

Notes

Sep 17, 2025

WG - Spring-Style Testing Compatibility kickoff

Invited Martin Kouba Aurea Munoz Hernandez Clement Escoffier Eric Deandrea Mario Fusco Georgios Andrianakis ~~Dmytro Liubarskyi~~ qnev89@gmail.com panda.constantin@gmail.com mattheus.089@gmail.com ~~Sheila Jones~~ chuksjustin2000@gmail.com brunobat@gmail.com Jakub Jedlicka ~~gegastaldi@gmail.com~~ Václav "Vašek" Muzikář ~~Yoann Rodiere~~ ~~Eduardo Ramirez Martinez~~

Attachments 📎 WG - Spring-Style Testing Compatibility kickoff

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Meeting records 📄 WG - Spring-Style Testing Compatibility kickoff - 2025/09/17 10:22 EDT - Transc...

Summary

Eric Deandrea opened the meeting by outlining the note-taking strategy, emphasizing the consolidation of all notes and discussions into a GitHub discussion for centralized access and a consistent school of thought, with Clement Escoffier supporting this approach. The primary objective is to extend the existing compatibility layer to testing, encompassing features like Spring Boot test and Mock MVC, aiming to reuse Spring tests directly in Quarkus without modification while avoiding significant changes to current testing methodologies. Key contributors to this effort include Eric Deandrea, Aurea Munoz Hernandez, and Martin Kouba, with the overall goal being to simplify the use of Quarkus for Spring developers by ensuring their tests function as expected.

Details

- **Meeting Setup and Note-Taking Approach** Eric Deandrea initiated the meeting by outlining the note-taking strategy, stating that all notes and discussions would be consolidated into a GitHub discussion for easy access and to avoid scattered information ([00:00:00](#)). He emphasized the importance of keeping all information in one central location to ensure a consistent school of thought. Clement Escoffier supported this approach and offered to summarize the core idea behind the effort ([00:01:12](#)).
- **Testing Compatibility Goals** The primary objective of the initiative is to extend the existing compatibility layer to the testing landscape, encompassing features like Spring Boot test, Mock MVC, REST template, and slice-based testing ([00:01:12](#)). A key non-goal is to avoid significant

changes to current testing methodologies, opting instead to retrofit existing practices and identify quick wins or low-hanging fruit ([00:02:19](#)). Clement Escoffier further clarified that the aim is to reuse tests written in a Spring environment directly in Quarkus without modification ([00:03:16](#)).

- **Challenges with Mocking HTTP** Clement Escoffier expressed strong reservations about mocking HTTP, citing his background in distributed systems where HTTP failures are common and often missed in mocked environments until production. He highlighted that such mocking could lead to a false sense of security and a lack of confidence in the testing approach ([00:03:16](#)).
- **Defining "Done" for Spring Compatibility** The definition of "done" involves understanding the most used Spring testing patterns, mapping them to Quarkus's capabilities, identifying any missing features, and determining what needs adaptation ([00:04:17](#)). A working prototype is envisioned to illustrate compatibility, focusing on allowing users to write tests using Spring APIs efficiently, rather than an "open rewrite" approach that would require learning new methodologies ([00:05:20](#)).
- **Key Contributors and Expertise** Clement Escoffier identified three main points of contact for this effort: Eric Deandrea, due to his expertise in Spring and authoring a book on the subject; Aurea Munoz Hernandez, for their experience in the Spring world; and Martin, for their extensive work on Quarkus test mechanisms and CDI expertise ([00:05:20](#)). Eric Deandrea emphasized Martin's importance for CDI expertise, which will be crucial for understanding slicing and bean contexts ([00:06:53](#)).
- **Simplifying Life for Spring Developers** The overarching goal is to make it easier for Spring developers to use Quarkus, ensuring their tests function as expected even if the underlying execution differs. This includes translating Spring testing concepts like Mock MVC to Rest Assured and Spring Boot test annotations to Quarkus test annotations. However, challenges arise with more complex features like slicing ([00:07:47](#)).
- **Developer Experience and Expected Behavior** Aurea Munoz Hernandez raised questions about the desired developer experience, specifically whether a simple Spring application should run in Quarkus by merely changing dependencies ([00:08:42](#)). Eric Deandrea clarified that the goal is to transpose Spring MVC controller classes to Quarkus equivalents like Rest Assured or Jakarta RS at build time, and to have direct replacements for features like `mock bean` ([00:09:48](#)).
- **Handling Discrepancies and Slicing** Aurea Munoz Hernandez inquired about situations where test results might differ between Spring Boot and Quarkus, particularly when HTTP mocking is not used ([00:11:16](#)). Eric Deandrea acknowledged that property overrides in Spring Boot test, which trigger application reloads, would require a similar concept in Quarkus. The team needs to decide if they want to support "slicing" in a way that re-bootstraps the application rather than actually slicing CDI and ARC, which is a complex topic for discussion ([00:12:31](#)).

- **Testing for Compatibility and Future Changes** Bruno Baptista suggested creating a compatibility layer or TCK to compare Spring and Quarkus behavior, ensuring alignment over time, especially with upcoming Spring major versions ([00:14:33](#)). Clement Escoffier agreed on the need for a basic test to verify continued compatibility, noting it as a follow-up task ([00:15:46](#)).
- **Managing Spring API Updates** Eric Deandrea questioned the current process for tracking and updating Spring API jars within Quarkus. Aurea Munoz Hernandez explained that updates are typically made when requested or when major Spring versions are released and new features are needed in Quarkus. Eric Deandrea suggested that this process might need further review ([00:16:44](#)).
- **Spring Boot Test and Mocking** Eric Deandrea clarified that `Spring Boot test` alone is not an integration test as it heavily mocks the web layer. Clement Escoffier expressed skepticism about using random ports for tests, noting that Spring's approach seems limited to HTTP and doesn't extend to other components like Kafka or gRPC ([00:18:20](#)). Eric Deandrea explained that Spring's random port only applies to the incoming HTTP port, and the web layer is fully mocked unless a defined port is used ([00:19:19](#)).
- **Challenges and Effort Required** Georgios Andrianakis emphasized the significant effort required for this initiative, stating that there will be no "quick wins" and it will likely demand full-time work rather than intermittent contributions. He offered his advisory support but stated he cannot dedicate full-time effort unless it becomes a top priority ([00:22:19](#)). Eric Deandrea acknowledged that this initiative falls within his purview and responsibilities ([00:23:14](#)).
- **Prioritizing Test Compatibility Features** Eric Deandrea proposed starting with the web layer, focusing on Spring Boot test, Mock MVC, or Web Test Client, as these cover a significant portion of use cases ([00:25:06](#)) ([00:27:25](#)). The next priority would be the persistence and data layer, including features like modifying data through annotations for specific tests ([00:26:28](#)). Aurea Munoz Hernandez agreed with this prioritization, noting that the data part would be easier due to existing Quarkus equivalents ([00:27:25](#)).
- **Data Management in Tests** Eric Deandrea described Spring's `@SQL` annotation, which allows defining SQL files to set up database states for tests ([00:27:25](#)). Clement Escoffier expressed concerns about the slowness of schema migration tools like Flyway and Liquibase in tests ([00:29:48](#)). Discussion also covered whether `@SQL` annotations clean up data between tests; Eric Deandrea noted that if not explicitly configured, data mutations persist, potentially leading to test isolation issues ([00:32:47](#)).
- **Potential for Quarkus Integration** Bruno Baptista suggested that data management features like those discussed for Spring could be beneficial for Quarkus tests themselves if implemented correctly. Eric Deandrea agreed that if found useful, such building blocks could be brought into Quarkus, simplifying Spring abstractions ([00:34:55](#)). Holly Cummins highlighted the complexity of cleanup and the need for clear semantics to avoid issues for users ([00:41:49](#)).

- **Usage of Spring Annotations** Clement Escoffier mentioned a spreadsheet tracking the usage of Spring annotations, particularly on Stack Overflow and GitHub, which could help prioritize which features to support. Eric Deandrea noted that many top-used annotations are indeed testing-related, confirming the importance of this initiative ([00:44:25](#)) ([00:48:23](#)). They also discussed whether to separate test artifacts, similar to Spring web and Spring data, to manage dependencies ([00:55:47](#)).
- **Meeting Platform Discussion** Eric Deandrea, Aurea Munoz Hernandez, and Clement Escoffier discussed whether to conduct the meeting in "corker verse" or "Scar," with Clement Escoffier affirming that it should be in "Caucus" and Holly Cummins agreeing that it makes sense. Holly Cummins also mentioned having a keynote speech the following day ([00:56:55](#)).
- **Work Item for Visualization** Holly Cummins will create a work item to address a graphic she had in mind but could not effectively communicate to the group. Eric Deandrea will include all meeting information, including the recording and Gemini's output, on a GitHub issue ([00:56:55](#)).
- **Meeting Wrap-up and Documentation** Clement Escoffier reminded Eric Deandrea to summarize the meeting outcomes on the GitHub discussion, as they were at time for the call. Eric Deandrea confirmed they would put all the meeting notes and recordings on the GitHub issue for everyone to access ([00:56:55](#)).

Suggested next steps

- ☐ The group will brainstorm a punch list for the issue.
- ☐ The group will capture a basic test to verify that the approach doesn't change and remains green as a follow-up task.
- ☐ The group will discuss whether to separate the test artifacts into smaller pieces.
- ☐ Eric Deandrea will put all meeting notes, including the recording and Gemini's output, on the GitHub issue and summarize the outcome on the GitHub discussion.
- ☐ Holly Cummins will raise a work item.

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