# RubyGems

Ruby package manager

## CONCEPTS

gem installs gems machine-wide. For a project, list them in a Gemfile and use bundle (see Bundler) so everyone gets the same versions.

**Gemspec** your gem's metadata
↓ `gem build`
**.gem file** packaged archive
↓ `gem push`
**rubygems.org** the default source
↓ `gem install`
**GEM_HOME** installed gems
↓ `require`
**Your Ruby code**

Without write access to the system Ruby, gem install fails with a permissions error. Use --user-install, or a Ruby version manager that keeps gems in your home.

## INSTALL

`gem install <gem>`
Install the latest version

`gem install <gem> -v "~> 1.2"`
Install a version matching a constraint

`gem install <gem> --user-install`
Install into your home directory

`gem install <gem> --no-document`
Skip generating docs (much faster)

`gem install <gem> --prerelease`
Allow prerelease versions

## LIST & SEARCH

`gem list`
List installed gems

`gem list <regexp>`
Filter installed gems by name

`gem search <regexp>`
Search remote gems by name

`gem info <gem>`
Version, license, homepage, install path

## UPDATE & REMOVE

`gem outdated`
List gems with newer versions

## UPDATE & REMOVE (cont.)

`gem update`
Update all installed gems

`gem update <gem>`
Update one gem

`gem update --system`
Update RubyGems itself

`gem uninstall <gem>`
Remove a gem

`gem uninstall <gem> -v <version>`
Remove one version

`gem cleanup`
Remove old versions of gems

## SOURCES

`gem sources`
Show configured sources

`gem sources -a <url>`
Add a source

## BUILD & PUBLISH

`gem build <name>.gemspec`
Package a gem into a .gem file

`gem signin`
Sign in and store an API key

`gem push <name>-<version>.gem`
Upload a gem to rubygems.org

## ENVIRONMENT

`gem env`
Show RubyGems configuration

`gem env home`
Where gems are installed

`gem --version`
Print the RubyGems version

`gem help <command>`
Help for one command

**Version constraints (-v)**

| Constraint | Meaning |
|---|---|
| `"1.2.3"` | exactly 1.2.3 |
| `"≥ 1.2"` | 1.2 or newer |
| `"~> 1.2"` | 1.2 up to below 2.0 |
| `"~> 1.2.3"` | 1.2.3 up to below 1.3 |
| `"< 2"` | anything below 2 |