Task YAML task runner

START HERE

`task --init`
Create a Taskfile.yml

`task --dry <name>`
Preview without running

`task --list`
Show tasks with descriptions

`task <name> -- <args>`
Pass args as CLI_ARGS

`task <name>`
Run a task

`task <name> <VAR>=<value>`
Set a variable

`task <a> <b>`
Run several in order

`task --watch <name>`
Re-run on file changes

task <name> CLI call → **deps** **Dependencies** run first, in parallel → **up-to-date?** **Check** sources / status → **cmds** **Commands** run in order

CONCEPTS

Running task with no name runs the task called default. Tasks live in Taskfile.yml, found by searching upwards from the current directory.

Variables are templated with {{.NAME}}; environment variables use $NAME in the shell.

Add .task/ to .gitignore: it stores the fingerprints used for up-to-date checks.

RUNNING

`task --list`
List tasks that have a desc

`task --list-all`
List all tasks, even without desc

`task <name>`
Run a task

`task --dry <name>`
Print commands without executing

`task --force <name>`
Run even if up to date

`task --parallel <a> <b>`
Run the named tasks concurrently

`task --summary <name>`
Show the task's summary text

`task --status <name>`
Check up-to-date state, run nothing

`task --watch <name>`
Re-run when sources change

`task --yes <name>`
Answer yes to prompts

`task --taskfile <file>`
Use a different Taskfile

`task --dir <path>`
Run in and look for Taskfile in a directory

`task --global <name>`
Run from the Taskfile in $HOME

`task --output group <name>`
Group output per task

`task --silent <name>`
Do not echo commands

`task --verbose <name>`
Show detailed output

`task --concurrency <n>`
Limit concurrent tasks

`task --failfast`
Stop dependencies on first failure

RUNNING (cont.)

`task --list --json`
Task info as JSON

`task --init`
Create a starter Taskfile.yml

TASK BASICS

`version: '3'`
Required first line

`tasks: <name>: cmds:`
Define a task and its commands

`cmd: <command>`
Single command shorthand

`desc: <text>`
Text shown in --list

`summary: <text>`
Long text for --summary

`aliases: [<alt>]`
Alternative task names

`dir: <path>`
Working directory of the task

`silent: true`
Hide command echo

`internal: true`
Hide from CLI and --list

`- task: <other>`
Call another task as a command

`ignore_error: true`
Keep going if the command fails

`timeout: 5m`
Fail a command after a time limit

`run: once`
Run a dependency only once per call

`default:`
Task run by plain task

DEPENDENCIES AND LOOPS

`deps: [<a>, <b>]`
Run these first, concurrently

`deps: - task: <t> vars: {...}`
Dependency with variables

`for: [<a>, <b>] cmd: ... {{.ITEM}}`
Loop a command over values

`for: {var: <V>}`
Loop over a variable's items

`for: {matrix: {...}}`
Loop over a cross product

`defer: <command>`
Run cleanup when the task ends

DEPENDENCIES AND LOOPS (cont.)

`if: <shell test>`
Skip command or task if it exits non-zero

`platforms: [linux, darwin]`
Limit task or command to platforms

VARIABLES

`vars: <NAME>: <value>`
Define a variable

`{{.NAME}}`
Use a variable in a command

`<NAME>: {sh: <command>}`
Variable from command output

`{{.NAME | default "x"}}`
Fallback if unset

`{{.CLI_ARGS}}`
Everything after -- on the CLI

`{{.TASK}}`
Name of the running task

`env: <NAME>: <value>`
Export an environment variable

`dotenv: ['.env']`
Load env vars from files

`requires: vars: [<NAME>]`
Fail if variable is missing

`requires: vars: - {name, enum: [...]}`
Restrict allowed values

`task <name> --interactive`
Prompt for missing required vars

UP-TO-DATE AND CHECKS

`sources: ['**/*.go']`
Files whose change triggers a run

`generates: [<file>]`
Files the task produces

`- exclude: '<glob>'`
Drop files from a sources list

`method: checksum`
Compare content (default)

`method: timestamp`
Compare modification times

`method: none`
Always run

`status: [<test cmd>]`
Skip when all commands exit 0

`preconditions: - sh: <test> msg: <text>`
Abort with a message if the test fails

`prompt: <question>`
Ask for confirmation first

UP-TO-DATE AND CHECKS (cont.)

`watch: true`
Make --watch the default for the task

`interval: 1s`
Watch polling interval

INCLUDES AND LAYOUT

`includes: <ns>: <path>`
Import tasks as ns:<task>

`taskfile: <path>`
Path in a long-form include

`dir: <path> (include)`
Working directory for included tasks

`optional: true`
Allow a missing included file

`flatten: true`
Include without namespace prefix

`excludes: [<task>]`
Skip tasks from an include

`vars: (in include)`
Pass variables to the included file

`task <ns>:<task>`
Run a namespaced task

RECIPES

Build only when sources change

```
tasks:
  build:
    desc: Build the binary
    sources: ['**/*.go',
go.mod]
    generates: [bin/app]
    cmds:
      - go build -o bin/app .
```

Default task listing others

```
tasks:
  default:
    cmds:
      - task --list
    silent: true
```

Deploy with guard rails

```
tasks:
  deploy:
    requires:
      vars:
        - name: ENV
          enum: [staging,
production]
    prompt: Deploy to {{.ENV}}?
    deps: [build]
    cmds:
      - ./deploy.sh {{.ENV}}
```

Loop over directories

```
tasks:
  test-all:
    cmds:
      - for: [api, web]
        cmd: cd {{.ITEM}} &&
npm test
```