

Merging branches and solving conflicts

check-list:

commit.

or merge ...

olve conflicts (if any).

ite merge changelog.

commit.

IMPORTANT

ALWAYS commit
just before and after merging!

ct check-list:

le myfile has a conflict

> myfile.BASE: before divergence

> myfile.THIS: local version

> myfile.OTHER: from other tree

iff3 myfile.BASE myfile.THIS

myfile.OTHER # One line only

ve result as myfile.

r resolve myfile

→ removes files created at step 1!

IMPORTANT

If *myfile* does not exist when typing
bzip resolved, it will automatically
be marked as *removed* by bzip.

Useful addresses

Abinit Forge

bzip+ssh://archives.abinit.org/abinit/

↪ <developer>/<branch>/

*All of the URL should be typed at once (one line only, no
space).*

Abinit Website - Developer's Corner

<http://www.abinit.org/developers/>

Reference information for developers.

Abinit Forums

<http://forum.abinit.org/>

*All new committers have to ask to be added to the
"Committers" group.*

Bazaar Website

<http://bazaar-vcs.org/>

Home page of the Bazaar Version Control System.

Mailing lists

Announcements

announce@abinit.org

*Low-traffic list for important announcements about
Abinit.*

Committer List

gnuarch@abinit.org

*For developers having an access to the Abinit Forge
(restricted).*

Need help?

To get help on all Bazaar commands, just remember
bzip help.

ABINIT FORGE



Quick reference for committers

Read this first

The Abinit website contains a section dedicated to Bazaar. Please read the documents located therein carefully (URL: one line, no space).

```
http://www.abinit.org/developers/  
↪ dev-environment/bazaar/
```

Structure of the Abinit Forge

Full URL of a branch (one line, no space):

```
bzr+ssh://forge.abinit.org/abinit/  
↪ <repository>/<branch>/
```

Repository name: *trunk*, or committer login.

Branch names:

- x.y.z-private
- x.y.z-public
- x.y.z-training

x: major version number (era)
y: minor version number (development cycle)
z: micro version number (patch level)

The *private* branch is where all developments go.
The *public* branch contains what is merged into *trunk*.
The *training* branch is there for learning, and is created for beginners and tutors only.

BEFORE ACCESSING THE FORGE

```
export EDITOR="/path/to/my/editor" (BASH)  
in $HOME/.bashrc
```

or

```
setenv EDITOR "/path/to/my/editor" (CSH)  
in $HOME/.cshrc
```

Useful commands

bzr ...	Result
help	Get help
info	Get source tree info
status	Get status report

Working with branches (recommended)

A *branch* is an autonomous copy of the source code. All history is kept locally, except when explicitly *published* by the committer.

Action	Command
Get	bzr branch url [local_dir]
Sync	bzr pull [url]
Publish	bzr push [url]
Off-line	bzr commit

Typical use: decentralized development.

If the working tree is empty, run `bzr checkout` from within. If it is inconsistent or outdated, run `bzr update` from within.

Public branches can and should only be synchronized with private ones by using the `~abinit/extras/bzr_helpers/bzr-publish` script from already-pushed private branches.

Working with checkouts

A *checkout* is a branch, the history of which is kept on the Forge. It can however be used off-line temporarily.

Action	Command
Get	bzr checkout url [local_dir]
Sync	bzr update
Publish	bzr commit
Off-line	bzr commit --local

Typical use: fast network connections.

Writing changelogs

Template:

One short summary line (no trailing

* dir1/sub1/file1: Some changes. Ma
full sentences.

* dir2/sub2/file2,dir3/sub3/file3:
other changes.

* dir4/sub4/file4: Related changes
blank line before).

* Additional notes and issues.

GNU changelog format: please make sure th
lines are < 80 characters and start at the first co
For a complete reference (one-line URL, no spa

```
http://www.gnu.org/prep/standard  
↪ html_node/Change-Logs.html
```

Committing

Check-list:

1. `bzr status`
2. Process files marked as unknown.
Go back to 1 until no file is mar
as unknown.
3. Write changelog (see above).
4. `bzr commit --strict [-F logfile]`
Use `-F` option if your changelog i
in a file.
5. Push at least once a day.

NOTE

Pushing to a public branch triggers heav
processes on various computers. Please us
your private branch as much as possible.