

# [CI] - Release an artifact

## Project Standalone Release

This page explains how a project can release independently.

### Preparing your project for release

A project can produce a staging repository by using one of the following methods against the {project-name}-maven-stage-{stream} job:

- Leave a comment `stage-release` against any patch for the stream to build
- Click `Build with Parameters` in Jenkins Web UI for the job

This job performs the following duties:

1. Removes `-SNAPSHOT` from all pom files
2. Produces a `taglist.log`, `project.patch`, and `project.bundle` files
3. Runs a `mvn clean deploy` to a local staging repo
4. Pushes the staging repo to a Nexus staging repo `https://nexus.<project-name>.org/content/repositories/<REPO_ID>` (`REPO_ID` is saved to `staging-repo.txt` on the log server)
5. Archives `taglist.log`, `project.patch`, and `project.bundle` files to log server

The files `taglist.log` and `project.bundle` can be used later at release time to reproduce a byte exact commit of what was built by the Jenkins job. This can be used to tag the release at release time.

### Releasing your project

Once testing against the staging repo has been completed and project has determined that the staged repo is ready for release. A release can be performed as follows:

1. Ask helpdesk to promote the staging repo
2. Download `taglist.log` and `project.bundle` files. They can be found in the "patches" directory of the related jenkins release job logs.
3. Read `taglist.log` and checkout the commit hash listed
4. Merge the `project.bundle` patches
5. Git tag the release
6. Push release tag to Gerrit

Steps 3-6 as bash: You will need a working GPG config to sign the release Git tag ("s" option)

```
PATCH_DIR=/tmp/patches
PROJECT=odlparent
VERSION=1.2.3
git checkout $(awk '{print $NF}' "$PATCH_DIR/taglist.log")
git fetch "$PATCH_DIR/$PROJECT.bundle"
git merge --ff-only FETCH_HEAD
git tag -asm "$PROJECT $VERSION" "v$VERSION"
git push origin "v$VERSION"
```

Once complete the Git tag should be available in Gerrit and the Artifacts should appear in the Nexus `opendaylight.release` repo.



### Related articles

- [Creating Branches for Projects with Upcoming Releases](#)
- [\[Gerrit - GitHub\] Update repo committer rights](#)
- [\[CI - Jenkins\] Update Jenkins jobs](#)
- [\[Artifactory\] Sync Bintray to JCenter/Maven-Central](#)
- [\[Artifactory\] Sync Artifacts from Bintray to Maven Central](#)