Bundler Ruby dependencies

START HERE

`bundle init`
Create a Gemfile

`bundle add <gem>`
Add a gem and install

`bundle install`
Install what the lockfile says

`bundle exec <cmd>`
Run a command in the bundle

`bundle update <gem>`
Upgrade one gem

`bundle outdated`
See newer versions

`bundle list`
All gems in the bundle

`bundle config set --local <name> <value>`
Change a setting

Gemfile your constraints → `install` / `update` → **Gemfile.lock** exact versions → `install` → **Installed gems** system or vendor/bundle → `exec` / `setup` → **Your app** load path set

CONCEPTS

Commit Gemfile and Gemfile.lock. The Gemfile holds your constraints, the lockfile pins the exact versions everyone gets.

Bundler 4: bare bundle shows help instead of installing, and flags like --deployment, --path and --without no longer exist. Use bundle config.

PROJECT

`bundle init`
Write a starter Gemfile here

`bundle gem <name>`
Scaffold a new gem

`bundle version`
Show the Bundler version

INSTALL & REMOVE

`bundle install`
Install gems, write Gemfile.lock

`bundle add <gem>`
Add a gem to the Gemfile and install

`bundle add <gem> -v "~> 1.2" -g development`
Add with version and group

`bundle add <gem> --skip-install`
Edit the Gemfile only

`bundle remove <gem>`
Remove a gem from the Gemfile

`bundle install --jobs <n>`
Install in parallel

`bundle install --local`
Use only gems already on disk

RUN

`bundle exec <cmd>`
Run a command with the bundle's gems

`bundle exec rake <task>`
Run a Rake task in the bundle

`bundle exec rspec`
Run tests with locked versions

`bundle binstubs <gem>`
Create bin/<exe> wrappers for a gem

`bundle check`
Are the dependencies satisfied?

`bundle open <gem>`
Open a gem's source in $EDITOR

UPDATE & OUTDATED

`bundle update <gem>`
Upgrade one gem and what it needs

`bundle update --all`
Upgrade everything

With the update_requires_all_flag setting on, a bare bundle update is refused; --all makes the intent explicit.

`bundle outdated`
List gems with newer versions

`bundle update <gem> --conservative`
Keep shared dependencies where they are

`bundle update --patch`
Prefer patch releases only

`bundle update --minor`
Prefer minor releases at most

`bundle update --bundler`
Update the locked Bundler version

`bundle outdated --only-explicit`
Only gems named in the Gemfile

INSPECT

`bundle list`
Every gem in the bundle with version

`bundle list --name-only`
Just the names

`bundle list --only-group <group>`
Gems of one group

`bundle info <gem>`
Details about one gem

`bundle info <gem> --path`
Where a gem is installed

`bundle show <gem>`
Path of a gem

LOCKFILE

`bundle lock`
Resolve and write the lockfile only

`bundle lock --update <gem>`
Re-resolve a single gem

`bundle lock --add-platform <platform>`
Add a platform to the lockfile

For example x86_64-linux or arm64-darwin, so one lockfile works on CI and laptops.

`bundle lock --add-checksums`
Add a CHECKSUMS section

CONFIG & DEPLOY

`bundle config`
List all settings and where set

`bundle config set --local <name> <value>`
Set for this project

`bundle config set --global <name> <value>`
Set for your user

`bundle config get <name>`
Show one setting

`bundle config unset <name>`
Remove a setting

`bundle config set --local path vendor/bundle`
Install gems into the project

`bundle config set --local deployment true`
Frozen lockfile + vendor/bundle

`bundle config set --local frozen true`
Fail if the lockfile would change

`bundle config set --local without 'development test'`
Skip groups on install

`bundle config set --local with <group>`
Install an optional group

`bundle config set --local force_ruby_platform true`
Compile native gems from source

`bundle cache`
Copy gems into vendor/cache

GEMFILE SYNTAX

`source "https://rubygems.org"`
Where gems come from

`gem "<name>"`
Depend on a gem

`gem "<name>", "~> 1.2"`
Pessimistic: >= 1.2, < 2.0

`gem "<name>", "~> 1.2.3"`
Pessimistic: >= 1.2.3, < 1.3

`gem "<name>", "≥ 1.0", "< 2.0"`
Several constraints

`gem "<name>", require: false`
Install but do not auto-require

`gem "<name>", require: "<path>"`
Require path differs from the name

`gem "<name>", group: :test`
Put one gem in a group

GEMFILE SYNTAX (cont.)

`group :development, :test do ... end`
Group several gems

`ruby "<version>"`
Pin the Ruby version

`gem "<name>", path: "<dir>"`
Use a local checkout

`gem "<name>", git: "<url>", branch: "<b>"`
Use a git repository

`gem "<name>", github: "<user>/<repo>"`
GitHub shorthand

`gem "<name>", source: "<url>"`
Take one gem from another source

`source "<url>" do ... end`
Gems from a private source

`gemspec`
Take dependencies from the .gemspec

IN RUBY CODE

`require "bundler/setup"`
Put bundle gems on the load path

`Bundler.require(:<group>)`
Require the gems of listed groups

`BUNDLE_GEMFILE=<path> <cmd>`
Use another Gemfile for one command

RECIPES

New project

```
bundle init
bundle add rake
bundle add rspec -g test
bundle exec rspec
```

CI or production install

```
bundle config set --local
deployment true
bundle config set --local
without 'development test'
bundle install
```

Make the lockfile work everywhere

```
bundle lock --add-platform
x86_64-linux
bundle lock --add-platform
arm64-darwin
git add Gemfile.lock
```

Careful upgrade

```
bundle outdated --only-explicit
bundle update <gem> --
conservative
bundle exec rspec
git diff Gemfile.lock
```