

# Dependabot Alerts & Updates — Quick Cheatsheet

Enable, configure, and triage GitHub dependency updates with confidence.

Scope: GitHub repos  
Audience: Dev, Sec,  
Maintainers

**Key defaults:** *Public* repos have alerts on by default. *Private* repos require enabling in Settings. Viewing alerts typically requires **read+** access; enabling/managing may require **admin** depending on org policy.

## 1 Enable & Visibility

- **Repo** → **Settings** → **Code security & analysis** → toggle **Dependabot alerts**.
- **Who can view:** anyone with **read+** (and everyone for public repos).
- **Who can enable/manage:** usually **admin/maintain**; org policies may restrict repo-level toggles.

### Roles (repo level)

	Read	Triage	Write	Maint.	Admin
View alerts	✓	✓	✓	✓	✓
Dismiss alert	✗	✓	✓	✓	✓
Merge PRs	✗	✓	✓	✓	✓
Enable alerts	✗	✗	✗	✓	✓

### Common Options

- `schedule.interval:`    `daily` | `weekly` | `monthly`.
- `allow/ignore:` control which dependencies update.

- `groups:` consolidate related updates into fewer PRs.

## 2 Configuration Basics

File: `.github/dependabot.yml`

```
version: 2
updates:
  - package-ecosystem: "npm"      # npm, pip,
    ↪ gomod, maven, gradle, cargo, etc.
    directory: "/"                # path to
    ↪ manifest(s)
    schedule:
      interval: "weekly"          # daily, weekly,
    ↪ monthly
    # groups:                      # optional:
    ↪ group related changes into one PR
    # minor-deps:
    #   patterns: ["*"]
    #   update-types: ["minor", "patch"]
  - package-ecosystem: "pip"
    directory: "/"
    schedule:
      interval: "weekly"
    ignore:                        # optional:
    ↪ ignore certain deps/versions
    - dependency-name: "example"
      versions: ["<1.2.3"]
```

- `open-pull-requests-limit:` cap concurrent update PRs.

## 3 Notifications & Automation

- **Alerts:** GitHub notifications, email, or webhooks (e.g., Slack/Teams via your integration).
- **PRs:** Auto-opened by Dependabot; configure required checks to ensure safe merges.
- **Rules UI:** At org/repo scope you can define rules to auto-dismiss low-risk alerts or auto-open PRs by severity/ecosystem.

## 4 Triage & Remediation Flow

1. **Assess** severity, reachability, and exploitability.
2. **Decide** on *upgrade*, *pin*, *patch*, or *temporary dismiss*.
3. **Validate** with tests, SCA/SAST/DAST, and runtime checks.
4. **Merge** when CI passes; monitor post-deploy.

### Recommended Dismissal Reasons

- *Not affected* (unreachable code path).
- *Legacy/unmaintained* with compensating controls.
- *False positive* (erroneous advisory match).
- *Will fix* in planned upgrade window with ticket reference.

## 5 Best Practices

- Keep **interval** small for critical services; group minor/patch updates.
- Set **required checks** on Dependabot PRs (tests, build, security scans).
- Gate merges by **vuln severity** via branch protection or policy.
- Use **labels** and **codeowners** to route reviews quickly.
- Limit **concurrent PRs** to avoid queue congestion.

## 6 Sample Policies & Patterns

### Limit Concurrent PRs

```
version: 2
updates:
  - package-ecosystem: "npm"
    directory: "/"
    open-pull-requests-limit: 5
    schedule: { interval: "daily" }
```

### Group Minor/Patch Updates

```
updates:
  - package-ecosystem: "maven"
    directory: "/"
    schedule: { interval: "weekly" }
    groups:
      routine-minor-patch:
        patterns: ["*"]
        update-types: ["minor", "patch"]
```

### Ignore Specific Versions

```
updates:
  - package-ecosystem: "gomod"
    directory: "/"
    schedule: { interval: "weekly" }
    ignore:
      - dependency-name: "example.com/libfoo"
        versions: ["1.4.x", "<1.3.2"]
```

## 7 Quick Links

- **Repo Settings:** Code security & analysis → Dependabot alerts.
- **Config File:** `.github/dependabot.yml` at repo root.
- **Routing:** Labels + CODEOWNERS for fast PR assignment.

**Compile tip:** This document uses minted for syntax highlighting. Compile with `-shell-escape` enabled (e.g., `pdflatex -shell-escape`).