Git Commands Cheat Sheet - DevOps Focus

Setup & Config

git config --global user.name "Max"
git config --global user.email "max@example.com"

Repository Basics

git init # Initialize a new repo
git clone URL # Clone remote repo

Staging & Committing

git status # Show changed files
git add file # Add specific file
git add . # Add all changes
git commit -m "Message" # Commit changes

Branches

git branch # List branches
git branch new-feature # Create branch
git checkout new-feature # Switch branch
git checkout -b hotfix # Create & switch
git merge new-feature # Merge into current branch

Remote Repositories

git remote -v # List remotes
git push origin main # Push branch
git pull origin main # Pull latest changes
git fetch origin # Fetch but don't merge

Undoing Changes

git reset file # Unstage a file
git checkout -- file # Discard changes
git revert commit_id # Undo commit safely
git reset --hard commit_id # Hard reset (careful!)

Logs & History

git log # Commit history
git log --oneline # Compact view
git diff # Show changes
git blame file # Who changed each line

Tagging

```
git tag v1.0 # Create tag
git push origin v1.0 # Push tag to remote
```

Stash (Temporary Save)

```
git stash # Save uncommitted changes
git stash apply # Reapply stashed changes
```

Collaboration & Rebase

```
git pull --rebase origin main # Rebase with main
git rebase -i HEAD~3 # Interactive rebase (clean history)
```