



OpenID Connect Working Group and OpenID Certification

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Michael B. Jones

Identity Standards Architect – Microsoft

You're Almost Certainly Using OpenID Connect! OpenID

- Android, Apple, AOL, Deutsche Telekom, Google, GSMA Mobile Connect, Microsoft, NEC, NTT, Salesforce, Softbank, Symantec, Verizon, Yahoo! Japan all use OpenID Connect
 - Many other sites and apps large and small use OpenID Connect

Open Letters to Apple



- OpenID Foundation wrote open letter to Apple about problems with Sign In with Apple in June
 - <https://openid.net/2019/06/27/open-letter-from-the-openid-foundation-to-apple-regarding-sign-in-with-apple/>
- Apple has since fixed security and interop problems identified!
 - Standard OpenID Connect libraries can now be used in many cases
- Posted a second open letter commending them on the improvements made

Session Management / Logout (work in progress)



- Three approaches specified by the working group:
 - Session Management
 - https://openid.net/specs/openid-connect-session-1_0.html
 - Uses HTML5 postMessage to communicate state change messages between OP and RP iframes
 - Front-Channel Logout
 - https://openid.net/specs/openid-connect-frontchannel-1_0.html
 - Uses HTTP GET to load image or iframe, triggering logout (similar to SAML, WS-Federation)
 - Back-Channel Logout
 - https://openid.net/specs/openid-connect-backchannel-1_0.html
 - Server-to-communication not using the browser
 - Can be used by native applications, which have no active browser
- Unfortunately, no one approach best for all use cases
- All support multiple logged in sessions from OP at RP
- Recent WG decision to split RP-Initiated Logout into its own spec
 - Is used with all three OP-Initiated Logout mechanisms
- Logout certification tests now in pilot phase
 - WG is testing multiple implementations before making logout specs Final

Native SSO Specification (work in progress)



- OpenID Connect Native SSO for Mobile Apps specification
 - https://openid.net/specs/openid-connect-native-sso-1_0.html
- Enables Single Sign-On across apps by the same vendor
- Assigns a device secret issued by the AS
- New specification written by George Fletcher
 - *Please review!*

`unmet_authentication_requirements`

Specification (work in progress)



- Defines new error code `unmet_authentication_requirements`
 - https://openid.net/specs/openid-connect-unmet-authentication-requirements-1_0.html
- Enables OP to signal that it failed to authenticate the End-User per the RP's requirements
- New specification written by Torsten Lodderstedt
 - *Please review!*

prompt=create Specification (work in progress)



- Initiating User Registration via OpenID Connect specification
 - https://openid.net/specs/openid-connect-prompt-create-1_0.html
- Requests enabling account creation during authentication
- Active discussion of relationships between account creation and use of existing accounts
- New specification written by George Fletcher
 - *Please review!*

Second Errata Set



- Errata process corrects typos, etc. discovered
 - Makes no normative changes
- Edits under way for second errata set
- https://openid.net/specs/openid-connect-core-1_0-25.html is current Core errata draft

Use of Self-Issued OpenID Provider OpenID

- OpenID Connect defines Self-Issued OpenID Provider
 - https://openid.net/specs/openid-connect-core-1_0.html#SelfIssued
- Lets you be your own identity provider
 - Rather than a third party
- Identity represented as asymmetric key pair controlled by you
- Self-Issued OpenID Provider being used to achieve DID auth
 - Described at <https://self-issued.info/?p=2013>

Related Working Groups



- eKYC and Identity Assurance WG
 - JWT format for verified claims with identity assurance information
- International Government Profile (iGov) WG
 - OpenID Connect profile for government & high-value commercial applications
- Enhanced Authentication Profile (EAP) WG
 - Enables integration with FIDO and other phishing-resistant authentication solutions
- **Mobile Operator Discovery, Registration & authentication (MODRNA) WG**
 - Mobile operator profiles for OpenID Connect
- Financial-grade API (FAPI) WG
 - Enables secure API access to high-value services
 - Used for Open Banking APIs in many jurisdictions, including the UK
- Research and Education (R&E) WG
 - Profiles OpenID Connect to ease adoption in the Research and Education (R&E) sector

Federation Specification (work in progress)



- OpenID Connect Federation specification
 - https://openid.net/specs/openid-connect-federation-1_0.html
- Enables establishment and maintenance of multi-party federations using OpenID Connect
- Defines hierarchical JSON-based metadata structures for federation participants
- Second Implementer's Draft status reached
- Multiple interop events to occur this year
- *Please review and implement!*

OpenID Connect Resources



- OpenID Connect
 - <https://openid.net/connect/>
- Frequently Asked Questions
 - <https://openid.net/connect/faq/>
- Working Group Mailing List
 - <https://lists.openid.net/mailman/listinfo/openid-specs-ab>
- OpenID Certification Program
 - <https://openid.net/certification/>
- Certified OpenID Connect Implementations Featured for Developers
 - <https://openid.net/developers/certified/>
- Mike Jones' Blog
 - <https://self-issued.info/>
- Nat Sakimura's Blog
 - <https://nat.sakimura.org/>
- John Bradley's Blog
 - <https://www.thread-safe.com/>

What is OpenID Certification?



- Enables OpenID Connect and FAPI implementations to be certified as meeting the requirements of defined conformance profiles
 - Goal is to make high-quality, secure, interoperable OpenID Connect implementations the norm
- An OpenID Certification has two components:
 - Technical evidence of conformance resulting from testing
 - Legal statement of conformance
- Certified implementations can use the “OpenID Certified” logo



What value does certification provide?



- Technical:
 - Certification testing gives confidence that things will “just work”
 - No custom code required to integrate with implementation
 - Better for all parties
 - Relying parties explicitly asking identity providers to get certified
- Business:
 - Enhances reputation of organization and implementation
 - Shows that organization is taking interop seriously
 - Customers may choose certified implementations over others

Use of Self-Certification



- OpenID Certification uses self-certification
 - Party seeking certification does the testing
 - (rather than paying a 3rd party to do the testing)
- Simpler, quicker, less expensive, more scalable than 3rd party certification
- Results are nonetheless trustworthy because
 - Testing logs are made available for public scrutiny
 - Organization puts its reputation on the line by making a public declaration that its implementation conforms to the profile being certified to

How does OpenID Certification work? OpenID

- Organization decides what profiles it wants to certify to
 - For instance, “Basic OP”, “Config OP”, and “Dynamic OP”
- Runs conformance tests publicly available at <https://op.certification.openid.net/> or <https://rp.certification.openid.net/> or <https://www.certification.openid.net/>
- Once all tests for a profile pass, organization submits certification request to OpenID Foundation containing:
 - Logs from all tests for the profile
 - Signed legal declaration that implementation conforms to the profile
- Organization pays certification fee (for profiles not in pilot mode)
 - See <https://openid.net/certification/fees/>
- OpenID Foundation verifies application is complete and grants certification
- OIDF lists certification at <https://openid.net/certification/>

Can I use the certification sites for interop testing?



- Yes – please do!
- The OpenID Foundation is committed to keeping the conformance test sites up and available for free to all
- Many projects using conformance testing for regression testing
 - Once everything passes, you're ready for certification!
- Test software is open source using Apache 2.0 license
 - Some projects have deployed private instances for internal testing
 - Available as a Docker container

OpenID Connect Certification Profiles OpenID

- Now OpenID Connect certification profiles for:
 - Basic OP and Basic RP
 - Implicit OP and Implicit RP
 - Hybrid OP and Hybrid RP
 - OP Publishing and RP Using Configuration Information
 - Dynamic OP and Dynamic RP
 - Form Post Response Mode for OP and RP
 - Third party-initiated login for OP and RP
 - ***New: Logout OP and RP tests in pilot mode***

New Connect Certification Profiles



- Four logout profiles for OPs and RPs in pilot mode
 - RP-Initiated Logout
 - Session Management Logout
 - Front-Channel Logout
 - Back-Channel Logout

Connect OP Certifications



- OpenID Provider certifications at <https://openid.net/certification/#OPs>
 - 374 profiles certified for 112 implementations by 91 organizations
- Recent additions:
 - Bitkey, Chinese Academy of Sciences, Ergon Informatik, Gluu, Ilex International, Samsung Electronics
- Each entry link to zip file with test logs and signed legal statement
 - **Test results available for public inspection**

Certified OpenID Providers

These deployments have been granted certifications for these OpenID Provider conformance profiles.

Organization	Implementation	Basic OP	Implicit OP	Hybrid OP	Config OP	Dynamic OP	Form Post OP	3rd Party-ent OP
Akamai	identity Cloud	10-Sep-2018			10-Sep-2018			
Arizona Regional Multiple Listing Service	ARMLS identity 1.0.2	21-Feb-2019						
Audi	Audi	24-Mar-2016	16-Feb-2017	15-Feb-2017	24-Mar-2016		10-Aug-2018	
Auth0	Auth0 1.1	10-Jun-2017	10-Jun-2017	10-Jun-2017	10-Jun-2017			
Auth0	Auth0 2.1	2-Aug-2018	2-Aug-2018	2-Aug-2018	2-Aug-2018	2-Aug-2018	2-Aug-2018	2-Aug-2018
AuthPassive	AuthPassive 4.0.7	19-Jul-2016	19-Jul-2016	19-Jul-2016	19-Jul-2016	19-Jul-2016	19-Jul-2016	19-Jul-2016
Comodo Easr & Brock Allen	identityBene4 v1.6	8-May-2016	8-May-2016	8-May-2016	8-May-2016			
Comodo Easr & Brock Allen	identityBene4	15-Dec-2016	15-Dec-2016	15-Dec-2016	15-Dec-2016			
City of Beavert Hills	CODN Identity	15-Mar-2019	15-Mar-2019	15-Mar-2019	15-Mar-2019		10-Nov-2019	
Bitkey	Bitkey platform 1.0.0	16-Jun-2020						
CA	CA API Gateway/CA Mobile API Gateway	20-Jan-2017	14-Jun-2017	14-Jun-2017	20-Jan-2017			
CA	CA Single Sign-On 12.0.2	4-Feb-2019	4-Feb-2019	4-Feb-2019	4-Feb-2019			
Chinese Academy of Sciences, DACAS	DACAS UA Gateway v1.0	24-Apr-2019	30-Mar-2019	24-Apr-2019				
Chinese Academy of Sciences, DACAS	DACAS Moodle v1.0	8-Apr-2020	8-Apr-2020	8-Apr-2020	8-Apr-2020			
Cloudflare	identity Provider 6.3.4	4-May-2018	23-Jul-2018	23-Jul-2018	23-Jul-2018			
Cloudline	Cloudline OneClick 2015	2-Nov-2015			2-Nov-2015			
Classmethod	Barista v1.10.2	6-Nov-2017			6-Nov-2017			
Cloudentity	Cloudentity ODCD version 1.3	16-Aug-2017			16-Aug-2017			
Cloudentity	CIAM Next	24-Oct-2019	24-Oct-2019	24-Oct-2019	24-Oct-2019			
Cloud Foundry	UAA 60	25-Aug-2018						
Connect2	Connect2E Server 6.1.3a	3-Jan-2017	3-Jan-2017	3-Jan-2017	3-Jan-2017			
Curly	Curly Identity Server 2.1.1	25-Dec-2017	25-Dec-2017	25-Dec-2017	25-Dec-2017			
Curly	Curly Identity Server 4.1.0	20-Sep-2019	20-Sep-2019	20-Sep-2019	20-Sep-2019	20-Sep-2019	20-Sep-2019	20-Sep-2019
CZ.NIC	rpc4id	7-Jul-2016	21-Jul-2016	7-Jul-2016	7-Jul-2016			
Deutsche Telekom	Telnon Login	28-Sep-2018			28-Sep-2018			
Ergon Informatik	Ergon IAM 7.1	25-Feb-2020						
Fargoflix	OpenIAM 13	18-Apr-2019	18-Apr-2019	18-Apr-2019	18-Apr-2019			
GEANT Association	GEANT ODCD-Plugin for Shirovsew v1.0.0	28-Oct-2019	28-Oct-2019	28-Oct-2019	28-Oct-2019	28-Oct-2019	28-Oct-2019	28-Oct-2019
Gluu	Gluu Server 3.1.3	16-Jul-2018	16-Jul-2018	16-Jul-2018	16-Jul-2018	16-Jul-2018	16-Jul-2018	16-Jul-2018
Gluu	Gluu Server 4.1.0	10-Oct-2019	10-Oct-2019	10-Oct-2019	10-Oct-2019	10-Oct-2019	10-Oct-2019	10-Oct-2019
Google	Google Federated Identity	20-Apr-2015	21-Apr-2015	20-Apr-2015	20-Apr-2015			
GrabTaxi Holdings	Grab ID 1.0	8-Feb-2019	1-Feb-2019		8-Feb-2019			
GrantForce	GrantForce Access Management 2.1.x	9-Nov-2018	9-Nov-2018	9-Nov-2018	9-Nov-2018			
GSMA	Mobile Connect Reference Implementation v2.3	18-May-2018						
Thierry Inpat	SimpleIdentity/Server V1.0.0	9-Dec-2016			9-Dec-2016			
Thierry Inpat	SimpleIdentity/Server V2.0.0	16-Jan-2018	16-Jan-2018	16-Jan-2018	16-Jan-2018			
Hanson	SimpleIdentity/Server V1.3.1	31-May-2017	31-May-2017	31-May-2017	31-May-2017			
Holand Hedberg	ijoid 0.7.7	28-Sep-2015	28-Sep-2015	28-Sep-2015	28-Sep-2015	28-Sep-2015		
Carbontrend	Spook Platform	2-Oct-2018	2-Oct-2018	2-Oct-2018	2-Oct-2018	2-Oct-2018		
IBM	IBM Cloud Identity	11-Sep-2018	11-Sep-2018	11-Sep-2018	11-Sep-2018		11-Sep-2018	
IBM	IBM Security Access Manager V9.0.7	25-Aug-2019	25-Aug-2019	25-Aug-2019	25-Aug-2019	25-Aug-2019	25-Aug-2019	25-Aug-2019
Identity Automation	Identity Automation	12-Jan-2018			12-Jan-2018			
Ideminternational	Ideminternational	10-Mar-2020	10-Mar-2020	10-Mar-2020	10-Mar-2020		10-Mar-2020	
I-Sprint Innovations	AccessHealth UAA	25-Aug-2016	25-Aug-2016	25-Aug-2016	25-Aug-2016			
KBSign	KBSign Access 4.0	17-Mar-2017						
The Library of Congress	Authentication, Authorization, and Accounting System, version 1.0	10-May-2017						
LINE	LINE Login	15-Jan-2018						
Micro Focus	Micro Focus Access Manager 4.4 Service	15-May-2019	15-May-2019	15-May-2019	15-May-2019			
Mindport	ACTS on IBMecm Server 2016	13-Sep-2016	13-Sep-2016	13-Sep-2016	13-Sep-2016			
Microsoft	Azure Active Directory V1	15-Sep-2016			15-Sep-2016		15-Sep-2016	

Microsoft	Azure Active Directory V2	10-Jan-2019	10-Jan-2019	10-Jan-2019	10-Jan-2019			10-Jan-2019
Microsoft	BP Experimental Career V0.9	6-May-2016			6-May-2016			
Mime	Mime Federated Identity v1	1-Aug-2017						
NEC	NCT100-DA-OC	15-Mar-2016						
NetResearch	Net Research Central Identity	10-Sep-2014			10-Sep-2014			10-Sep-2014
Norura Research Institute	npID	10-Apr-2018	10-Apr-2018	10-Apr-2018	10-Apr-2018	10-Apr-2018	10-Apr-2018	10-Apr-2018
Norura Research Institute	UIN-C	10-Apr-2018						
NRI SecurityTechnologies	UIN-C Ultra 1.0	28-Jan-2017	28-Jul-2017	28-Jul-2017	28-Jul-2017		28-Jul-2017	28-Jul-2017
NTT Software Corporation	TrustNet/Federation Manager	28-Jan-2017	28-Jan-2017	28-Jan-2017	28-Jan-2017			
ODS-RI	ThemStrust Identity Platform v1.0	7-Oct-2019	7-Oct-2019		7-Oct-2019			7-Oct-2019
ODS-RI	ThemStrust Identity Platform v1.0	25-Apr-2017	25-May-2017		25-Apr-2017			25-Apr-2017
ODS-RI	ThemStrust Identity Platform v2.0	5-Mar-2018	5-Mar-2018		5-Mar-2018			5-Mar-2018
ODS-RI	ThemStrust Identity Platform v2.0	20-Nov-2018	20-Nov-2018	20-Nov-2018	20-Nov-2018	20-Nov-2018	20-Nov-2018	20-Nov-2018
ODS-RI	ThemStrust Identity Platform v2.0	22-Jul-2019	22-Jul-2019	22-Jul-2019	22-Jul-2019			22-Jul-2019
ODS-RI	ThemStrust Identity Platform v2.0	22-Jul-2019	22-Jul-2019	22-Jul-2019	22-Jul-2019			22-Jul-2019
Ods	Ods OP	25-Mar-2016	25-Mar-2016	25-Mar-2016	25-Mar-2016		16-Jun-2016	
Oregon	Oregon Connect 5.0	9-Nov-2018	9-Nov-2018	9-Nov-2018	9-Nov-2018			9-Nov-2018
OpenAthens	OpenAthens Cloud	3-Oct-2017			3-Oct-2017			3-Oct-2017
Optimal sM	TheOptimalCloud 4.2	19-Oct-2017	19-Oct-2017		19-Oct-2017			
Orsis	Orsis Identity Cloud Service 16-Apr-2016	16-Apr-2016	16-Apr-2016	16-Apr-2016	16-Apr-2016			16-Apr-2016
ORY Graph	ORY Hydra v1.0.0	14-Jul-2018	14-Jul-2018	14-Jul-2018	14-Jul-2018	14-Jul-2018	14-Jul-2018	14-Jul-2018
Osiam	Osiam Trust Platform 4.4	6-Jan-2019	14-Nov-2018	14-Nov-2018	14-Nov-2018			23-Nov-2019
Payfit	Light with Payfit	19-Nov-2015			19-Nov-2015			
Placemat App	Placemat	19-Jan-2018	19-Jan-2018	19-Jan-2018	19-Jan-2018	19-Jan-2018		19-Jan-2018
Plig Identity	Plig/Release 5.0	10-Apr-2015	10-Apr-2015	10-Apr-2015	10-Apr-2015	10-Apr-2015		10-Apr-2015
Plig Identity	Plig/Release 6.1.3	25-Sep-2019	25-Sep-2019	25-Sep-2019	25-Sep-2019	25-Sep-2019		25-Sep-2019
Plig Identity	Plig/One for Enterprise 6.5.146	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019
Plig	Plig/Cloud Foundry 2.1 UAA	11-Jul-2016						
Plig	Plig/Id-Look	22-Oct-2018			22-Oct-2018			22-Oct-2018
Prodeconnect Media	Prodeconnect 1.0.0	7-Aug-2017	7-Aug-2017	7-Aug-2017	7-Aug-2017			7-Aug-2017
Recruit	Recruit ID	16-May-2018			16-May-2018			
Red Hat	Kapack 2.0.0	31-Oct-2016	31-Oct-2016	31-Oct-2016	31-Oct-2016		31-Oct-2016	31-Oct-2016
Justin Ritter	MITNED/Connect	10-May-2015			10-May-2015		10-May-2015	10-May-2015
Salesforce	Summer 2018 Release	14-May-2018			14-May-2018			
Samsung Electronics	Samsung Account	11-Feb-2020						
Michael Schwartz	Gluu Server 2.3	2-Jul-2016	2-Jul-2016	2-Jul-2016	2-Jul-2016	2-Jul-2016	2-Jul-2016	2-Jul-2016
Michael Schwartz	Gluu Server 3.1.1	16-Oct-2017	16-Oct-2017	16-Oct-2017	16-Oct-2017	16-Oct-2017	16-Oct-2017	16-Oct-2017
Securix	SecurixAuth vP 8.2	25-Feb-2016	25-Feb-2016	25-Feb-2016	25-Feb-2016	25-Feb-2016	25-Feb-2016	25-Feb-2016
Phil Stefan	node-oid-provider	2-Jan-2017	2-Jan-2017	2-Jan-2017	2-Jan-2017	2-Jan-2017	2-Jan-2017	2-Jan-2017
Softbank	Softbank ODCD v1.0	10-Jan-2019			10-Jan-2019			
Synapse	NBL 2016.0.16	10-Oct-2016			10-Oct-2016			10-Oct-2016
Talpalear	Hybrid 4.0.0	20-Aug-2019			20-Aug-2019			
Talpalear	Them Identity Service 3.0	26-Aug-2018	26-Aug-2018	26-Aug-2018	26-Aug-2018			26-Aug-2018
U2U Consult	The identity multi v1	10-Oct-2016	10-Oct-2016	10-Oct-2016	10-Oct-2016			10-Oct-2016
U2U Consult	OID de	10-Oct-2016	10-Oct-2016	10-Oct-2016	10-Oct-2016			10-Oct-2016
University of Chicago	ODCD OP Service for Shibboleth vP 1.1 version 1.0	23-Feb-2014	23-Feb-2014	23-Feb-2014	23-Feb-2014			23-Feb-2014
Veri	Veri 1.2	10-Oct-2016			10-Oct-2016			10-Oct-2016
Verizon	V2Connect 1.9	24-Sep-2018			24-Sep-2018			
Verity Systems	Verify M Identity 3.1.1	25-Nov-2015			25-Nov-2015			25-Nov-2015
Venue	Connect v1.0	28-Jan-2016	2-Feb-2016		28-Jan-2016			28-Jan-2016
Vision	Hotswap OAM	18-Apr-2016	18-Apr-2016	18-Apr-2016	18-Apr-2016	18-Apr-2016	18-Apr-2016	18-Apr-2016
VisionConcepts	vision 1.0	11-Apr-2016	11-Apr-2016	11-Apr-2016	11-Apr-2016			11-Apr-2016
VisionConcepts	vision 1.0	6-Feb-2016			6-Feb-2016			6-Feb-2016
WBO2	identity Server 1.4.3	15-Jan-2016	15-Jan-2016	15-Jan-2016	15-Jan-2016	15-Jan-2016	15-Jan-2016	15-Jan-2016
Yoroi Japan	Yoroi ID Federation v2	7-Dec-2016	7-Dec-2016	7-Dec-2016	7-Dec-2016			7-Dec-2016

Certified OpenID Providers for Logout Profiles

These deployments have been granted certifications for these OpenID Provider logout conformance profiles.

Organization	Implementation	RP-Initiated OP	Session OP	Front-Channel OP	Back-Channel OP
Connect2	Connect2E Server 1.6.1	10-Dec-2018	10-Dec-2018	10-Dec-2018	10-Dec-2018
Plig Stefan	node-oid-provider	11-Nov-2019	11-Nov-2019	11-Nov-2019	11-Nov-2019

Connect RP Certifications



- Relying Party certifications at <https://openid.net/certification/#RPs>
 - 77 profiles certified for 30 implementations by 18 organizations
- Recent additions:
 - Ilex International, Roland Hedberg

Certified Relying Parties

These deployments have been granted certifications for these Relying Party conformance profiles:

Organization	Implementation	Basic RP	RP Implicit	Hybrid RP	Config RP	Dynamic RP	Form Post RP	3rd Party-Init RP
Brock Allen	oidc-client-js 1.3		4-Feb-2017		7-Feb-2017			
Dominick Baier	IdentityModel.OidcClient 2.0	27-Jan-2017			6-Feb-2017			
Damien Bowden	angular-auth-oidc-client 1.0.2		21-Jun-2017		11-Aug-2017			
F5 Networks	BIG-IP 13.1.0 Evergreen	7-Jul-2017						
Thierry Habart	SimpleIdentityServer V1.0.1	17-Jan-2017	17-Jan-2017	17-Jan-2017	17-Jan-2017	17-Jan-2017		
Ilex International	Sign&go 8.0	10-Mar-2020						
Janrain	IDPD 2.6.0	7-Feb-2017						
Roland Hedberg	pyoidc 0.9.4	20-Dec-2016	20-Dec-2016	20-Dec-2016	20-Dec-2016	20-Dec-2016		
Roland Hedberg	oidcrp 0.4.0	16-Apr-2018	16-Apr-2018	16-Apr-2018	16-Apr-2018	16-Apr-2018		
IBM	Open Liberty 18.0.0.4	26-Oct-2018						
IBM	WebSphere Liberty 18.0.0.4	26-Oct-2018						
Tom Jones	TC.AUTHENTICATION 1.0	30-Jun-2017						
Karlsruher Institut für Technologie, SCC	oidcc 1.0.1	2-Feb-2017			2-Feb-2017			
KSIGN	KSign Trust Thing 1.0	2-Jan-2018						
KSIGN	KSign Trust Thing 1.1		3-Oct-2018					
KSIGN	KSign Trust Thing 1.2				10-Oct-2019			
Nomura Research Institute	phpOIDC 2016 Winter	7-Feb-2017	7-Feb-2017	7-Feb-2017	7-Feb-2017	7-Feb-2017		
Nov Mataka	openid_connect_rubygem v1.0.3	20-Jan-2017						
Ping Identity	PingAccess 4.2.2	26-Jan-2017						
Ping Identity	PingFederate 8.3.1	17-Jan-2017			31-Jan-2017			
Ping Identity	PingFederate 9.2.1	4-Feb-2019			4-Feb-2019		4-Feb-2019	
Filip Skokan	node openid-client *1.3.0	15-Dec-2016	15-Dec-2016	15-Dec-2016	15-Dec-2016	15-Dec-2016		
Filip Skokan	node openid-client *2.0.0	12-Apr-2018	12-Apr-2018	12-Apr-2018	12-Apr-2018	12-Apr-2018	29-Jun-2018	
Filip Skokan	node openid-client *3.0.0	11-May-2019	11-May-2019	11-May-2019	11-May-2019	11-May-2019	11-May-2019	
Manfred Steyer	angular-oauth2-oidc 2.0.5		16-Aug-2017					
ZmartZone IAM	lua-resty-openidc 1.5.1	17-Nov-2017			17-Nov-2017			
ZmartZone IAM	mod_auth_openidc 2.3.1	21-Jul-2017	21-Jul-2017	21-Jul-2017	21-Jul-2017	21-Jul-2017		

Certified OpenID Relying Parties for Logout Profiles

These deployments have been granted certifications for these OpenID Relying Party logout conformance profiles:

Organization	Implementation	RP-Initiated RP	Session RP	Front-Channel RP	Back-Channel RP
Roland Hedberg	OIDCryp v0.6.6	20-Mar-2020	20-Mar-2020	20-Mar-2020	20-Mar-2020

FAPI Certification Status



- Financial-grade API (FAPI) implementations being certified
- FAPI Part 2 OP certification launched in April 2019
 - 18 implementations certified to date
- Financial-grade API Client Initiated Backchannel Authentication Profile (FAPI-CIBA) launched in September 2019
 - One implementation certified to date
- FAPI Part 2 RP certification tests launched in December 2019
 - One implementation certified to date

What's next for OpenID Certification? OpenID

- Connect Certification code being reimplemented in Java
 - Current implementation in Python
 - Moving to the same code base as FAPI certification
 - Expect migration to Java implementation later this year
 - **News:** Many Java OpenID Connect tests now ready for you to test!
- Additional FAPI profiles being developed:
 - FAPI-CIBA RP
- Certification for additional specifications is possible:
 - E.g., eKYC-IDA, HEART, MODRNA, iGov, EAP, R&E, etc.

OpenID Certification Call to Action



- Certify your OpenID Connect and FAPI implementations
- Help us test the Java OpenID Connect tests
 - Joseph Heenan will tell you how