

# Moving integration tests closer to the code they test

## Rationale

Currently we have integration tests (ITs) defined in the `org.apache.sling.launchpad.tests` module, and also some ITs split amongst various modules - [Sightly Testing](#) and [Models ITs](#) are some examples.

Having tests close to the code is very good as the feedback cycle is very short and we don't risk missing issues until after a release is done. However, having tests grouped in a single module is effective as well - we're using it to test Sling on multiple JVMs quite easily. The question now is whether we can have the best of both worlds - tests living next to the code but also executed centrally in a single global IT job.

## Proposal

The proposal would see the tests moved to each bundle in the `src/test/java` module and executed for each module on `mvn verify`. These tests would then also be collected and launched in the `org.apache.sling.launchpad.testing` module. The `test-jar` dependency would only package integration tests, as unit tests will not be executed as part of the global Sling IT module.

The dependencies would ideally be implicit:

- dependencies are defined in the Sling Starter, for instance `org.apache.sling:org.apache.sling.servlets.get:2.0.10`
- the Sling Launchpad Testing module would at runtime look for `test-jar` dependencies defined for each of the bundle
- When finding such a dependency, for instance `org.apache.sling:org.apache.sling.servlets.get:2.0.10:test-jar` it would add it to the list of tests to run

## Tests to consider relocating

The concept of an IT has multiple meanings in the Sling world, and we have at least:

- Tests using the HTTP API of Sling, based on the [Sling Testing Clients](#) or the older Sling Testing Tools
- [Teleporter tests](#)
- Pax-Exam tests

In my opinion the first two should definitely be included and executed in the consolidated IT module. I am not sure about the third one, since technically those tests do not have to run against a defined Sling launchpad. See for instance the [commons.log pax-exam ITs](#) .

This is also tracked with [SLING-7936](#) - Execute module integration tests in the launchpad-testing module [OPEN](#)