@Web Conference19 March 2025

# OAuth SIG Community 21<sup>st</sup> Meeting

(66th 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
- 3. DPoP
- 4. Passkeys
- 5. FAPI 2.0

#### Community Event

KeyConf 2025 Japan

KeyConf 25 Amsterdam

# Table of Contents

# New Support

### 1. Workload Identity - Transaction Token, SPIFEE

- Specification (IETF Internet Draft in OAuth WG)
  <a href="https://datatracker.ietf.org/doc/draft-ietf-oauth-transaction-tokens/">https://datatracker.ietf.org/doc/draft-ietf-oauth-transaction-tokens/</a>
- Status Transaction Token: Some SIG members have PoC and would work on it.
  <a href="https://github.com/dteleguin/tts-demo">https://github.com/dteleguin/tts-demo</a>
- 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)
  <a href="https://www.ietf.org/archive/id/draft-ietf-oauth-first-party-apps-00.html">https://www.ietf.org/archive/id/draft-ietf-oauth-first-party-apps-00.html</a>
- 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)

### 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: <a href="https://openid.net/specs/openid-sharedsignals-framework-1\_0-ID3.html">https://openid.net/specs/openid-sharedsignals-framework-1\_0-ID3.html</a>
  - CAEP: <a href="https://openid.net/specs/openid-caep-interoperability-profile-1">https://openid.net/specs/openid-caep-interoperability-profile-1</a> 0-ID1.html
  - RISC: <a href="https://openid.net/specs/openid-risc-profile-specification-1">https://openid.net/specs/openid-risc-profile-specification-1</a> 0.html
- Discussion: Support RISC and CAEP events / Shared Signals and Events (#14217) Some SIG members are working on it.
  - PoC for a receiver: <a href="https://github.com/identitytailor/keycloak-ssf-support">https://github.com/identitytailor/keycloak-ssf-support</a>

## 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)
  <a href="https://openid.net/specs/openid-federation-1">https://openid.net/specs/openid-federation-1</a> 0.html
- Discussion: Support for OpenID Federation 1.0 (<u>#31027</u>)

Some SIG members are working on it.

- prepared an intermediate authority and trust anchor
- confirmed that a client can be registered to Keycloak by its trust chain.
- an article about it will be posted in Medium soon.

# Refinement

#### 1. OpenID Verifiable Credentials Issuance (OID4VCI)

- Goal: Keycloak can work as an issuer of VCs. (currently it is an **experimental** feature)
- Possible use-cases: German National EUDI Wallet https://bmi.usercontent.opencode.de/eudi-wallet/eidas2/en/start/
- Epic issue: [OID4VCI] Approaching Credential Scope based API design (#32961)

  Status: 8 out of all 8 issues were resolved. (+2 resolved, 100%)

Current other open issues:

- Limit Client capabilities to OpenID Connect or OpenID4VCI (#32967, no PR)
- Extend AbstractOIDCProtocolMapper for credentials (#32957, PR #37687)
- Discussion: OpenID for Verifiable Credential Issuance (#17616)
- Design: <a href="https://github.com/keycloak/keycloak-community/blob/main/design/OID4VCI.md">https://github.com/keycloak/keycloak-community/blob/main/design/OID4VCI.md</a>
- Guide: <u>adorsys/keycloak-ssi-deployment</u>

## 2. Token Exchange

- Goal: Officially supported (currently it is a **preview** feature)
- Status: In progress
- Epic issue: Support for standard Token-Exchange (#31546)
- Status:

```
Standard (internal - internal): KC 26.2 (Mar/Apr)
33 out of 34 issues were resolved (+9 issue added, +28 newly resolved, 97.0%)
Federated (internal - external): KC 26.4 (Sep/Oct) or later?
1 out of 13 issues were resolved (+1 issue added, +1 newly resolved, 8.0%)
Documentation:
```

https://docs.google.com/document/d/1T\_4hjf0tapLAC5Hpac8wNiEHcrAmYZDQGpj3JRJ2MBI

■ Discussion: Token-Exchange Use-cases (#26502)

# 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: 7 of 11 issues were resolved (+1 newly resolved, 64%)

Need urgent consideration:

[Resolved] DPoP: Refresh token created with DPoP can be refreshed without proof (#36475)

[PR sent] DPoP: User Info Endpoint authorization type mismatch (#36476)

## 4. Passkeys (Multi-Device FIDO Credentials)

- Status: Goal: Officially supported (currently it is a **preview** feature since KC 23)
- Status: In progress
- Discussion: Support for passkeys (#16201)
  - Epic Issue: 8 of 14 issues were resolved (#23656, +1 resolved, 57%)
- Resources
  - FIDO Alliance : <a href="https://fidoalliance.org/white-paper-multi-device-fido-credentials/">https://fidoalliance.org/white-paper-multi-device-fido-credentials/</a>
  - Apple : <a href="https://developer.apple.com/passkeys/">https://developer.apple.com/passkeys/</a>
  - Google: <a href="https://developers.google.com/identity/passkeys/">https://developers.google.com/identity/passkeys/</a>
  - passkeys.dev : <a href="https://passkeys.dev/">https://passkeys.dev/</a>
  - passkeys.io : <a href="https://www.passkeys.io/">https://www.passkeys.io/</a>
  - passkeys futures detection: <a href="https://featuredetect.passkeys.dev/">https://featuredetect.passkeys.dev/</a>

#### 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.

- Clarify the difference.
- Clarify what we should do.
- Work for that if needed.

# Community Event

## KeyConf 2025 Japan

■ Date: 13 June 2025, 12:30 - 8:00 PM (just before KubeCon Japan 2025, Tokyo, Japan)

■ Venue: TBA (Tokyo, Japan) •

Hosted by Cloud Native Security Japan (CNSJ), under CNCF Japan Chapter

https://community.cncf.io/events/details/cncf-cloud-native-security-japan-presents-keyconf-2025-japan/

Registration: not yet open

CfP: open

https://sessionize.com/keyconf-2025-japan/

# KeyConf 25

■ Date: 28 August 2025 (just after OSS Summit Europe 2025, Amsterdam, Netherlands)

Venue: Amsterdam, Netherlands

#### Discussion Items:

How about holding a BarCamp on 29 August just after KeyConf 25?

Attendee: up to 20 people expected.

Venue: Backbase HQ?

