

HOW CAN MICRO FRONTENDS BE COMBINED WITH CAMUNDA 7 ?

OVERVIEW //

The customer

acrevis Bank AG, headquartered in St. Gallen, is a Swiss regional bank with a market area between Lake Constance and Lake Zurich. It operates eight branches and employs approximately 180 staff. Over 57,000 private individuals and businesses place their trust in acrevis. The bank focuses on investment advice and asset management as well as real estate financing.

The project

adesso planned and implemented the Proof of Concepts (PoC) for the specific use of micro frontends with Camunda 7 for acrevis Bank.

Used technologies

- > Camunda 7
- > H2 in-Memory Database
- > Java Spring Boot
- > RabbitMQ
- > REST-API
- > Spring Boot WebSocket
- > Vue.js

About us

As an independent consulting and IT service provider, adesso ensures the success of your projects and the future-proofing of your applications. We develop the enterprise architecture for your IT projects and advise you end-to-end throughout the entire process with motivated employees, numerous partnerships – all under the umbrella of the capable adesso Group.

„After inspiring discussions on innovative topics, the implementation of this technical challenge was the right opportunity for a first joint project with adesso Schweiz AG. And just as adesso represented itself it also reflected in our collaboration experience: clear in communication, reliable in implementation as well as cooperative and flexible in the collaboration. We appreciated this very much and are thrilled with the result, which provides us with very valuable insights. We would gladly do it again!“

Andreas Bosshart, Project Manager Digitalization

Initial situation

Micro Frontend is a somewhat new concept in frontend development based on the idea of splitting complex web applications into smaller, independent units. This enables attractive benefits such as easier scaling, faster development, improved maintainability and more flexibility. No wonder acrevis Bank's development team is interested in the micro frontend approach. But is the approach suitable for the bank's specific system landscape?

A partner was sought to implement a proof of concept for the micro frontend approach in combination with Camunda 7 based on the employee portal of acrevis.

In earlier discussions adesso was already able to position itself as a competent, flexible partner and was thus assigned with implementation of the proof of concept.

Solution

The most important requirement, and at the same time the biggest challenge, was that the individual micro frontends form independent components so that they can be reused flexibly in the future.

adesso factored this into the solution and built three micro frontends with associated micro services in the completed PoC for the acrevis staff portal. Internally, these communicate via REST API and WebSocket. The process logic was mapped with a single Camunda module and communication to this module runs via a message queue. The communication between the micro frontends, as well as the linking of the frontends into a single application, is complex. Here, the decisive advantage of the micro frontend approach is that a team-split implementation is possible. This means that fewer conflicts arise during development and the individual micro frontends can also be started and tested separately from one another.

Customer benefit

adesso's proof of concept provides key insights and a newly gained understanding of the micro frontend approach to support acrevis Bank in its decision on whether to use micro frontends in the future.

