

```
[luci@vm5163 users]$ git checkout luci
Previous HEAD position was 6aa5673... [FIX] paragraphs and uls on wiki pages were hidden
HEAD is now at 9f6a06b... [FIX] typo
```

Fetching other branches, like 16.x

Fetching all branches **would take ages**, so lets try just with 16.x:
`mkdir branches; mkdir branches/16.x; cd branches/16.x`

```
[luci@vm5163 16.x]$ git svn init https://svn.code.sf.net/p/tikiwiki/code/branches . --branches=16.x
Initialized empty Git repository in /home/luci/Devel/Tiki/branches/16.x/.git/
[luci@vm5163 16.x]$ git svn fetch --no-follow-parent
W: Ignoring error from SVN, path probably does not exist: (160013): Filesystem has no item: File not found: revision 100, path '/branches/16.x'
W: Do not be alarmed at the above message git-svn is just searching aggressively for old history.
This may take a while on large repositories
Checked through r9000
```

The last line "Checked through r..." changes dynamically. Now pray it does not fail and wait for it... ;)

Don't panic if it looks like it does nothing but checking. It will start to match things around revision r59800 or so and output it on your terminal then.

It should finally end up with something like this:

```
Checked out HEAD:
  https://svn.code.sf.net/p/tikiwiki/code/branches/16.x/lib r60476
```

Resources

There are some resources but all of them are a bit outdated:

- https://maymay.net/blog/2009/02/24/how-to-use-git-svn-as-the-only-subversion-client-youll-need/
- https://www.viget.com/articles/effectively-using-git-with-subversion (from 2008)
- http://flavio.castelli.name/2007/09/04/howto_use_git_with_svn/

Aliases

git-svn | git-svn howto