

# Git With Other Default Branch

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Sometimes the default branch name is not the name you want. However this branch name is hard-coded into `git`. One way to circumvent the usage of the hard-coded default branch, is to create a virtual new branch **before** the first commit.

When a new `git` repository is created the `HEAD` file is at that moment a pointer to the (virtual) default branch. One can easily find out with `cat` to what it points. The trick is to change the pointer for `HEAD` **before** the first commit and therefore before the default branch exists and making the new virtual first branch the default branch.

For all steps we assume a new repository was created similar to this approach.

```
cd /tmp
mkdir test
cd test
git init
```

( VS;PR ) Now the **very short** process to create a git repository with a different default branch, without explanations, so **please read** it.

```
cd /tmp
mkdir test
```

```
cd test

git init

git checkout --orphan main
```

( ATL ; DR ) The next example is basically (almost) the same, but include some commands to prove it and explanations on what to expect.

```
cd /tmp

mkdir test

cd test

git init                # HEAD points to non existing ref:
  ↳ refs/heads/master

cat .git/HEAD           # Should give ref: refs/heads/master

ls .git/refs/heads      # Should give nothing

git checkout --orphan main # HEAD points to non existing ref:
  ↳ refs/heads/main

cat .git/HEAD           # Should give ref: refs/heads/main

ls .git/refs/heads      # Should give nothing (will change after commit)
```

( TL ; DR ) And finally the following session shows what happens, if there is a first commit to the repository, including the output of all commands.

```
cd /tmp

mkdir test

cd test

git init                # HEAD points to non existing ref:
  ↳ refs/heads/master
Initialized empty Git repository in /tmp/test/.git/
```

```
cat .git/HEAD          # Should give ref: refs/heads/master
ref: refs/heads/master

ls .git/refs/heads     # Should give nothing

git checkout --orphan main # HEAD points to non existing ref:
  ↳ refs/heads/main
Switched to a new branch 'main'

cat .git/HEAD          # Should give ref: refs/heads/main
ref: refs/heads/main

ls .git/refs/heads     # Should give nothing (will change after commit)

touch README.md        # Will create the file README.md

git add README.md       # Make the file known to git

                        # Create a commit and in unison the new branch
                        # under a non default name

git commit -m init README.md
[main (root-commit) 9fdf194] init
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 README.md

cat .git/HEAD          # Should give ref: refs/heads/main
ref: refs/heads/main

ls .git/refs/heads     # Should give main
main
```

As one can see `ls .git/refs/heads` now shows that the new branch came into existence.

## 1 History

| Version | Date       | Notes           |
|---------|------------|-----------------|
| 0.1.0   | 2022-07-15 | Initial release |

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