

Running and writing integration tests for Keycloak

Recap previous session

- assumption is - more contributions help
- prepare hackathon



- everyone is invited to share things: hour of code with e.g. UI development?

Today: Running and writing integrations tests

aka: what would be the next useful step for [Keycloak DevDay 25 Hackathon](#)...

Prerequisite for today

Getting started! - Setup to build, run and debug keycloak on your local machine

Note: Since ~ 14.12.25 IDELauncher stops working - [some changes required](#)

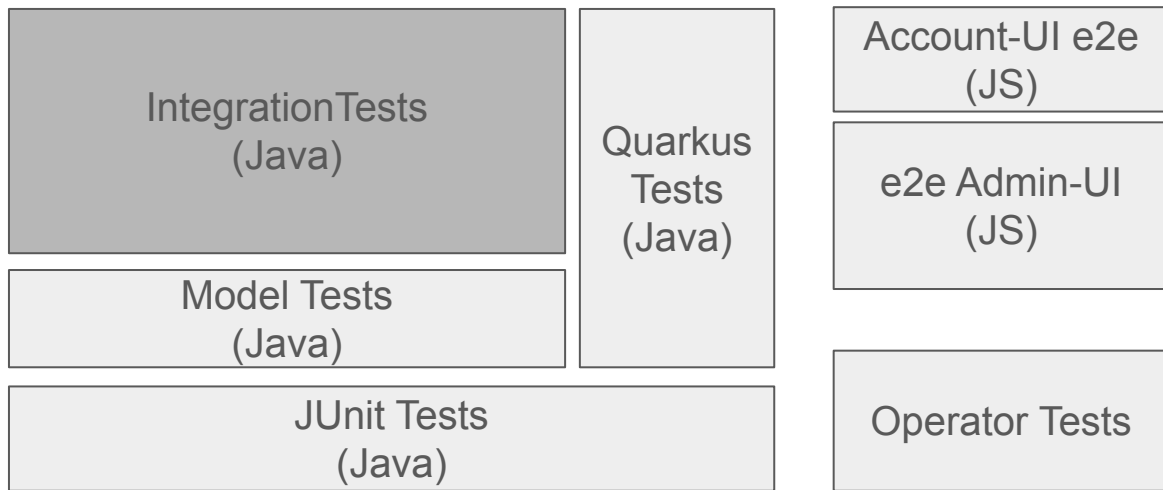
Testing in keycloak

Ensure quality of a
single change
aka.
run with a [PR](#) build

Conformance Testing
Load/Performance Testing
Security
...

Testing within a pull-request

Ensure quality of a
single change
aka.
run with a PR build



Java Integration Tests

Integration
Tests
(Java)

Arquillian based Integration Tests
(Java)

New Test-framework
Integration Tests
(Java)

The screenshot displays an IDE window titled "Run: All in integration-arquillian-tests-base". The top status bar indicates the run is "Stopped. Tests failed: 4,540, passed: 628, ignored: 225 of 5,387 tests - 1 hr 13 min".

The left sidebar shows a tree view of the test suite structure:

- <default package> 1 hr 13 min
 - AccountConsoleTest 4 sec 48 ms
 - redirectToLoginIfNotAuthenticate 3 sec 941 ms
 - testScopesPresentInAuthorizationReq 107 ms
 - AccountRestServiceCorsTest 3 sec 12 ms
 - testGetVersionedApiInvalidOrigin 1 sec 814 ms
 - testGetProfile 209 ms
 - testUpdateProfile 174 ms
 - testErrorResponse 204 ms
 - testGetVersionedApi 156 ms
 - testGetProfileInvalidOrigin 157 ms
 - testUpdateProfileInvalidOrigin 153 ms
 - testErrorResponseInvalidOrigin 145 ms
 - AccountRestServiceLightweightToken 10 sec 989 ms
 - listApplicationsWithoutPermission 2 sec 982 ms
 - testUpdateProfileWithRegistrationEmail 250 ms

The main console area shows the following output:

```
08:54:56,799 INFO [org.keycloak.testsuite.util.URLUtils] starting navigation
integration-arquillian-tests [test]: At 26.01.25, 14:03 with 1 error, 22 warnings 1 hr, 16 min, 25 sec, 652 ms
  org.keycloak.testsuite:integration-arquillian-tests-base:jar:999.0.0-SNAPSHOT 1 error, 22 warnings 1 hr, 16 min, 23 sec, 654 ms
    Parameter 'overWriteIfNewer' is unknown for plugin 'maven-resources-plugin:3.0.1:copy-resources (example-realms)'
    > test 1 error, 21 warnings 1 hr, 16 min, 20 sec, 791 ms
```

Below the console output, a snippet of an exception is visible:

```
com.fasterxml.jackson.databind.exc.UnrecognizedPropertyException: U
at [Source: REDACTED (`StreamReadFeature.INCLUDE_SOURCE_IN_LOCATION
at com.fasterxml.jackson.databind.exc.UnrecognizedPropertyExcept
at com.fasterxml.jackson.databind.DeserializationContext.handle
```

An inset box in the bottom right corner provides a summary of the test run:

```
[INFO]
[ERROR] Tests run: 5264, Failures: 48, Errors: 4441, Skipped: 147
[INFO]
```

What do you think about today's session?
Please provide feedback!

If there should be another episode - which
topic?

Ideas how to make this contribution related
knowledge maintainable?

Thank you!

Any questions?