

BitBucket to GitHub Migration:

1. Move the BitBucket Repository to GitHub by cloning and pushing into GitHub
git clone --mirror: to clone every references (commits, tags, branches)
git push --mirror: to push everything

Jenkins to GitHub CI/CD:

2. For replacing Jenkins Pipeline with GitHub Actions we need to define a **GitHub Actions workflow in a YAML file**.
[GitHub Actions Importer to automate the migration of your Jenkins pipelines to GitHub Actions.](#)
3. For the Ant build .xml for Jenkins we use some Jenkins Environment variable and Jenkins-specific paths which need to be removed and clean build.xml

In case of GitHub Action we write a YAML workflow file and use it to run the build.xml in GitHub Actions. This yaml file replaces the jenkins file in build.xml

[Building and testing Java with Ant](#)

➔ Minimal changes in build.xml:

- Remove any Jenkins-specific configurations or paths.
- Ensure your targets (like build, test, package, deploy) are correctly defined.

➔ build.yml (**GitHub Actions workflow**) in .github/workflows/ defines the CI/CD process (checkout, dependencies, and running the tasks defined in build.xml).

The workflow is mainly defined in build.yml, and `build.xml` only focuses on the build process (compiling, testing, etc.), leaving the CI/CD process to GitHub Actions. This way, GitHub Actions will handle everything like Jenkins but without having to run Jenkins itself.

4. Here to run the jobs defined in **GitHub Actions workflow** (build.yml) we use **GitHub Runner**. In general these are provided by GitHub only by default but if needed we can configure our own self-hosted runners also.

[Adding self-hosted runners](#)