For keycloak FAPI-SIG Aug 2020

# FAPI Support Milestone

# Table of Contents

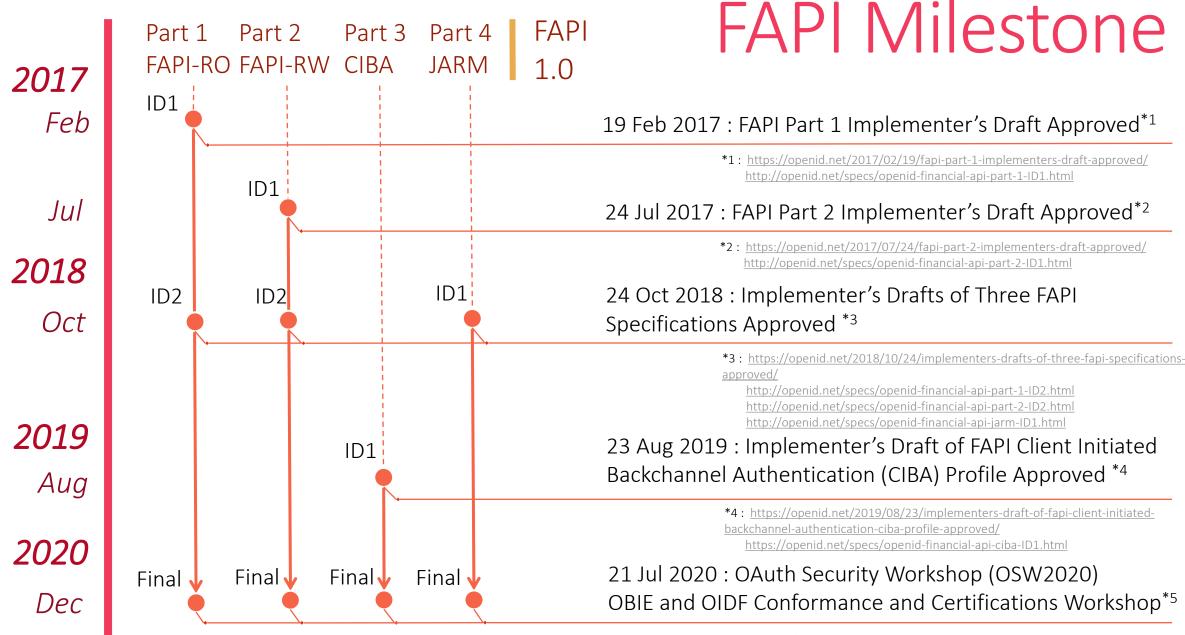
Background & Main Task Definition

Milestone

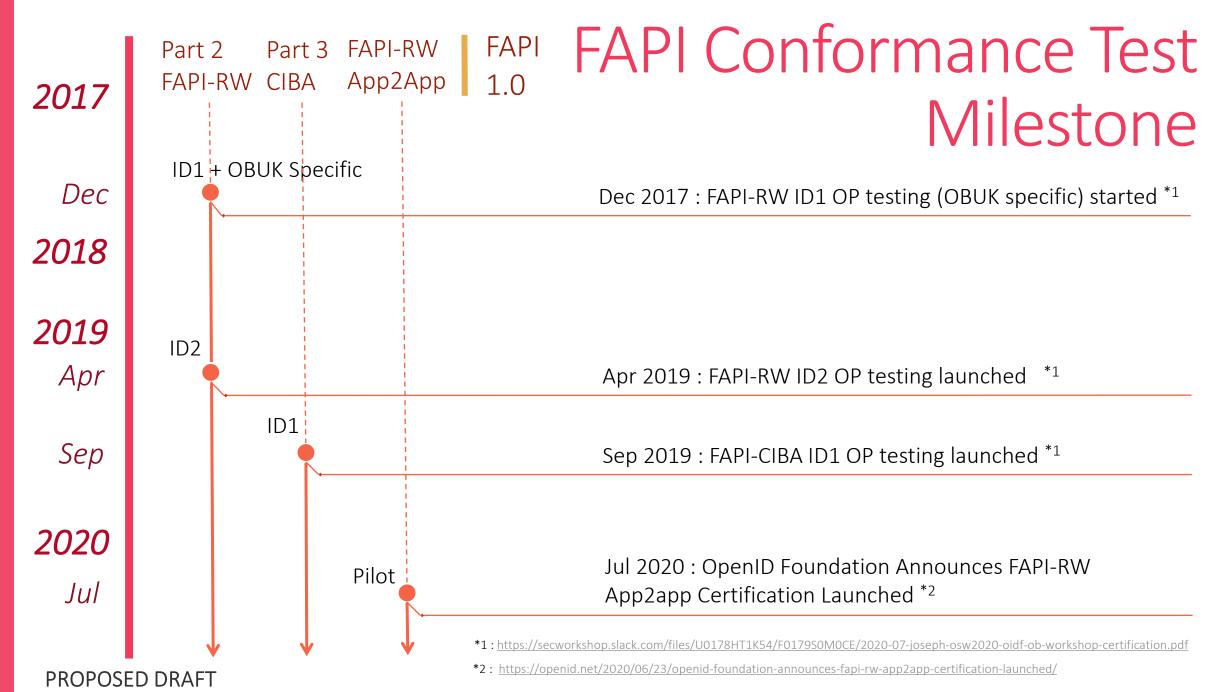
FAPI-RW

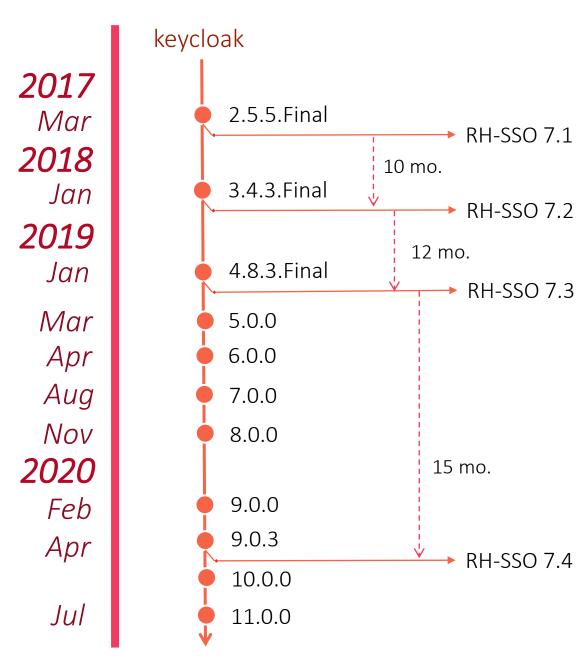
FAPI-CIBA

### Background & Main Task Definition



\*5: <a href="https://www.youtube.com/watch?v=VCyBu7tlRMs">https://www.youtube.com/watch?v=VCyBu7tlRMs</a> 18:10





### Keycloak Milestone

15 Mar 2017 : [keycloak-dev] Keycloak 2.5.5.Final Released\*1

\*1: https://lists.jboss.org/pipermail/keycloak-dev/2017-March/009006.html

4 Jan 2018: [keycloak-dev] Keycloak 3.4.3.Final released\*2

\*2: https://lists.jboss.org/pipermail/keycloak-dev/2018-January/010282.html

15 Jan 2019: Keycloak 4.8.3.Final released\*3

\*3: https://www.keycloak.org/2019/01/keycloak-483final-released.html

6 Mar 2019: Keycloak 5.0.0 released

17 Apr 2019 : <u>Keycloak 6.0.0 released</u>

24 Aug 2019 : <u>Keycloak 7.0.0 released</u>

15 Nov 2019: Keycloak 8.0.0 released

17 Feb 2020 : <u>Keycloak 9.0.0 released</u>

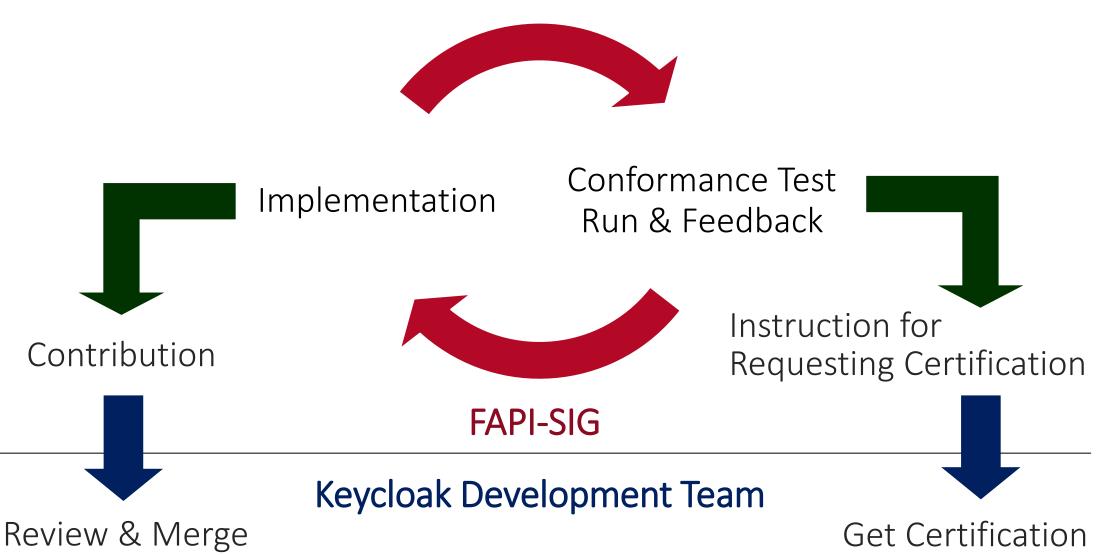
14 Apr 2020: Keycloak 9.0.3 released\*4

\*4: https://www.keycloak.org/2020/04/keycloak-903-released.html

29 Apr 2020 : Keycloak 10.0.0 released

22 Jul 2020 : Keycloak 11.0.0 released

## Responsibility



### Main Tasks

#### [First Priority]

FAPI-RW

Pass Conformance Tests. (by Nov 2020)

- -> (Expected) keycloak dev team gets the certificate.
- -> (Expected) RH-SSO 7.5 based on this certified keycloak. (might be 2021)
- FAPI-CIBA
  Implement & Contribute (by Dec 2020)
- -> (Expected) RH-SSO 7.5 with FAPI-CIBA as technology preview.

#### [Second Priority]

Ecosystem SpecificTBD

### Milestone: Main Task 1<sup>st</sup> Priority: FAPI-RW

### Sub Tasks

Implementation & Contribution

#### Task:

Resolve remaining open JIRA tickets and issues on jsoss-sig/keycloak-fapi repository.

Resolve issues reported from conformance test run & feedback.

Preferable Background: Software Development, Web Security Development

Preferable Skill: JavaEE, OAuth2/OIDC, security feature programming/review

Conformance Test Run & Feedback

#### Task:

Run conformance test against keycloak and analyze its result.

Report this analysis to Implementation and Contribution team.

Preferable Background: Software Development, Web Application Testing

Preferable Skill: JavaEE, Docker, Web application security analysis

### Target Conformance Test

#### Background:

- Keycloak has already supported both MTLS and Private Key client authentication.
- There is no open JIRA tickets and issues specific to w/MTLS or w/Private Key.
- Both w/MTLS and w/Private Key requires mutual TLS for Holder-of-Key Bound Token.

#### [First Priority]

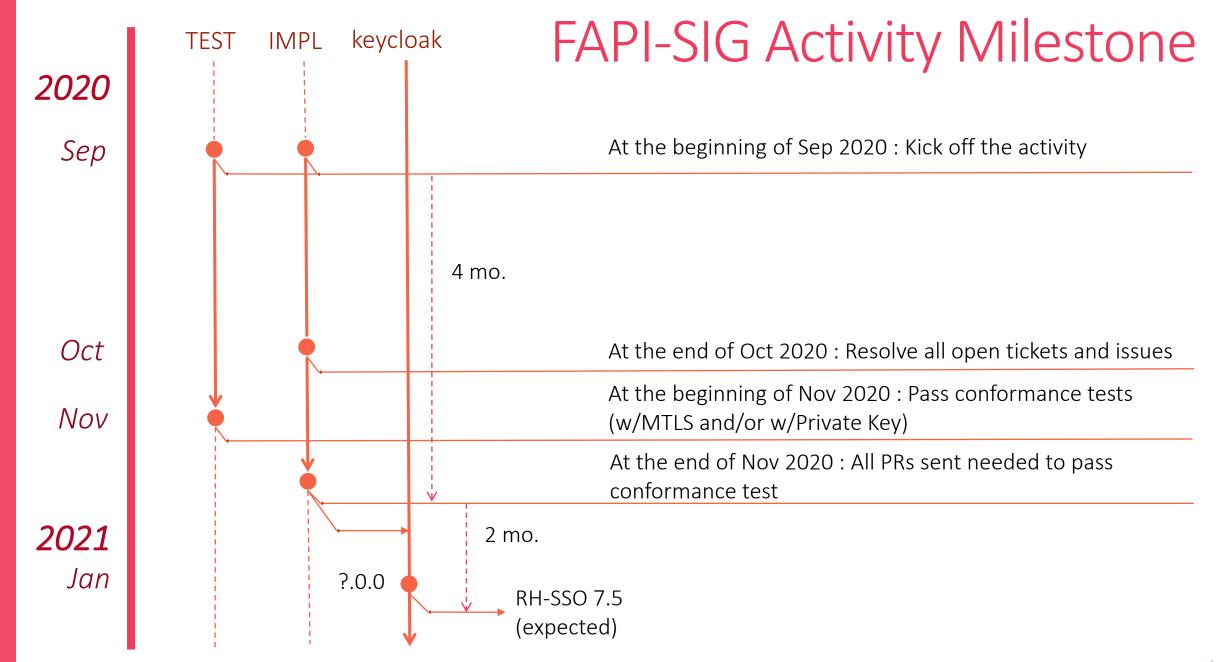
• FAPI R/W OP w/ MTLS

Only requires mutual TLS.

#### [Second Priority]

FAPI R/W OP w/ Private Key

Requires both mutual TLS and private\_key\_jwt client authentication.



### Milestone: Main Task 1<sup>st</sup> Priority : FAPI-CIBA

### Sub Tasks

Implementation & Contribution

#### Task:

Implement CIBA and FAPI-CIBA security profile based on the design document\*1

First Priority: FAPI-CIBA OP poll w/ MTLS

Only requires mutual TLS.

Second Priority: FAPI-CIBA OP poll w/ Private Key

Requires both mutual TLS and private\_key\_jwt client authentication.

Out of Scope: FAPI-CIBA OP ping w/ MTLS, FAPI-CIBA OP ping w/ Private Key

FAPI-CIBA states that an authorization server shall support poll mode while may support ping mode.

Preferable Background: Software Development, Web Security Development

Preferable Skill: J2EE, OAuth2/OIDC, CIBA, security feature programming/review

\*1: <a href="https://github.com/keycloak/keycloak-community/blob/master/design/client-initiated-backchannel-authentication-flow.md">https://github.com/keycloak/keycloak-community/blob/master/design/client-initiated-backchannel-authentication-flow.md</a>

2020

Sep

Nov

2021

Jan

