

IntegrationTests.jl: a framework for the automatic generation of integration tests for Julia projects and eco systems

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To be successor, every larger software project needs to be tested to verify the correct functionality and to enable its functionality to be extended flawlessly. The type of tests can be very different and depends on the kind of software project. Software projects, that are divided into several sub-projects require integration tests to verify that the individual parts work together correctly.

At JuliaHEP 2023, I gave the talk “Unit and Integration testing in modularized julia package eco-systems” and talked about the problems that need to be solved when developing integration tests for a Julia package ecosystem. With the feedback from the talk, I developed IntegrationTests.jl [1], a framework to dynamically generate GitHub Action or GitLab CI integration jobs for a given Julia Project.toml. The talk explains the different problems to solve when adding integration tests in a Julia project and how IntegrationTests.jl solves them.

[1] <https://github.com/QEDjl-project/IntegrationTests.jl>

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