Yarn Node package manager

package.json ranges you want → `resolve` → **yarn.lock** exact versions → `fetch` → **Cache** zipped packages → `link` → **Install** PnP or node_modules

CONCEPTS

Yarn 4 is set per project: yarn set version stable writes the version into package.json (packageManager), and Corepack picks it up.

By default Yarn 4 uses Plug'n'Play and writes no node_modules; set nodeLinker: node-modules in .yarnrc.yml if a tool needs the folder.

Settings live in .yarnrc.yml, not .npmrc; every one can also be set as a YARN_* environment variable.

INSTALL AND ADD

`yarn install`
Install all dependencies

`yarn add <pkg>`
Add a dependency

`yarn add -D <pkg>`
Add a dev dependency

`yarn add <pkg>@<version>`
Add a specific version or tag

`yarn add -E <pkg>`
Save the exact version

INSTALL AND ADD (cont.)

`yarn install --immutable`
Fail if the lockfile would change

`yarn install --mode=skip-build`
Install without running build scripts

REMOVE AND UPDATE

`yarn remove <pkg>`
Remove a dependency

`yarn up <pkg>`
Upgrade a package

`yarn up "<pkg>@^2"`
Upgrade to a given range

`yarn up "*"`
Upgrade everything

`yarn up -i`
Pick upgrades interactively

`yarn dedupe`
Merge duplicate versions in the lockfile

`yarn set version stable`
Pin the latest stable Yarn

`yarn set version <version>`
Pin an exact Yarn version

RUN SCRIPTS

`yarn run <script>`
Run a package script

`yarn <script>`
Shorthand for yarn run

`yarn run <script> <args>`
Pass arguments to a script

`yarn run <bin>`
Run a dependency's binary

`yarn dlx <pkg> [args]`
Fetch and run without installing

`yarn dlx -p <pkg> <cmd>`
Run a command from a package

`yarn exec <cmd>`
Run a shell command in the Yarn environment

`yarn node <file>`
Run Node with Yarn's loader

`yarn init`
Create a package.json

INSPECT

`yarn info <pkg>`
Show info about a package

`yarn why <pkg>`
Show why a package is installed

`yarn npm audit`
Check for known vulnerabilities

WORKSPACES

`yarn workspaces list`
List all workspaces

`yarn workspace <name> <cmd>`
Run a command in one workspace

`yarn workspace <name> add <pkg>`
Add a dependency to one workspace

`yarn workspaces foreach -A run <script>`
Run in every workspace

`yarn workspaces foreach -Apt run <script>`
Parallel, dependencies first

`yarn workspaces foreach --since=<ref> -A run <script>`
Only workspaces changed since a ref

Workspaces in package.json

```
{
  "private": true,
  "workspaces": ["packages/*"]
}
```

Depend on a sibling with "<pkg>": "workspace:^"; Yarn swaps it for the real version when publishing.

CONFIG, PATCHING AND PUBLISHING

`yarn config set <key> <value>`
Write a project setting

`yarn npm publish`
Publish the workspace

.yarnrc.yml

```
nodeLinker: node-modules
npmRegistryServer: "https://registry.npmjs.org"
enableTelemetry: false
```

RECIPES

Start a project

```
yarn set version stable
yarn init
yarn add express
yarn add -D typescript vitest
yarn run test
```

CI install and test

```
yarn install --immutable
yarn workspaces foreach -Apt run build
yarn workspaces foreach -A run test
```

Test only what changed

```
yarn workspaces foreach -A --since=origin/main run test
```

Patch a dependency

```
yarn patch <pkg>
# edit the printed folder
yarn patch-commit -s <dir>
```