

Certification Program Update

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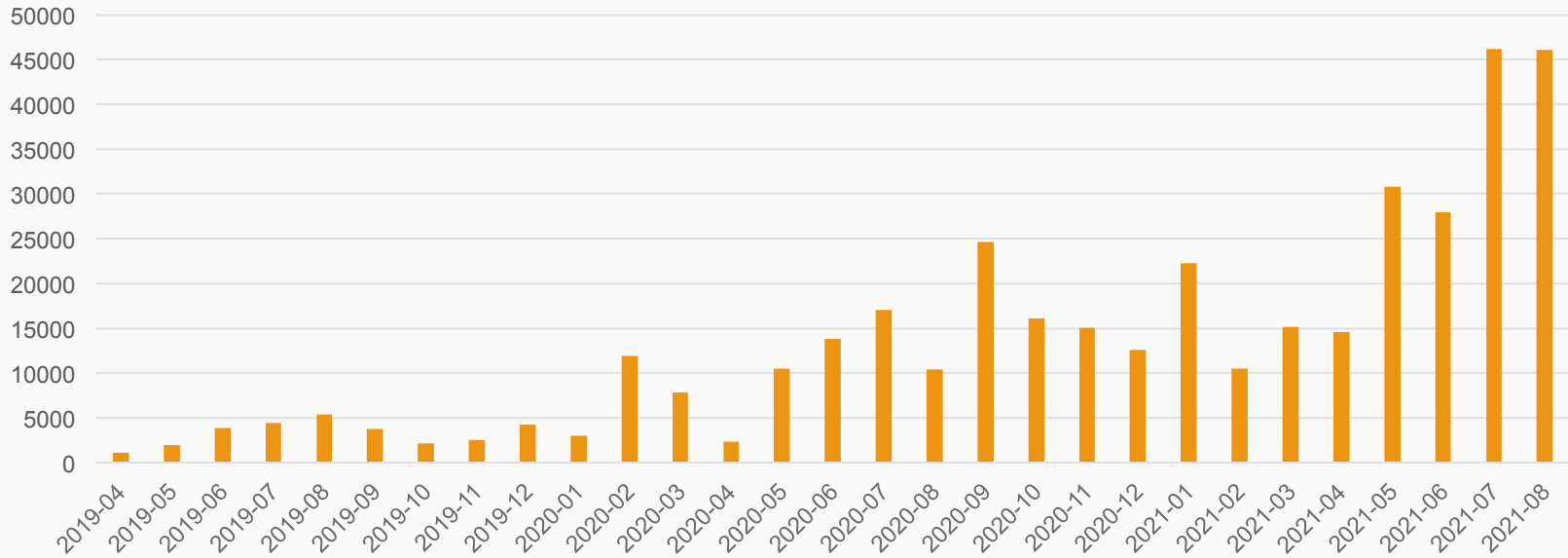
OpenID Certification Program Overview

- A light-weight, low-cost, self-certification program to serve members, drive adoption and promote high-quality implementations
 - Identity Providers launched in early 2015
 - Relying Parties launched in late 2016
 - Financial-grade profiles launched in 2019
- Each certification makes it easier for those that follow and helps make subsequent deployments more trustworthy, interoperable and secure
- All certified implementations are openly listed at <https://openid.net/developers/certified/>



Growth of program

Number of tests run on new java suite by month



FAPI Certification: Core goals

- Interoperability
- Security
- Correct deployment of certified software

However:

- FAPI tests do not test all of OpenID Connect Core
 - ‘Pretty good’ coverage of relevant parts though
 - Vendors should run OpenID Connect Core tests as well (if they support non-FAPI)

FAPI-RW Certification: Reasons to Test

- Reduced support costs
 - If your implementation is interoperable it will “just work” for third parties
- Evidence of compliance to show government regulators
- Evidence of compliance may reduce insurance costs, chances of security breach, etc.
- It can be embarrassing if other people test your server & you fail
 - Anyone can test a server

Interoperability Checks – Time Stamps

“Seconds since 1st Jan 1970” has been a well-known standard for years... but:

09:37:08 **FAILURE** EnsureUserInfoUpdatedAtValid

[2 More ^](#) **OIDCC-5.1** [↗](#) updated_at appears to be in the future

updated_at	May 31, 52521, 1:30:00 AM
now	Jul 21, 2020, 8:37:08 AM

Why use the OIDF's conformance program?

- OIDF tests are developed with close support of relevant working group
 - Tests are updated based on requests from working group
- Testers get direct support from the OIDF certification team
 - Domain experts familiar with all the specs
 - Team have access to OIDF/OAuth2 spec authors when necessary
- Internationally recognized, award winning
- Tests are maintained and updated by OIDF when:
 - new versions of underlying specs published
 - new potential security vulnerabilities are found
 - new interoperability problems are found
 - testers find failures difficult to interpret
- Issues found by testers are raised back to the relevant OIDF working groups
 - Specs can be improved / clarified / disambiguated as necessary

Ecosystem wide benefits

- For “Open” initiatives to succeed, they must:
 - Interoperate
 - Be scalable
 - Be secure

- Must test both sides of the connection
 - The ‘sharing’ party (the bank / authorization server)
 - The ‘receiving’ party (the fintech / OAuth2 client)

- Ecosystems can only scale if they are interoperable
 - An ecosystem with 40 full participants will have 1,560 distinct connections
 - Vital that conformance happens before go live
 - Retrofitting interoperability and security is time consuming and disruptive

- OIDF can engage at the ecosystem / regulatory level

Open Banking Adoption of FAPI & FAPI Certification



- UK led the way with FAPI adoption and FAPI certification under the direction of the Open Banking Implementation Entity
 - Currently 15 UK banks have 31 FAPI certifications of 16 deployments
 - Most of the CMA9 have certified
 - OBIE require the largest 9 banks to recertify annually

- Additional jurisdictions adopting FAPI and FAPI certification
 - US – OI DF anticipates the Financial Data Exchange formally adopting FAPI and requiring FAPI certification
 - AU – OI DF coordinating with AU DSB team who have adopted FAPI as a normative standard and will be encouraging AU banks to FAPI certify
 - Brazil – Security Work Group in Brazil has adopted FAPI as part of Brazil’s open banking stack and will require banks to be FAPI certified. OI DF collaborating with Security WG on Brazil-specific conformance tests
 - Other jurisdictions – OI DF working with regulators and coordinators in Europe, Bahrain and other locals to encourage and support the adoption of FAPI and FAPI conformance

Brazil OpenBanking

- Based on FAPI1-Advanced
- OIDF have worked closely with Mirow/Central Bank
- 100+ banks certified in less than 6 months
- Some extra restrictions compared to FAPI Advanced spec
 - Encrypted request objects required
 - PS256 for signing
 - Intent pre-lodging (similar to UK OpenBanking)
 - Intent id passed in a structured scope
 - Brazil specific ACR claim values

Review of 2021

- **January:** Welcomed one new team member
- **January:** Launched FAPIRW Implementer's draft 2 OP certifications for CDR Australian Consumer Data Rights
- **January:** Launched FAPIRW Implementer's draft 2 OP with Pushed Authentication Requests (PAR) certifications
- **June:** Launched FAPI1-Advanced certifications for RP and OP
- **June:** Launched FAPI1-Advanced OP tests for Brazil OpenBanking
 - Including the first FAPI Dynamic Client Registration test
- **October:** Launched FAPI1-Advanced RP tests for Brazil OpenBanking
- **October:** Added Dynamic Client Management (RFC7592) tests for Brazil OpenBanking
- **November:** One team member moved on, recruited two new ones
- **November:** beta ekyc-ida OP tests launch

The next 6 months

- Finalizing eKYC openid provider conformance testing
- FAPI-CIBA relying party testing
- FAPI-CIBA testing for Brazil profile
- FAPI2 Baseline testing
- Improvements to submission process

Wrap up

- Conformance Suite source code etc publicly available on gitlab:
<https://gitlab.com/openid/conformance-suite>
- Instructions for testing/certifying:
<https://openid.net/certification/instructions/>
- Production deployment:
<https://www.certification.openid.net/>
(Login with **any** google/gitlab/openid account)
- Contact the team or myself if you'd like some help:
 - joseph.heenan@oidf.org or certification@oidf.org
 - <https://twitter.com/josephheenan>
 - <https://www.linkedin.com/in/josephheenan>