# Releasing a new version of the Sling Starter

These instructions complement those from http://sling.apache.org/documentation/development/release-management.html, which are geared more towards bundle releases, while releasing the Launchpad is a bit more involved.

## Prepare the Starter release

Since the Launchpad is a collection of bundles, it is required for each bundle included it in to be a release, rather than a SNAPSHOT. We currently have only releases in the starter, so this should not be an issue.

It is not recommended to group the Sling Starter and other bundles in the same release vote. The Sling Docker images are automatically built on DockerHub when a release tag is created and it a bundle is missing since it is not yet released the build will fail and will need to be manually recovered. It is possible to trigger a new build later on by deleting the release tag and creating it again but it complicates the release process and is therefore not recommended.

## Create a new and noteworthy page

A new and notheworthy page outlines some of the significant changes done since the last release. The launchpad-comparator Java project allows generating a changelog between two versions of the Sling Starter and can be used to extract the new and noteworthy items. The README file from that project contains all the information needed to generate the changelog.

Additionally, we tag issues that we consider noteworthy with the label `Sling-VERSION-ReleaseNotes`. For instance, the query for the Sling 11 release notes is  project = SLING AND labels = Sling-11-ReleaseNotes ORDER BY updated DESC .

Example pages:

- https://sling.apache.org/news/sling-launchpad-8-released.html .
- https://sling.apache.org/news/sling-launchpad-9-released.html
- https://sling.apache.org/news/sling-10-released.html
- https://sling.apache.org/news/sling-11-released.html
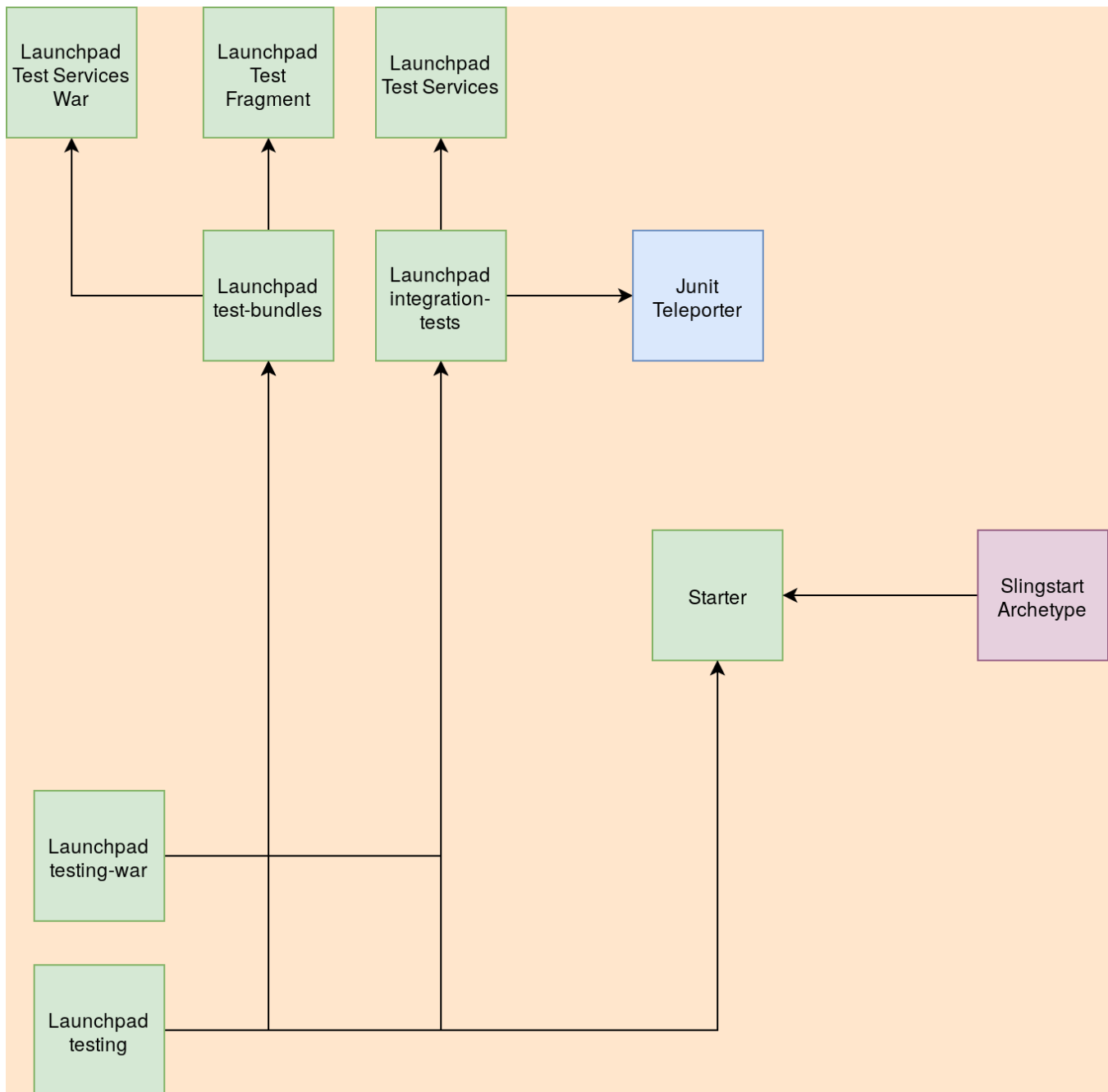- https://sling.apache.org/news/sling-12-released.html

## Update and release the "core" set of artifacts

Although the Sling Starter is composed of just one artifact, we aim to release at least the tests and the Maven archetypes at the same time. We release the tests to capture the state of how Sling worked for that certain release, and the archetypes to allow users to start using them with the latest Starter version from day one.

Currently we release the following artifacts (TBD):

- Sling Starter
- Sling Launchpad Testing
- Sling Launchpad Integration Tests
- Sling Launchpad Test Services
- Sling Launchpad Test Fragment
- Sling Launchpad Test Bundles
- Starter Content (needs to be updated to point to API docs for the new Starter release)
- Project Archetype (needs to be updated to reference the new Starter release)
- Archetype Parent (only if needed for other archetype versions)
- Bundle Archetype (only if not working with the new Starter release)
- JCRInstall Bundle Archetype (only if not working with the new Starter release)
- Initial Content Archetype (only if not working with the new Starter release)

The diagram below shows the projects that were released for Sling 11 and their dependencies. Some unrelated dependencies (blue) were also released as they were used as snapshots. Only one archetype (magenta) was released as the others did not need any changes.

## Deploy the new API docs

For each version we deploy the aggregated javadoc for for the Sling bundles contained in the launchpad. The javadoc can be generated using the generate_javadoc_for_release.sh script. The script picks up artifacts from the Starter file, and manually adds others which we consider required, such as annotations. Any additional artifacts should be manually added to the script.

After generating the artifacts these should be copied in the `sling-site` repository, under `src/main/jbake/assets/apidocs/sling${VERSION}` and referenced from:

- the sidebar ( `src/main/jbake/templates/menu.tpl` )
- the API docs page ( `src/main/jbake/content/documentation/apidocs.md` )


For Sling 11 the javadoc deployment has failed once with an error similar to "Argument list too long". However, a second build allowed the publish to continue and succeeded. The key is to not invoke Maven with the `clean` phase, as the progress would be wiped.

## Deploy the docker image on DockerHub

Since the Sling 8 release we also provide a docker image. As of the Sling Starter 12 release, the process is automated using [DockerHub automated builds](#). Pushing a tag of the form `org.apache.sling.starter-$VERSION` will result in a DockerHub tag of `$VERSION` and also in the `latest` tag being updated.

There is no direct access to the DockerHub UI. If needed, a set of credentials that can be used to trigger builds are stored in the private Sling PMC area in SVN.

The automated builds setup was configured in **INFRA-22832** - Getting issue details... `STATUS` , with the following rules put in place

[blocked URL](#)

## Update local references to the old starter

A number of projects in the sling source tree typically reference the Sling starter mostly for testing. These projects should be updated to either reference the latest release, if they use it for testing additional sets of bundles, or to the latest SNAPSHOT, if they are used to test the current launchpad, like launchpad/testing or launchpad/testing-war .

## Change version of dependant projects

The following projects should keep their versions in sync with the main launchpad:

- launchpad-testing
- launchpad-testing-war

For future releases we should consider releasing the launchpad/testing and launchpad/testing-war projects ( and dependant test projects ) alongside the main launchpad project, so that the test state is recorded as well.

## Clean up starter documentation

The latest version of the Sling Starter is defined in the Sling site by the `sling_releaseVersion` variable in `src/main/jbake/templates/includes/U.groovy` . Once changed, it i recommended to verify it is used, in case usage patterns have changed from the previous version.

## Update the Apache Sling Wikipedia page

The page is at [https://en.wikipedia.org/wiki/Apache_Sling](https://en.wikipedia.org/wiki/Apache_Sling) and we should update at least the latest released version and the corresponding release date.

## Announce release

Send an email to [users@sling.apache.org](mailto:users@sling.apache.org) and [announce@apache.org](mailto:announce@apache.org) . For example, see [[ANN] Apache Sling 12 released](#) .

## See also

1. Launchpad 8 release tracking task: **SLING-5095** - Getting issue details... `STATUS`
2. [dev@sling.apache.org: Sling 8 release checklist](#)
3. [dev@sling.apache.org: Launchpad 7 release?](#)
4. [Towards Sling 6](#)
5. [dev@sling.apache.org: Sling 6 release plan](#)