@Web Conference7 May 2025

OAuth SIG Community 23rd Meeting

(68th from ex-FAPI-SIG)

New Support

- 1. Workload Identity Transaction Token, SPIFEE
- 2. FiPA
- 3. SSF
- 4. OpenID Federation 1.0

Refinement

- 1. OID4VCI
- 2. Token Exchange
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Community Event

KeycloakCon Japan

KeyConf 25 Amsterdam

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New Support

1. Workload Identity - Transaction Token, SPIFEE

- Specification (IETF Internet Draft in OAuth WG)
 https://www.ietf.org/archive/id/draft-ietf-oauth-transaction-tokens-05.html (updated)
- Status Transaction Token: Some SIG members have PoC and would work on it.
 https://github.com/dteleguin/tts-demo
- Status SPIFEE: Some IBM staff have PoC and would work on it.

 https://github.com/maia-iyer/spire-demos/tree/main/keycloak token exchange

2. OAuth 2.0 for First-Party Applications (FiPA)

- Specification (IETF Internet Draft)
 https://www.ietf.org/archive/id/draft-ietf-oauth-first-party-apps-01.html (updated)
- Status: Some SIG members would work on it.
- Discussion:

Support for native login experiences with OAuth 2.0 First-Party Applications (#25014)

Refactoring Authenticators to Support an API-Based Authentication Approach (#36924)

Enable user authentication by presentation of an SD-JWT identity credential with OAuth 2.0 for First-Party Applications (FiPA) (#38796)

3. Shared Signals Framework (SSF)

- Motivation
 - Some major platform vendors supported/required it:
 - <u>Apple Business Manager, Apple School Manager</u>
 - Google Cross-Account Protection (RISC)
- Adopters
 - A lot (Cisco, Okta, etc.), but not officially announced (maybe SSF is for internal use?)
- Specification (Implementer's Draft)
 - SSF: https://openid.net/specs/openid-sharedsignals-framework-1_0-ID3.html
 - CAEP: https://openid.net/specs/openid-caep-interoperability-profile-1 0-ID1.html
 - RISC: https://openid.net/specs/openid-risc-profile-specification-1 https://openid.net/specs/openid-risc-profile-specification-1 0.html
- Discussion: Support RISC and CAEP events / Shared Signals and Events (#14217) Some SIG members are working on it.
 - PoC for a receiver: https://github.com/identitytailor/keycloak-ssf-support

4. OpenID Federation 1.0

- Motivation
 - Enabling automatic client Registration within the European ecosystem: Payment Service Directive (PSD), Payment Services Regulation (PSR), Financial Data Access (FIDA)
 - In research & education field, eduGAIN's OpenID Federation profile support.
 - Adopters: Italy's digital identity system (SPID),
 Greece's academic network (GRNET) in the future?
- Specification (Implementer's Draft)
 https://openid.net/specs/openid-federation-1 0.html
- Discussion: Support for OpenID Federation 1.0 (#31027)

PoC: dynamically registering a wallet by OpenID Federation CNCF Blog:

https://www.cncf.io/blog/2025/04/25/building-trust-with-openid-federation-trust-chain-on-keycloak/ KeycloakCon Japan: https://keycloakconjapan2025.sched.com/event/23463

Refinement

1. OpenID Verifiable Credentials Issuance (OID4VCI)

- Goal: Keycloak can work as an issuer of VCs. (currently it is an experimental feature)
- Status: In progress
- Possible use-cases: German National EUDI Wallet
 https://bmi.usercontent.opencode.de/eudi-wallet/eidas2/en/start/
- Design:

https://github.com/keycloak/keycloak-community/blob/main/design/OID4VCI.md

- Guide: <u>adorsys/keycloak-ssi-deployment</u>
- Discussions:

OpenID for Verifiable Credential Issuance (#17616)

[OID4VCI] Realm based scope credential approach (#39265)

■ Epic issue: [OID4VCI] Approaching Credential Scope based API design (#32961)

Status: 8 out of all 8 issues were resolved. (100%) -> Close it?

1. OpenID Verifiable Credentials Issuance (OID4VCI)

■ Epic issues:

```
[OID4VCI] Implementing support for OID4VCI ID2 Draft 15 (#39273)

Status: 0 out of all 19 issues were resolved. (0%)

#39271, #39272, #39276, #39277, #39278(Optional), #39279, #39282, #39283,

#39284(Optional), #39286, #39287, #39289, #39290, #39291, #39292, #39293,

#39294, #39309, #39310

[WIP] [OID4VCI] Support: Authorization Code Flow (#39261)

#39130(PR: #39148), #39260, #39264(PR: #39409)
```

2. Token Exchange - Internal/Internal

- Goal: Officially supported (currently it is a **preview** feature)
- Status: Completed (Keycloak 26.2)
- Epic issues:

Support for standard Token-Exchange (#31546) -> Closed

2. Token Exchange - Internal/External

- Goal: support as **preview** feature(?)
- Status: In progress
- Epic issues:

```
Federated token exchange (#38335)
```

```
Status: 2 out of all 14 issues were resolved. (+2 resolved, 14%)
```

```
#12546, #12548, #14922, #16426, #20042, #20185, #29313(PR: #29343),
```

#33332(PR: #35075, merged), #34682, #34869, #36295, #37193, #37725,

#37988(PR: #37989, merged)

Subject impersonation token exchange (#38336)

Status: 0 out of all 5 issues were resolved. (0%)

#16294, #17668, #25367, #28440(PR: #29398), #35902

3. Demonstrating Proof-of-Possession (DPoP)

- Goal: Officially supported (currently it is a **preview** feature since KC 23)
- Status: In progress
- Epic issue: DPoP: promote from preview to supported (#22311)

Status: 9 of 12 issues were resolved (75%)

#21921, #26277, #33942,

4. Passkeys (Multi-Device FIDO Credentials)

- Goal: Officially supported (currently it is a **preview** feature since KC 23)
- Status: In progress
- Discussion: Support for passkeys (#16201)
- Epic Issue: Passkeys support (#23656)

Status: 10 of 14 issues were resolved. (71%)

#27945, #29558, #29596(PR: #38781), #32816

- Resources
 - FIDO Alliance : https://fidoalliance.org/white-paper-multi-device-fido-credentials/
 - Apple : https://developer.apple.com/passkeys/
 - Google: https://developers.google.com/identity/passkeys/
 - passkeys.dev : https://passkeys.dev/
 - passkeys.io : https://www.passkeys.io/
 - passkeys futures detection: https://featuredetect.passkeys.dev/

5. FAPI 2.0

The final version of FAPI 2.0 Security Profile was published in Feb 2025.

https://openid.net/specs/fapi-security-profile-2_0-final.html

The current (since KC23) Keycloak's FAPI 2.0 support is for its implementer's draft version 2.

https://openid.net/specs/fapi-2_0-security-profile-ID2.html

https://www.keycloak.org/docs/latest/release_notes/index.html#fapi-2-drafts-support

Need to follow the final version.

■ Epic Issue: FAPI 2.0 Security Profile final version support (#38769)

Community Event

Events

2025

June



13 KeycloakCon Japan 2025 (Hilton Odaiba Hotel, Tokyo, Japan)



16 - 17 KubeCon + CloudNativeCon Japan 2025 (Hilton Odaiba Hotel, Tokyo, Japan) - Keycloak session in Maintainer Track

August



25 - 27 Open Source Summit Europe 2025 (RAI Amsterdam Convention Centre, Amsterdam, Netherlands)



KeyConf 25 (Van der Valk Hotel Amsterdam Zuidas - RAI, Amsterdam, Netherlands)

KeycloakCon Japan

- Date: 13 June 2025, 1:00 8:00 PM (just before KubeCon Japan 2025, Tokyo, Japan)
- Venue: Hilton Tokyo Odaiba (Tokyo, Japan)

As CNCF-hosted co-located event of KubeCon + CloudNativeCon Japan 2025.

- Web Site: https://events.linuxfoundation.org/keycloakcon-japan/
- Registration: Open. This event is free to attend.
- Schedule: Published.

https://events.linuxfoundation.org/keycloakcon-japan/program/schedule/

KeyConf 25

- Date: 28 August 2025 (just after OSS Summit Europe 2025, Amsterdam, Netherlands)
- Venue: Van der Valk Hotel Amsterdam Zuidas RAI, Amsterdam, Netherlands 💳
- Web Site: https://keyconf.dev/
- Registration: Open.
- CfP: Open.

Note:

BarCamp on 29 August just after KeyConf 25 on Backbase HQ.

