OpenID Connect Certification

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• Hans Zandbelt
  – Independent Consultant (NL), contracting for the OpenID Foundation
  – over 15 years of experience implementing and deploying of federated SSO protocols & systems
  – Formerly 7 years CTO Office @ Ping Identity
  – OIDC RP development: Apache 2.x HTTPd module
  – First RP (pilot) certification
History

• February 2014
  – OpenID Connect standardized - SSO/Identity Profile on top of OAuth 2.0
• April 2015
  – OP Self-Certification program launched
• December 2016
  – RP Self-Certification in pilot*
• April 2017
  – Increased resources (people, funding)*
• May 2017
  – 39 OPs listed, 12 RPs (pilot)
Why

- Adoption (foundation/eco-system)
- Interoperability (participants)
- Conformance/security (customers/buyers/marketing)
  - Public attestation
  - Verify by running code/libraries yourself

- Testing (!) (developers)
Resources

• Code: open source on https://github.com/openid-certificate
  – Libraries + test tool

• Infrastructure
  – OP Test Server: op.certification.openid.net
  – RP Test Server: rp.certification.openid.net

• Team
  – certification@openid.net
What

• OP test suite
  – Test tool simulates RP (process/port per-OP)
  – Generate requests, parse responses, write logs

• RP test suite
  – Test tools simulates OP (multi-tenant, per-RP)
  – Accept requests, generate responses, write logs

• Clients
  – Tool / Software / Library
  – Instance (deployment) (?)
How (1)

• Run a series of tests
  – Request/Response Interactions between your software and the test suite

• Results are logged on both sides (test suite and participant)
  – Positive: successful validation/response
  – Negative: request/response should be rejected, error should be generated
• Local docker
  – Only for testing, actual certification is done against the live certification server
How (2)

• Produce logs
  – Server side
  – Client side (may be screenshots)

• Send logs together with signed statement

• Get listed on the OpenID website as a certified implementation
  – Global check done for the right input, it is still self-certified
Recent Developments

• Stabilize
  – Tickets/Issues

• Dockerize
  – Continuous Integration

• Process & People & Funding
  – Maintain & Develop infrastructure
  – Help testers

• New extensions/protocols/suites on the horizon:
  – Logout, Session Management, MODRNA, FAPI/OB
Team

- Mike Jones, Roland Hedberg, Don Thibeau, Mike Leszcz, Hans Zandbelt
  - Code development
  - Maintain the running infrastructure
  - Help testers

- Questions/E-mail:
  - certification@openid.net

- Issues/Bugs/Enhancements:
  - https://github.com/openid-certification/oidctest/issues
Thank you

http://openid.net/certification/