@Web Conference6 September 2024

OAuth SIG Community 17th Meeting

(62nd from ex-FAPI-SIG)

Table of Contents

Ongoing

- 1. OID4VCI
- 2. DPoP
- 3. OpenID Federation 1.0
- 4. SSF

Standing Still

- 1. Token Exchange
- 2. Passkeys

Keeping Watch

- 1. OAuth 2.0 for First-Party Applications
- 2. Transaction Token
- 3. OpenID Connect Native SSO for Mobile Apps 1.0
- 4. OIDC4IDA

Community Event

KeyConf 25

Ongoing

OpenID Connect for Verifiable Credentials (OID4VCs)

■Epic issue:

[1] [OID4VCI] Approaching Credential Scope based API design

https://github.com/keycloak/keycloak/issues/32961

Status: 0 out of all 11 issues were resolved. (no progress, 0%)

Some SIG members are working on some tickets (2 in progress, 1 resolved).

[2] Pre-authorized-code flow of OID4VCI Implementation Shift to Scope-Based Approach within OpenID Connect Protocol

https://github.com/keycloak/keycloak/issues/32772

Status: 0 out of all 3 issues were resolved. (no progress, 0%)

OpenID Connect for Verifiable Credentials (OID4VCs)

Completed by KC 25

In Progress

- Goal: Keycloak can work as an issuer of VCs. (currently it is an experimental feature)
 - Phase 1: supported as an experimental feature
 - Phase 2: supported as a preview feature
 - Phase 3: supported officially
- Discussion: https://github.com/keycloak/keycloak/discussions/17616
- Design: https://github.com/keycloak/keycloak-community/blob/main/design/OID4VCI.md
- Guide: <u>adorsys/keycloak-ssi-deployment</u>
- Breakout sessions

27th: 9 Oct (https://cloud-native.slack.com/archives/C05KR0TL4P8/p1728911695051919)

28th: 16 Oct (https://cloud-native.slack.com/archives/C05KR0TL4P8/p1729077599586509)

29th: 23 Oct (https://cloud-native.slack.com/archives/C05KR0TL4P8/p1729682195485119)

30th: 30 Oct (https://cloud-native.slack.com/archives/C05KR0TL4P8/p1730291024363319)

Demonstrating Proof-of-Possession (DPoP)

- Goal: Officially supported (currently it is a **preview** feature)
- Status: In progressKeycloak 23 starts supporting DPoP as a preview feature.
- Epic issue
 - https://github.com/keycloak/keycloak/issues/22311
- Status: 2 of 6 issues were resolved (+2 issue added)
 - Make sure DPoP is passing with official OIDC testsuite https://github.com/keycloak/keycloak/issues/31970

 Some SIG members are working on it.

OpenID Federation 1.0

- Motivation
 - Enabling Automatic Registration of Clients 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.
- Specification (Implementer's Draft)
 - https://openid.net/specs/openid-federation-1_0.html
- Discussion
 - https://github.com/keycloak/keycloak/discussions/31027
 - 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.
 - confirmed that removing clients that are not used by a batch does not work.

Shared Signals Framework (SSF)

Motivation

Some major platform vendors supported/required it:

- Apple Business Manager, Apple School Manager
- Google Cross-Account Protection (RISC)
- Standardization Body

OpenID Foundation - Shared Signals Working Group

- 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_0.html
- Discussion

Support RISC and CAEP events / Shared Signals and Events #14217

Some SIG members are working on it.

- PoC for a transmitter.

https://github.com/thomasdarimont/keycloak/tree/poc/shared-signals/services/src/main/java/org/keycloak/protocol/ssf

Standing Still

Token Exchange

- Goal: Officially supported (currently it is a preview feature)
- Status: In progress

 Keycloak (unknown version) supported token exchange as a preview feature.
- Epic issue
 - https://github.com/keycloak/keycloak/issues/31546
- Status: 3 out of all 9 issues were resolved. (+2 resolved)
- Discussion
 - https://github.com/keycloak/keycloak/discussions/26502
- Resources:
 - Specification: RFC 8693 OAuth 2.0 Token Exchange
 - Keycloak's implementation
 - https://www.keycloak.org/docs/latest/securing_apps/index.html#_token-exchange

Passkeys (Multi-Device FIDO Credentials)

- Status: Goal: Officially supported (currently it is a **preview** feature)
- Status: In progressKeycloak 23 starts supporting passkeys as a preview feature.
- Discussion
 - https://github.com/keycloak/keycloak/discussions/16201
- Epic Issue: 7 of 13 issues were resolved (+2 open issues, +1 resolved)
 - https://github.com/keycloak/keycloak/issues/23656
- 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/

Keeping Watch

OAuth 2.0 for First-Party Applications

- Specification (IETF Internet Draft)
 - https://www.ietf.org/archive/id/draft-parecki-oauth-first-party-apps-00.html

■ Status: Some SIG members would work on it.

Transaction Token

- Specification (IETF Internet Draft in OAuth WG)
 - https://datatracker.ietf.org/doc/draft-ietf-oauth-transaction-tokens/
- Status: Some SIG members have PoC and would work on it.
 - https://github.com/dteleguin/tts-demo

OpenID Connect Native SSO for Mobile Apps 1.0

Overview:

SSO in mobile apps: Share user authentication information among mobile applications installed on the same device.

Current BCP recommends to use a session cookie on a system browser, but some problems:

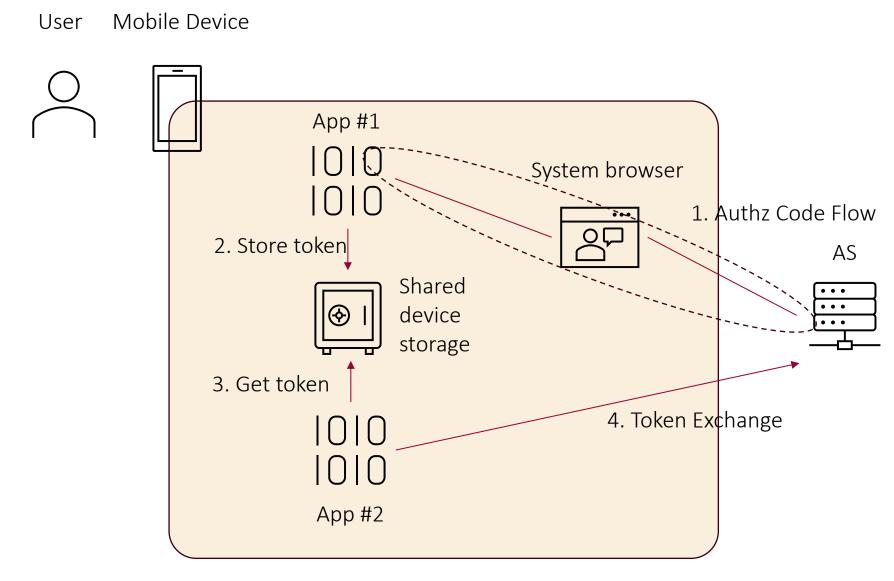
- The session cookie could be deleted by a user.
- The session cookie could not be shared if a user uses private browsing.

To avoid using the session cookie, use token exchange.

It could be one of use-cases of Token Exchange.

- Specification (Implementer's Draft)
- https://openid.net/specs/openid-connect-native-sso-1_0.html

OpenID Connect Native SSO for Mobile Apps 1.0



OpenID Connect for Identity Assurance 1.0 (OIDC4IDA)

- Status: In progressWaiting for discussion and review.
- Specification
- OpenID Connect for Identity Assurance 1.0 Draft

 https://openid.net/specs/openid-connect-4-identity-assurance-1-0.html
- Discussion
- Support for OIDC extensions: OIDC4IDA https://github.com/keycloak/keycloak/discussions/21270
- Implementation
- implement oidc4ida | Draft PR sent

Draft PR: https://github.com/keycloak/keycloak/pull/21309

Community Event

KeyConf 25

Options:

- 1. Day just before or after OSS Summit Europe (25-27 Aug, Amsterdam, Netherlands)
 - https://events.linuxfoundation.org/open-source-summit-europe/
 - Date: Friday 22 or Thursday 28 Aug 2025
 - Venue: Amsterdam, Netherlands
 - Option A: OSS Summit Europe co-located event
 - ✓ Audience : OSS Summit Europe attendee only?
 - Option B: Standalone Event (like KeyConf 24 Vienna)
 - ✓ Registration Fee: free or required?(e.g., Keycloak Dev Day requires about 100 EUR)
- 2. Standalone Event
 - Date and Time: Sep or Oct 2025? / 1 Day?
 - Venue: Athens, Greece / Bucharest, Romania / Cardiff, Wales / Dublin, Ireland /
 Oslo, Norway / Prague, Czech Republic / Zurich, Switzerland etc.

