

Git Quick Guide — Push & Pull (1-pager)

Prereqs (one-time per machine)

- Install Git: `https://git-scm.com` (check: ``git --version``)
- Identify yourself:
`git config --global user.name "Your Name"`
`git config --global user.email "you@example.com"`
- (Optional) Default branch name:
`git config --global init.defaultBranch main`

Get the repo (first time only)

```
git clone <repo-url>
cd <repo-folder>
```

Pull latest changes (stay current)

```
# Update main
git fetch origin
git switch main
git pull --rebase origin main
```

Update your feature branch with latest main

```
git fetch origin
git switch <your-branch>
git rebase origin/main      # or: git merge origin/main
```

Make changes

```
# edit files...
git status          # see what changed
```

Commit & push your work

```
git add -A          # or: git add <file1> <file2>
git commit -m "Clear, short message"
# First push of a new branch:
git push -u origin <your-branch>
# Afterwards (or on main):
git push origin HEAD
```

Create a branch (recommended for new work)

```
git switch -c feature/short-topic  # new branch from current branch
# Push it and open a PR on GitHub
```

Check remotes

```
git remote -v          # verify origin URL (HTTPS or SSH)
```

Resolve common issues

- Rejected (non-fast-forward) on push:
`git pull --rebase origin <current-branch>`
resolve conflicts, then:
`git push origin HEAD`
- Merge/rebase conflicts:
open files, fix conflict markers `<<<<<< ===== >>>>>>`
`git add <fixed-files>`
`git rebase --continue` # or: `git merge --continue`
If you need to start over:
`git rebase --abort`
- Detached HEAD (accidentally checked out a commit):
`git switch <your-branch>`
- Stashed changes (if you used stash):
`git stash list`

...(truncated to keep this a 1-pager)...