



DevOps Automation Checklist

25 Tasks to Automate Today



Save 5+ hours per developer per week



How to Use This Checklist

HIGH Do first

MEDIUM Do soon

LOW Nice to have

EASY < 1 day

MEDIUM 1-3 days

HARD 1+ weeks



HIGH PRIORITY (Start Here)

1

Automated Testing Setup

HIGH

MEDIUM

⌚ 5 hrs/week saved

What to automate:

- Unit tests run on every commit
- Integration tests run before merge
- E2E tests run on staging deployments
- Test coverage reports automatically generated

Quick win: Set up Jest/Vitest with GitHub Actions

ROI: Catches bugs early, saves debugging time

2 CI/CD Pipeline Automation

HIGH

HARD

⌚ 8 hrs/week saved

What to automate:

- Automatic builds on push
- Automated deployments to staging
- Production deployments with approval gates
- Rollback automation

Quick win: GitHub Actions or GitLab CI/CD

ROI: Eliminates manual deployment errors, saves hours

3 Code Quality Checks

HIGH

EASY

⌚ 3 hrs/week saved

What to automate:

- Linting on every commit (ESLint, Prettier)
- Formatting checks before merge
- Type checking (TypeScript)
- Code complexity analysis

Quick win: Pre-commit hooks with Husky

ROI: Consistent code quality, fewer code reviews

4

Environment Setup Automation

HIGH

MEDIUM

⌚ 4 hrs/week saved

What to automate:

- One-command project setup
- Docker Compose for local dev
- Environment variable validation
- Dependency installation scripts

Quick win: Create setup.sh script

ROI: Faster onboarding, fewer "works on my machine" issues

5

Dependency Management

HIGH

EASY

⌚ 2 hrs/week saved

What to automate:

- Automated dependency updates (Dependabot, Renovate)
- Security vulnerability scanning
- License compliance checks
- Outdated package alerts

Quick win: Enable Dependabot on GitHub

ROI: Keeps dependencies secure and up-to-date



MEDIUM PRIORITY (Do Soon)

6

Boilerplate Code Generation

MEDIUM

MEDIUM

⌚ 6 hrs/week saved

What to automate:

- API endpoint scaffolding
- CRUD operation templates
- Test file generation
- Component templates

Quick win: Use Plop.js or custom generators

ROI: Consistent code structure, faster development

7

Database Migration Automation

MEDIUM

MEDIUM

⌚ 3 hrs/week saved

What to automate:

- Migration scripts run automatically
- Rollback procedures

→ Database seeding for dev

→ Migration testing

Quick win: Use migration tools (Knex, TypeORM, Alembic)

ROI: Safer database changes, fewer production issues

8 Documentation Generation

MEDIUM

EASY

⌚ 2 hrs/week saved

What to automate:

- API docs from code comments (Swagger/OpenAPI)
- README generation
- Changelog automation
- Architecture diagrams

Quick win: JSDoc + Swagger for APIs

ROI: Always up-to-date docs, less maintenance

9 Git Workflow Automation

MEDIUM

EASY

⌚ 2 hrs/week saved

What to automate:

- Branch naming conventions
- Commit message validation

→ PR template automation

→ Merge conflict detection

Quick win: Git hooks + branch protection rules

ROI: Cleaner git history, easier code reviews

10 Logging and Monitoring Setup

MEDIUM

MEDIUM

⌚ 4 hrs/week saved

What to automate:

→ Structured logging

→ Error tracking (Sentry, Rollbar)

→ Performance monitoring

→ Alert automation

Quick win: Set up Sentry for error tracking

ROI: Faster debugging, proactive issue detection

11 Security Scanning

MEDIUM

EASY

⌚ 3 hrs/week saved

What to automate:

→ SAST (Static Application Security Testing)

→ Dependency vulnerability scanning

- Secret detection (API keys, passwords)
- Security policy enforcement

Quick win: Snyk or GitHub Advanced Security

ROI: Prevents security breaches, compliance

12 Performance Testing

MEDIUM

HARD

⌚ 4 hrs/week saved

What to automate:

- Load testing on deployments
- Performance regression detection
- Lighthouse CI for web apps
- Database query optimization alerts

Quick win: Lighthouse CI in GitHub Actions

ROI: Better user experience, fewer performance issues

13 Backup Automation

MEDIUM

EASY

⌚ 2 hrs/week saved

What to automate:

- Database backups (daily/hourly)
- File backup automation

→ Backup verification

→ Restore testing

Quick win: Cron jobs or cloud backup services

ROI: Data safety, disaster recovery

14 Release Notes Automation

MEDIUM

EASY

⌚ 1 hr/week saved

What to automate:

- Generate release notes from commits
- Version bumping
- Changelog updates
- Release announcements

Quick win: Semantic Release or Release Drafter

ROI: Consistent releases, better communication

15 Feature Flag Management

MEDIUM

MEDIUM

⌚ 3 hrs/week saved

What to automate:

- Feature flag configuration
- Gradual rollouts

- Feature toggle management
- A/B testing automation

Quick win: LaunchDarkly or custom flag system

ROI: Safer deployments, easier feature management



LOW PRIORITY (Nice to Have)

16

Cost Monitoring and Optimization

LOW

MEDIUM

⌚ 2 hrs/week saved

What to automate:

- Cloud cost tracking and alerts
- Resource usage optimization
- Unused resource cleanup
- Cost allocation reports

Quick win: AWS Cost Explorer or CloudHealth

ROI: Reduces cloud spending, better budget control

17

Incident Response Automation

LOW

HARD

⌚ 3 hrs/week saved

What to automate:

- Automatic incident detection
- On-call rotation management
- Post-mortem report generation
- Incident escalation workflows

Quick win: PagerDuty or Opsgenie integration

ROI: Faster incident resolution, better reliability

18 Compliance and Audit Automation

LOW

MEDIUM

⌚ 2 hrs/week saved

What to automate:

- Compliance checklist tracking
- Audit log generation
- Policy compliance checks
- Regulatory reporting

Quick win: Automated compliance dashboards

ROI: Easier audits, regulatory compliance

19 Infrastructure as Code

LOW

HARD

⌚ 5 hrs/week saved

What to automate:

- Infrastructure provisioning (Terraform, CloudFormation)
- Infrastructure changes via code
- Environment replication
- Infrastructure testing

Quick win: Start with Terraform for one environment

ROI: Consistent infrastructure, faster provisioning

20 Container Orchestration

LOW **HARD**

⌚ 4 hrs/week saved

What to automate:

- Container deployment automation
- Auto-scaling configuration
- Container health checks
- Service discovery

Quick win: Kubernetes or Docker Swarm setup

ROI: Better resource utilization, easier scaling

21 API Versioning Automation

LOW **MEDIUM**

⌚ 2 hrs/week saved

What to automate:

- API version detection
- Deprecation warnings
- Version migration guides
- Breaking change detection

Quick win: API versioning middleware

ROI: Smoother API evolution, better compatibility

22 Data Pipeline Automation

LOW **HARD**

⌚ 4 hrs/week saved

What to automate:

- ETL pipeline automation
- Data transformation workflows
- Data quality checks
- Data pipeline monitoring

Quick win: Apache Airflow or Prefect

ROI: Reliable data processing, less manual work

23 Certificate and SSL Management

LOW **EASY**

⌚ 1 hr/week saved

What to automate:

- SSL certificate renewal
- Certificate expiration alerts
- Auto-renewal workflows
- Certificate deployment

Quick win: Let's Encrypt with certbot

ROI: No expired certificates, better security

24 Load Testing Automation

LOW

MEDIUM

⌚ 3 hrs/week saved

What to automate:

- Scheduled load tests
- Performance baseline tracking
- Capacity planning reports
- Bottleneck identification

Quick win: k6 or Artillery.io in CI/CD

ROI: Proactive performance optimization

25 Team Onboarding Automation

LOW

EASY

⌚ 2 hrs/week saved

What to automate:

- New team member setup scripts
- Access provisioning automation
- Onboarding checklist tracking
- Welcome email sequences

Quick win: Automated setup script + checklist

ROI: Faster onboarding, consistent experience

Summary

High Priority (5 tasks)

- Automated Testing Setup
- CI/CD Pipeline Automation
- Code Quality Checks
- Environment Setup Automation
- Dependency Management

Total: 22+ hrs/week saved

Medium Priority (10 tasks)

- Boilerplate Code Generation
- Database Migration Automation
- Documentation Generation
- Git Workflow Automation
- Logging and Monitoring
- Security Scanning
- Performance Testing
- Backup Automation
- Release Notes Automation
- Feature Flag Management

Total: 30+ hrs/week saved

Low Priority (10 tasks)

- Cost Monitoring
- Incident Response Automation
- Compliance and Audit
- Infrastructure as Code
- Container Orchestration
- API Versioning
- Data Pipeline Automation
- Certificate Management
- Load Testing Automation
- Team Onboarding Automation

Total: 25+ hrs/week saved

Getting Started

Start with the **High Priority** tasks—they'll give you the biggest impact. Focus on one task at a time, and don't try to automate everything at once. Each automation builds on the others, so completing them in order will make the later ones easier.

Remember: The goal isn't to automate everything immediately. Pick the tasks that will save your team the most time based on your current pain points. Even automating just 5-10 of these tasks can save 20+ hours per developer per week.

Ready to Automate Your DevOps Workflow?

I can help you implement these automations for your team. Book a free consultation to see how my DevOps Productivity Suite can save your team 5+ hours per developer per week.

[Book Your Free Consultation →](#)

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