

# Deployment Checklist

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Project: Bilko Version: 0.1 Date: 2026-02-23 Author: Ops Architect Status: Draft Reviewers: Tech Lead, Alem Bašić

## Document History

Version	Date	Author	Changes
0.1	2026-02-23	Ops Architect	Initial draft

## INSTRUCTIONS

Use this checklist for every production deployment. Create a copy for each release: `DEPLOY-CHECKLIST-YYYY-MM-DD-vX.X.X.md` in `docs/releases/`

**Never skip items.** If an item doesn't apply, mark N/A with reason.

# Deployment Checklist: Bilko v[VERSION]

**Deploy date:** YYYY-MM-DD **Deploy time:** HH:MM CET **Release notes:** [Link to release notes]  
**Deployer:** [Name] **Reviewer:** [Name]

# Pre-Deployment (Run 24 Hours Before)

## Code & Tests

- All CI checks green on main branch (lint, type-check, unit tests, integration tests, build, E2E)
- Coverage  $\geq$  80% overall,  $\geq$  95% financial logic
- All PRs in this release merged to main
- No `TODO` or `FIXME` comments referencing this release
- No skipped tests (`it.skip`, `test.skip`) in financial logic files
- Release notes prepared and reviewed

## Database

- New migrations reviewed by Tech Lead
- Migrations tested on staging environment:
  - Applied successfully: Yes / No
  - Rollback (down migration) tested: Yes / No
  - Migration time on staging (record): \_\_\_ seconds
- Migration is backward-compatible (old API version can still read data): Yes / N/A
- If schema changes: Prisma Client regenerated and tested

## Security

- No new secrets committed to git (`git log --all --grep='password|secret|key'` — should be clean)
- All new API endpoints require authentication (no accidental public endpoints)
- RBAC verified for new endpoints (correct roles enforced)
- Zod validation applied to all new request bodies
- No cross-org data leakage in new queries

## Financial Logic (Skip if release has no financial changes)

- VAT calculations tested for all 3 countries (RS 20%, BA 17%, HR 25%)

- Double-entry validation enforced for all new transaction creation paths
  - NUMERIC(19,4) used throughout — no JavaScript `number` for monetary values
  - Exchange rate locking verified for multi-currency transactions
  - Invoice total calculation verified:  $\text{subtotal} + \text{VAT} - \text{discount} = \text{total}$  (exact, no float)
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## Staging Verification (Run 2 Hours Before)

- Staging deployment successful (same build that will go to production)
  - Staging health check passing: `curl https://staging-api.bilko.io/health`
  - Manual smoke test on staging:
    - Login with test account
    - Create invoice (RSD, 20% VAT) — verify totals correct
    - Create expense with receipt upload
    - Generate VAT report
    - Verify report numbers are consistent with data
  - E2E tests pass on staging
  - No new Sentry errors after staging deploy (check Sentry for 30 min)
  - Database migrations applied to staging: `bilko_staging` DB
- 

## Backup (Run 30 Minutes Before)

- Pre-deploy backup taken:

```
railway run pg_dump $DATABASE_URL -f pre_deploy_$(date +%Y%m%d_%H%M).dump
```

- Backup file accessible and non-empty
  - Backup stored in secure location (note location here): \_\_\_\_\_
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## Deployment Execution

# Step 1: Apply Database Migrations

- Migrations applied to production:

```
railway run npx prisma migrate deploy
```

- Migration successful: Yes / No
- Post-migration record count check:

```
railway run psql $DATABASE_URL -c "SELECT COUNT(*) FROM invoices, COUNT(*) FROM organizations;"
```

- Invoice count: \_\_
- Organization count: \_\_

# Step 2: Deploy Backend (Railway)

- Push to main triggers Railway production deploy (automatic via CI) OR manual: `railway up --service api --environment production`
- Railway deployment successful
- Railway health check green: `curl https://api.bilko.io/health`
- No restart loops in Railway logs

# Step 3: Deploy Frontend (Vercel)

- Vercel production deployment successful (automatic via CI) OR manual: `cd apps/web && vercel --prod`
- bilko.io loads correctly in browser
- No browser console errors on first load

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# Post-Deployment Verification (Run Immediately After Deploy)

- API health: `curl https://api.bilko.io/health` → `{"status":"ok","db":"ok"}`
- Frontend: `curl -I https://bilko.io` → HTTP/2 200
- Login flow: can log in with test account
- Invoice creation: create test invoice, verify totals

- BetterStack: all monitors green
  - Sentry: no new error types in first 15 minutes
  - Railway: CPU < 50%, Memory < 1GB
- 

# 15-Minute Monitoring Window

Monitor for 15 minutes after deploy. Record observations:

Time	API Health	Error Rate	CPU	Memory	Notes
+0 min					
+5 min					
+10 min					
+15 min					

**Deploy declared successful:** [ ] Yes — at HH:MM by [Name]

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## Rollback Criteria

**Rollback immediately if:**

- Health check fails for > 3 consecutive minutes
- Error rate > 5% (Sentry)
- Any financial calculation producing incorrect results
- Authentication completely broken

**See rollback procedure:** [rollback-plan.md](#)

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## Post-Deploy Cleanup

- Rollback plan document created for this release (if major release)
- Release notes published
- Team notified in Slack #bilko-deploys: "v[VERSION] deployed successfully"
- Deploy notes added to GitHub release tag

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# Approval

Role	Name	Date	Signature
Deployer			
Reviewer	Alem Bašić		

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Revision #3

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Updated 2026-05-31 20:04:15 UTC by John