

Software Deployment Checklist

A step-by-step checklist for deploying software to production safely.

Pre-deployment checks

- ☐ Confirm the code is reviewed, approved and merged to the release branch.
- ☐ Verify all automated tests and the build pass in the pipeline.
- ☐ Check that database migrations are written and reversible where possible.
- ☐ Confirm environment variables, secrets and config are set for production.
- ☐ Review and update dependencies, and check for known vulnerabilities.
- ☐ Schedule the deploy window and notify the team and stakeholders.
- ☐ Freeze unrelated changes to keep the release scope clear.

Prepare and back up

- ☐ Take a fresh backup of the production database before deploying.
Verify the backup completed and is restorable.
- ☐ Snapshot or back up critical files and current configuration.
- ☐ Record the currently deployed version and commit hash.
- ☐ Confirm rollback artifacts, such as the previous build, are available.
- ☐ Put up a maintenance page if downtime is expected.
- ☐ Verify monitoring and alerting are active before you begin.

Execute the deployment

- ☐ Deploy to a staging or canary environment first if available.
- ☐ Run database migrations and confirm they complete successfully.
- ☐ Deploy the new application version to production.
- ☐ Apply configuration and feature-flag changes as planned.
- ☐ Clear or warm caches and CDN content as needed.
- ☐ Restart or reload services and confirm they come back healthy.

Smoke test and verify

- ☐ Confirm the application loads and the correct version is live.
- ☐ Test critical user paths such as login, checkout or core workflows.
- ☐ Verify integrations and third-party services respond correctly.
- ☐ Check error rates, response times and resource usage.
- ☐ Validate that the database changes behave as expected.
- ☐ Confirm background jobs and scheduled tasks are running.

Rollback plan

- ☐ Define clear criteria for when to roll back versus fix forward.
- ☐ Document the exact steps to revert code, config and migrations.
- ☐ Know how to restore the database backup if data is affected.
- ☐ Assign who has authority to trigger a rollback during the window.
- ☐ Test that the rollback path works before relying on it.
- ☐ Communicate immediately if a rollback is performed.

Post-deployment monitoring

- ☐ Watch dashboards, logs and alerts closely for the first period after deploy.
- ☐ Compare key metrics against the pre-deploy baseline.
- ☐ Remove the maintenance page and confirm full availability.
- ☐ Notify stakeholders that the deployment is complete and stable.
- ☐ Close out the release and update deployment records and tickets.
- ☐ Log any issues and follow up with a retrospective if needed.