

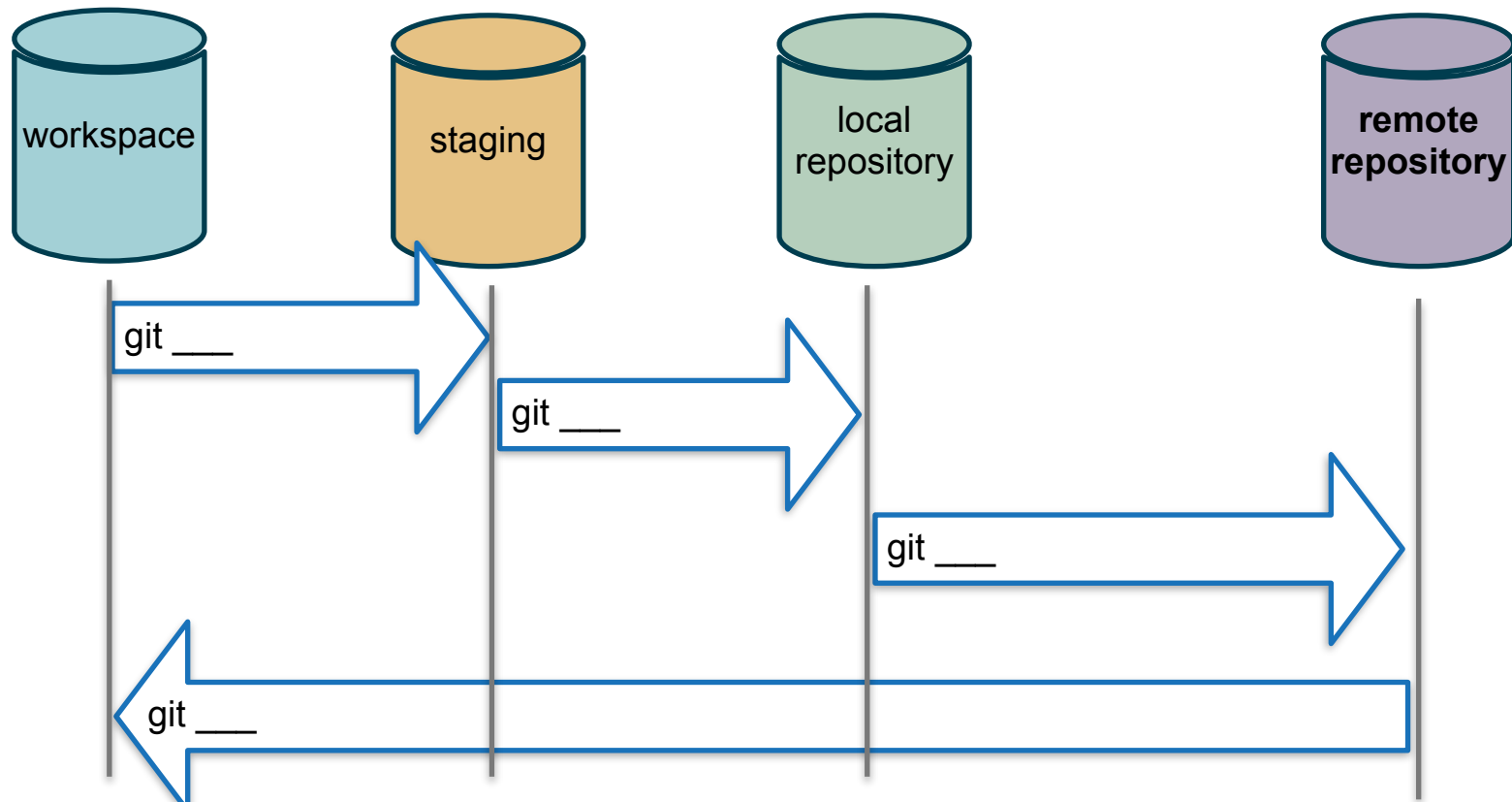
# Git



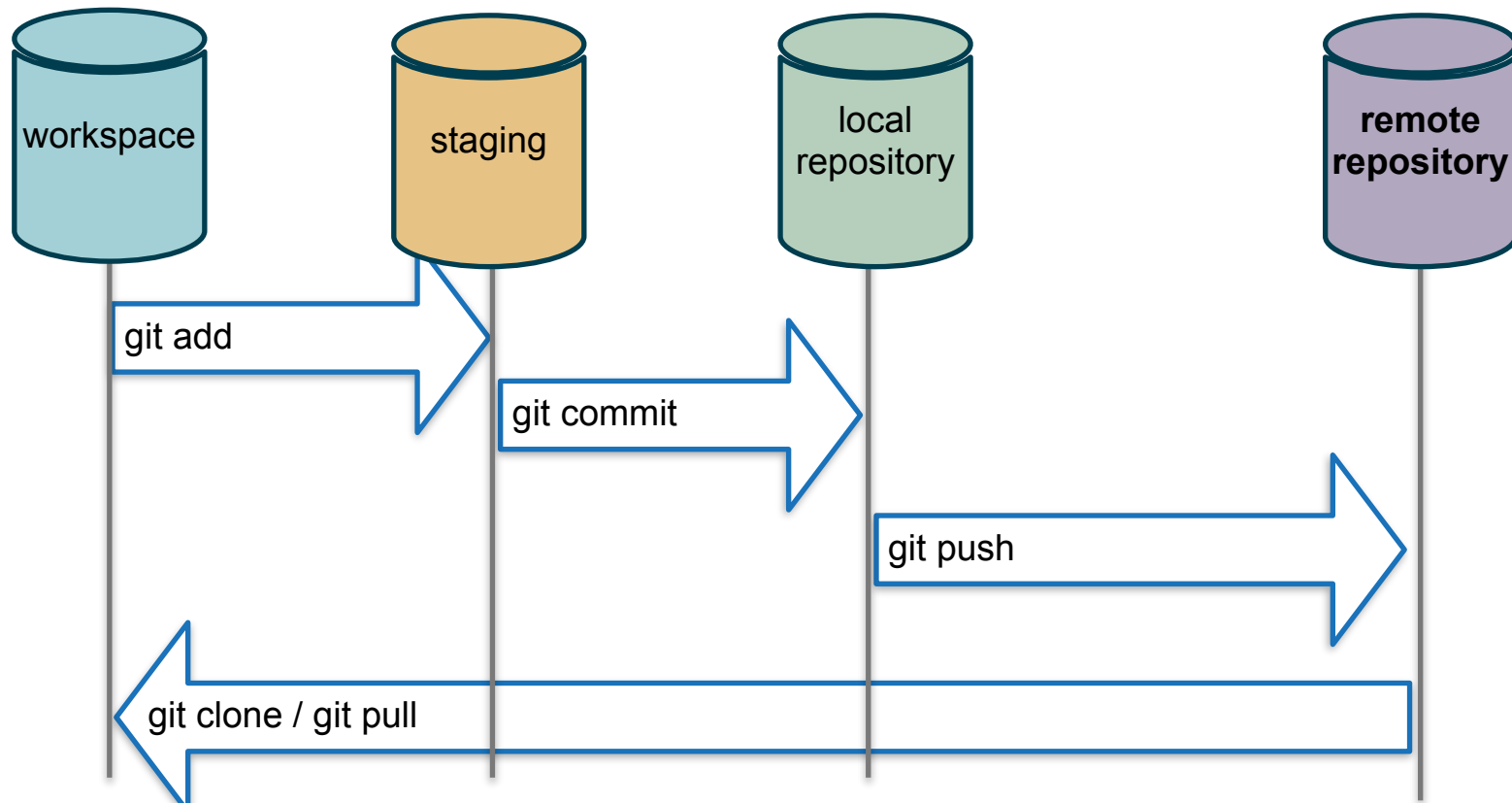
# Git Basic



# Git Commands



# Git Commands



# Git Commands

## Git command

## Description

git \_\_\_\_

Create a new Git repository

git \_\_\_\_

Show the working tree status

git \_\_\_\_

Add file contents to the index

git \_\_\_\_

Record changes to the repository

git \_\_\_\_

Display a record of the commits in a Git repository

git \_\_\_\_

Manage set of tracked repositories

git \_\_\_\_

Fetch from and integrate with another repository or a local branch

git \_\_\_\_

Update remote refs along with associated objects

git \_\_\_\_

Clone a repository into a new directory

# Git Commands

## Git command

## Description

`git init`

Create a new Git repository

`git status`

Show the working tree status

`git add`

Add file contents to the index

`git commit`

Record changes to the repository

`git log`

Display a record of the commits in a Git repository

`git remote`

Manage set of tracked repositories

`git pull`

Fetch from and integrate with another repository or a local branch

`git push`

Update remote refs along with associated objects

`git clone`

Clone a repository into a new directory

# Git Aliases: Add a shorthand for Git commands

- Run command “git config --global alias.st status”
- Check the file ~/.gitconfig
- Common git aliases

st = status

lg = log --graph --abbrev-commit --decorate --format=format:'%C(bold blue)

%h%C(reset) - %C(dim)%ad%C(reset) %C(cyan)%s%C(reset) %C(dim)- %an%C(reset)

%C(auto)%d%C(reset)' --date=format:'%Y-%m-%d %H:%M:%S'

ba = branch -a

cm = commit -m

cam = !git add -A && git commit -m

co = checkout

pr = pull --rebase

# Git Commit Best Practice





# Git Commit Best Practice

- Submit frequently in small steps
- Do not submit incomplete changes
- Test changes before submitting
- Detailed commit message

# Recommend Message Format

## **type: message**

type can be feat/fix/refactor/test e.g.

feat: a new feature

fix: a bug fix

refactor: code refactor

test: adding missing tests or change existing tests

For example, in cute number one of the commit maybe like this:

**feat: find all even numbers**

# Git Exercise



# Git Commit Best Practice

- Submit frequently in \_\_\_\_ steps
- Do not submit \_\_\_\_ changes
- \_\_\_\_ changes before submitting
- \_\_\_\_ commit message

# Git Commit Best Practice

- Submit frequently in **small** steps
- Do not submit **incomplete** changes
- **Test** changes before submitting
- **Detailed** commit message

# Git Commit Message Format

**type: message**

type can be feat/fix/refactor/test e.g.

Please fill the type according to the commit messages.

\_\_\_\_: find largest number

\_\_\_\_: add test case to check if number greater than 10

\_\_\_\_: use filter instead of for loop

\_\_\_\_: fix wrong logic to check even number

# Git Commit Message Format

**type: message**

type can be feat/fix/refactor/test e.g.

Please fill the type according to the commit messages.

**feat**: find largest number

**test**: add test case to check if number greater than 10

**refactor**: use filter instead of for loop

**fix**: fix wrong logic to check even number