# **Dependabot Auto-Merge Gids voor Trust.io**



## Waar vind je Dependabot PRs op GitHub?

## 1. GitHub Repository Locaties

#### **Hoofdlocatie - Pull Requests Tab:**

- Ga naar: https://github.com/ancproggrams/trust/pulls
- Filter op Dependabot: klik op "Author" en selecteer app/dependabot
- Of gebruik de zoekbalk: is:pr is:open author:app/dependabot

#### **Directe Links:**

- Alle open Dependabot PRs: https://github.com/ancproggrams/trust/pulls? q=is%3Apr+is%3Aopen+author%3Aapp%2Fdependabot
- Gesloten Dependabot PRs: https://github.com/ancproggrams/trust/pulls? q=is%3Apr+is%3Aclosed+author%3Aapp%2Fdependabot

## 2. PR Types Herkennen

#### Security Updates (Prioriteit: HOOG)

- Titel bevat: "security", "vulnerability", "CVE"
- Label: security
- Automatisch goedgekeurd door onze workflow

#### Patch Updates (Prioriteit: LAAG)

- Versie patroon: 1.2.3 → 1.2.4
- Meestal backwards compatible
- Automatisch goedgekeurd

#### Minor Updates (Prioriteit: MEDIUM)

- Versie patroon:  $1.2.x \rightarrow 1.3.0$
- Nieuwe features, meestal backwards compatible
- Automatisch goedgekeurd met extra monitoring

#### Major Updates (Prioriteit: HOOG - MANUAL REVIEW)

- Versie patroon: 1.x.x → 2.0.0
- Mogelijk breaking changes
- ALTIJD handmatige review vereist

# Automatische Goedkeuring - Hoe het Werkt

### **Huidige Configuratie**

Onze repository heeft nu automatische workflows die:

#### 1. Automatisch goedkeuren:

- Alle security updates
- Patch updates (x.x.X)
- Minor updates (x.X.x) met lage risico

#### 2. Handmatige review vereisen:

- Major updates (X.x.x)
- Updates die CI tests laten falen
- Dependencies met bekende issues

#### **Workflow Proces**

```
graph TD
   A[Dependabot opent PR] --> B{Update Type?}
    B -->|Security| C[Auto-approve + Auto-merge]
    B -->|Patch| D[Auto-approve + Auto-merge]
    B -->|Minor| E[Auto-approve + Auto-merge]
    B -->|Major| F[Manual Review Required]
    C --> G[CI Tests]
    D --> G
   E --> G
   G -->|Pass| H[Auto-merge]
    G -->|Fail| I[Create Issue + Manual Review]
    F --> J[Team Notification]
    J --> K[Manual Approval Needed]
```

## Repository Settings Configuratie

### **Branch Protection Rules**

Voor automatische merge moet je deze instellingen configureren:

#### 1. Ga naar Repository Settings:

- https://github.com/ancproggrams/trust/settings/branches

### 2. Configureer Branch Protection voor main:

- ▼ Require a pull request before merging
- ✓ Require approvals (minimum 1)
- ☑ Dismiss stale PR approvals when new commits are pushed
- Require status checks to pass before merging
- Require branches to be up to date before merging
- Allow auto-merge
- Allow force pushes (for administrators only)

#### 3. Required Status Checks:

- Voeg toe: dependabot-auto-approve
- Voeg toe: alle CI/CD checks die je hebt

### **Auto-merge Settings**

#### 1. Repository Settings > General:

- Scroll naar "Pull Requests"
- Table "Allow auto-merge"
- <a>Enable "Automatically delete head branches"</a>

#### 2. Merge Strategy:

- Recommended: "Squash and merge" (voor cleane history)
- Alternative: "Create a merge commit"



## GitHub CLI Commands

## **Handmatige PR Management**

```
# Authenticeer eerst
gh auth login
# Bekijk alle Dependabot PRs
gh pr list --search "is:pr is:open author:app/dependabot"
# Goedkeuren van een specifieke PR
gh pr review [PR_NUMBER] --approve --body "LGTM - dependency update"
# Merge een goedgekeurde PR
gh pr merge [PR_NUMBER] --squash --delete-branch
# Bekijk PR details
gh pr view [PR_NUMBER]
# Auto-merge inschakelen voor een PR
gh pr merge [PR_NUMBER] --auto --squash
```

## **Bulk Operations**

```
# Goedkeuren van alle patch updates
gh pr list --search "is:pr is:open author:app/dependabot" --json number,title | \
jq - r'.[] | select(.title | test("patch|[0-9]+\\.[0-9]+\\.[0-9]+ to [0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+\
 [0-9]+")) \mid .number' \mid \
xargs -I {} gh pr review {} --approve --body "Auto-approved patch update"
# Merge alle goedgekeurde Dependabot PRs
gh pr list --search "is:pr is:open author:app/dependabot review:approved" --json
number | \
jq -r '.[].number' | \
xargs -I {} gh pr merge {} --auto --squash --delete-branch
```



# 🚨 Safety Measures & Monitoring

#### **Rollback Procedures**

Als een auto-merge problemen veroorzaakt:

#### 1. Immediate Rollback:

```
```bash
   # Find the merge commit
   git log -oneline -grep="Dependabot"
# Revert the merge (replace MERGE_SHA)
git revert MERGE_SHA -m 1
```

### git push origin main

. . .

#### 1. Create Hotfix:

```
bash
  git checkout -b hotfix/dependabot-rollback
  # Make necessary fixes
  git commit -m "fix: rollback problematic dependency update"
  git push origin hotfix/dependabot-rollback
  gh pr create --fill
```

## **Monitoring Dashboard**

#### **GitHub Insights:**

- https://github.com/ancproggrams/trust/pulse
- https://github.com/ancproggrams/trust/network/dependencies

#### **Dependabot Alerts:**

- https://github.com/ancproggrams/trust/security/dependabot

## **Failure Handling**

Onze workflows automatisch:

- 1. Detecteren gefaalde merges
- 2. Creëren rollback issues
- 3. Notificeren team members
- 4. Loggen alle acties voor audit trail

# **10** Team Workflow Integration

## **Notification Settings**

#### **Voor team members:**

- 1. Ga naar repository  $\rightarrow$  "Watch"  $\rightarrow$  "Custom"
- 2. Selecteer:
- V Issues
- V Pull requests
- **Releases**
- Security alerts

## **Review Assignment**

#### Automatische assignment voor major updates:

```
- Configureer in .github/CODEOWNERS:
```

```
# Dependabot major updates require review
package.json @ancproggrams
composer.json @ancproggrams
requirements.txt @ancproggrams
```

#### **Escalation Procedures**

#### Level 1: Automatisch (Security/Patch/Minor)

- Auto-approve + auto-merge
- Post-merge monitoring
- Rollback bij problemen

#### Level 2: Team Review (Major Updates)

- Manual approval required
- Team notification
- Extended testing period

#### **Level 3: Critical Issues**

- Immediate rollback
- Emergency hotfix
- Team meeting voor root cause analysis

## Audit Trail & Reporting

## Logging

Alle automatische acties worden gelogd in:

- GitHub Actions logs
- Repository Issues (voor rollbacks)
- Git commit history
- Security advisories

## **Monthly Review**

#### Aanbevolen maandelijkse check:

- 1. Review alle auto-merged PRs
- 2. Check voor gefaalde rollbacks
- 3. Update automation rules indien nodig
- 4. Review security advisories

## **Metrics Tracking**

Track deze KPIs:

- Aantal auto-merged PRs per maand
- Rollback percentage
- Time to merge voor security updates
- Manual review tijd voor major updates

# 🔄 Maintenance & Updates

## **Workflow Updates**

#### Wanneer workflows updaten:

- Nieuwe dependency types
- Gewijzigde security requirements
- Team process changes

#### **Update procedure:**

- 1. Test in feature branch
- 2. Review met team
- 3. Deploy tijdens low-traffic periode
- 4. Monitor eerste week intensief

## **Dependabot Configuration**

#### Huidige configuratie in .github/dependabot.yml :

- Check frequency: daily
- Package ecosystems: npm, composer, pip
- Auto-merge strategy: patch + minor
- Security updates: immediate

#### Aanpassingen overwegen:

- Scheduling voor specifieke tijden
- Groeperen van updates
- Vendor-specific rules
- Custom commit messages

# **Quick Start Checklist**

- [ ] GitHub CLI geauthenticeerd ( gh auth login )
- [ ] Repository settings geconfigureerd (auto-merge enabled)
- [ ] Branch protection rules ingesteld
- [ ] Workflows gecommit en actief
- [ ] Team notifications geconfigureerd
- [ ] Eerste test met patch update
- [ ] Rollback procedure getest
- [ ] Team getraind op nieuwe workflow

Voor vragen of problemen: Maak een issue aan met label dependabot-support