Release Candidates - Fedora Release Process

Prepare and distribute test plan

The test plan should also be ready prior to code freeze.

It should include:

- Which platform/configuration combinations will be tested
- Which automated tests will be run, and by whom
- Which manual tests will be run, and by whom
- Which service compatibility tests (external search, external triplestore) will be run, and by whom
- Instructions on how testers will report on test results

You can create a copy of Release Testing Procedures - Template to start.

Create release branches and begin final test phase

The items to be released are shown in the Fedora release plan. Duplicate the **base plan**, and edit as necessary.

This meant as a resource to help keep track of tasks, do not worry if you don't *do* it all. Not all items are released with each release.

For the examples below the code ${RC_VERSION} can be replaced with the actual release version.

These examples assume *origin* is the Fedora organization repository for the item in question. i.e. https://github.com/fcrepo/fcrepo

If you are releasing a new version (say **6.0.0**) of Fedora, then

```
> git push origin <main -or- maintenance-branch>:${RC_VERSION}-RC
```

would actually be

```
> git push origin main:6.0.0-RC
```

For each item create a new release candidate branch from the current main development branch.

This will ALMOST always be *main* unless you are releasing a bug/security fix for an older version. Then you would be working from a maintenance branch.

For example

```
git checkout -b ${RC_VERSION}-RC origin/<main -or- maintenance-branch>
git pull
git push origin -u ${RC_VERSION}-RC:${RC_VERSION}-RC
```

The above creates a new branch called ${RC_VERSION}-RC (i.e. 6.0.0-RC) based on the *main* or maintenance branch. It pulls any changes from the remote server. Then it pushes up the branch to github and marks it as the upstream branch.

Build release candidate resources and upload to Github

For each item we want tested, we must provide the community with the built resource to save them from having to build it themselves. This is not necessary for fcrepo-storage-ocfl.

Assuming you are still on your ${RC_VERSION}-RC branch from above, build it following it's particular instructions.

For example

```
> mvn clean install
```

Create a new Github release

Once a you have built the artifact to be tested you should rename it so instead of SNAPSHOT it says RC-${CANDIDATE_VERSION}

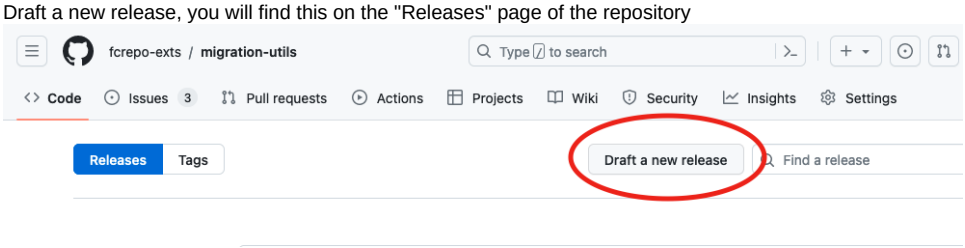
${CANDIDATE_VERSION} is a placeholder and always begins as 1, if you uncover bugs during release testing that require fixing then subsequent release candidates will increment this number (i.e. 2, 3, 4, ...)

For example

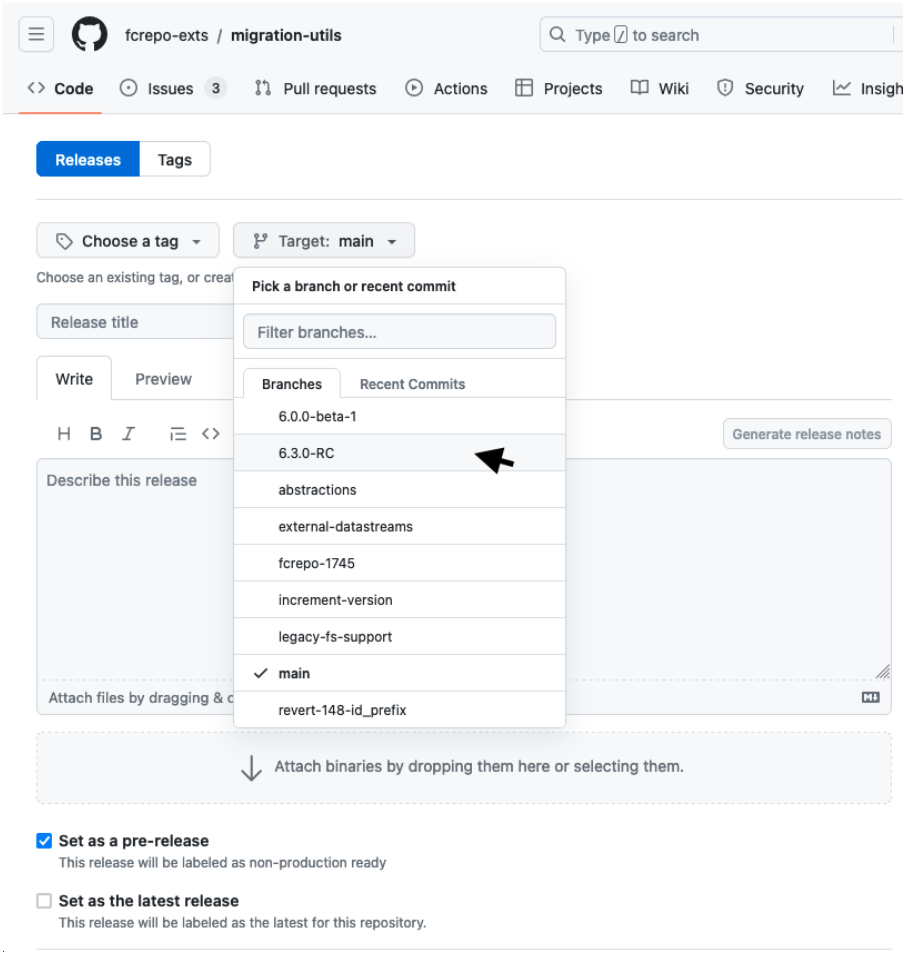
```
> mv migration-utils-6.3.0-SNAPSHOT.jar migration-utils-6.3.0-RC-1.jar
```

Then draft a new Github release and attach the artifact there.

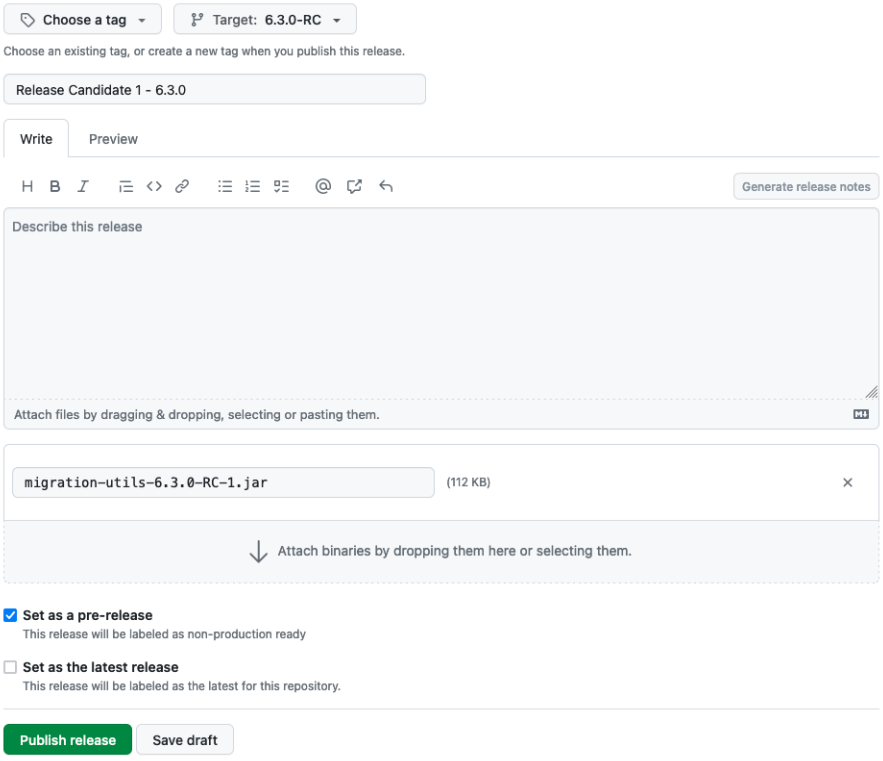
1. Draft a new release, you will find this on the "Releases" page of the repository



2. Select the release candidate branch you pushed up. Also ensure you check the **Set as a pre-release** checkbox



3. Finally enter a descriptive title and attach the built binary (the WAR for fcrepo, the JAR for most others)



4. Click **Publish release**

Send out the release candidate notice

You can follow the process here Policy - Release Candidates

Additional resources

Build scripts

These build scripts may be of use for building the set of release candidate modules. They have not been maintained.

Optional - Deploy Snapshot Artifacts

If the release candidate is coming off of a "maintenance" branch instead of main, it is possible that snapshot artifacts have not been deployed to the Sonatype snapshot repository. If this is the case, Travis will fail to build.

You can check if the snapshot artifacts exist by looking for each module. For example:

`https://s01.oss.sonatype.org/content/repositories/snapshots/org/fcrepo/fcrepo-http-commons/`

If the snapshot artifacts do not exist, you can deploy them to Sonatype with the following command:

```
mvn -DaltDeploymentRepository=sonatype-nexus-snapshots::default::https://s01.oss.sonatype.org/content/repositories/snapshots/ deploy -DskipTests
```