SwiftLint Swift style linter

START HERE

`swiftlint`
Lint the current directory

`// swiftlint:disable:next <rule>`
Silence the next line

`swiftlint --fix`
Auto-correct violations

`swiftlint --reporter json`
Machine-readable output

`swiftlint lint --strict`
Treat warnings as errors

`swiftlint rules`
List all rules

`swiftlint rules <rule>`
Explain one rule

`swiftlint --config <file>`
Use a specific config

.swiftlint.yml rules + paths → `select` → **Swift files** included minus excluded → `lint` → **Violations** warning or error → `report` → **Reporter** xcode, json, ...

CONCEPTS

SwiftLint reads .swiftlint.yml from the directory you run it in; rules run on every .swift file below it.

Analyzer rules need a full compiler log and run only under swiftlint analyze; ordinary lint rules never run there.

--fix rewrites files on disk and skips linting. Commit or stash first, then run swiftlint again to see what is left.

RUN

`swiftlint`
Lint all Swift files below here

`swiftlint lint <path>`
Lint given files or folders

`swiftlint --fix`
Auto-correct what can be fixed

`swiftlint lint --strict`
Fail on warnings too

`swiftlint lint --quiet`
Print violations only

`swiftlint lint --lenient`
Downgrade errors to warnings

`swiftlint --fix --format`
Also reformat like Xcode

RUN (cont.)

`swiftlint lint --force-exclude <file>`
Skip excluded files even if named
Needed for editor and pre-commit integrations that pass file paths explicitly.

`swiftlint lint --use-stdin`
Lint standard input

`swiftlint lint --only-rule <rule>`
Run just this rule

`swiftlint lint --enable-all-rules`
Run every rule, even opt-in

`swiftlint --version`
Print the version

RULES

`swiftlint rules`
List rules and their status

`swiftlint rules <rule>`
Show one rule's description

`swiftlint rules --enabled`
Only rules enabled by config

`swiftlint rules --disabled`
Only rules that are off

`swiftlint rules --correctable`
Only rules --fix can fix

`swiftlint rules --default-config`
Print every rule's defaults

RULES (cont.)

`swiftlint docs`
Open the rule reference

CONFIG

`disabled_rules: [<rule>]`
Turn off default rules

`opt_in_rules: [<rule>]`
Turn on extra rules

`included: [Sources]`
Lint only these paths

`excluded: [Pods, .build]`
Never lint these paths

`only_rules: [<rule>]`
Run exactly these rules
Cannot be combined with disabled_rules or opt_in_rules.

`opt_in_rules: [all]`
Enable every opt-in rule

`strict: true`
Warnings fail the run

`reporter: "<name>"`
Default output format

`<rule>: warning`
Set a rule's severity

`line_length: 120`
Warning threshold for a rule

`file_length: {warning: 500, error: 1200}`
Warning and error limits

`type_name: {min_length: 4}`
Tune a rule's options

CONFIG (cont.)

`parent_config: <path or url>`
Inherit a shared config

`swiftlint --config <a> --config <b>`
Stack configs, last wins
Passing --config turns off nested .swiftlint.yml lookup.

`baseline: <file>`
Ignore violations saved in a baseline

INLINE CONTROL

`// swiftlint:disable <rule>`
Off until enabled or end of file

`// swiftlint:enable <rule>`
Turn the rule back on

`// swiftlint:disable:next <rule>`
Off for the next line

`// swiftlint:disable:this <rule>`
Off for this line

`// swiftlint:disable:previous <r>`
Off for the previous line

`// swiftlint:disable all`
Silence every rule

`// swiftlint:disable <r1> <r2>`
Several rules at once

OUTPUT

`swiftlint reporters`
List available reporters

`swiftlint lint --reporter json`
Choose the output format

`swiftlint lint --reporter github-actions-logging`
Annotate GitHub PRs

`swiftlint lint --reporter summary`
Count violations per rule

`swiftlint lint --output <file>`
Write the report to a file

BASELINE & ANALYZE

`swiftlint lint --write-baseline <file>`
Save current violations

`swiftlint lint --baseline <file>`
Report only new violations

`swiftlint analyze --compiler-log-path <log>`
Run analyzer rules

INSTALL & CI

`brew install swiftlint`
Install with Homebrew

`mint install realm/SwiftLint`
Install with Mint

INSTALL & CI (cont.)

`swift package plugin swiftlint`
Run via the SwiftLintPlugins package

Xcode 15+ sandboxes script phases: set ENABLE_USER_SCRIPT_SANDBOXING to NO so the lint phase can read your sources.

RECIPES

Minimal .swiftlint.yml

```
disabled_rules:
  - trailing_whitespace
opt_in_rules:
  - empty_count
  - closure_spacing
included:
  - Sources
excluded:
  - Pods
line_length: 120
type_name:
  min_length: 4
```

Xcode run script phase

```
if command -v swiftlint >/dev/null 2>&1; then
  swiftlint
else
  echo "warning: swiftlint not installed"
fi
```

Adopt on a messy codebase

```
swiftlint lint --write-baseline .swiftlint.baseline.json
# then add to .swiftlint.yml:
baseline: .swiftlint.baseline.json
swiftlint lint --strict
```