



GitHub Actions

## Integration testing ABAP OpenAPI REST call on GitHub Actions







April 22, 2025

TL;DR full example at https://github.com/heliconialabs/abap-integration-test-openapi

Not all REST services have read operations making testing a bit more difficult. And integration testing should happen in an isolated environment to ensure reproduceable results.

This article outlines an example where the ABAP code and REST service all runs on GitHub actions for testing in a continuous integration setup.

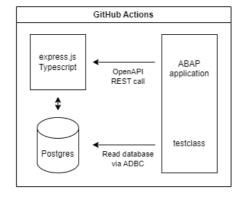
## Implementing the ABAP OpenAPI client

The REST service was designed with OpenAPI, creating the specification first. Then all the scaffolding to call the REST service from ABAP can be automagically generated using the ABAP OpenAPI generator.

For the server side I did a manual monkey implementation with express.js which saves the data in a postgres database.

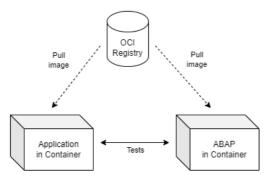
## **Running on GitHub Actions**

Node and postgres can easily run in GitHub actions, and the ABAP code can be **transpiled** to javascript to run. The **testclass** exists only on GitHub, and is not intended to be installed into a real system, hence its stored in folder /test/ and uses ADBC to read values from the postgres database and verify everything works as expected.



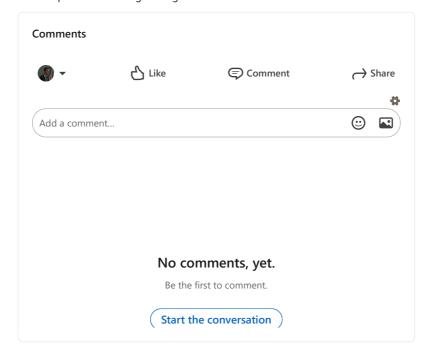
Spinning up and running express + postgres + ABAP takes less than 30 seconds, giving fast feedback to the developer on every commit. It is also possible to run it all on local PC or on GitHub Codespaces.

Alternatively, its possible to build a OCI image and provide it for testing purposes,



With the **Standalone ABAP Development Extension Pack**, its almost like developing any other programming language.

Choose technologies that are testable and compatible with the future #keepTheCoreMoving #evergreenABAP





Senior SAP/ABAP Consultant at Heliconia Labs