Trust & Identity Incubator

Add OIDC OP support to SimpleSAMLphp

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Overview

- Security Assertion Markup Language (SAML)
  - Authentication and authorization exchanging
  - Used in enterprise and government applications
- OpenID Connect (OIDC) is a widespread authentication protocol
  - Authentication layer on top of OAuth 2.0
  - Focused in mobile and web applications

Overview: SAML vs OIDC comparison

SAML	OIDC
Service Provider (SP)	Relying Party (RP)
Identity Provider (IdP)	OpenID Provider (OP)
XML based	JSON based
Feature rich	Lightweight

Overview

- SimpleSAMLphp (SSP) application that deals with authentication
  - Focused in SAML 2.0 SP and IdP deployments
  - Extensible with modules
  - Only supports OIDC Relaying Parting interface
- This activity seeks to implement an OIDC OP in accordance with the OIDC specification into SSP.

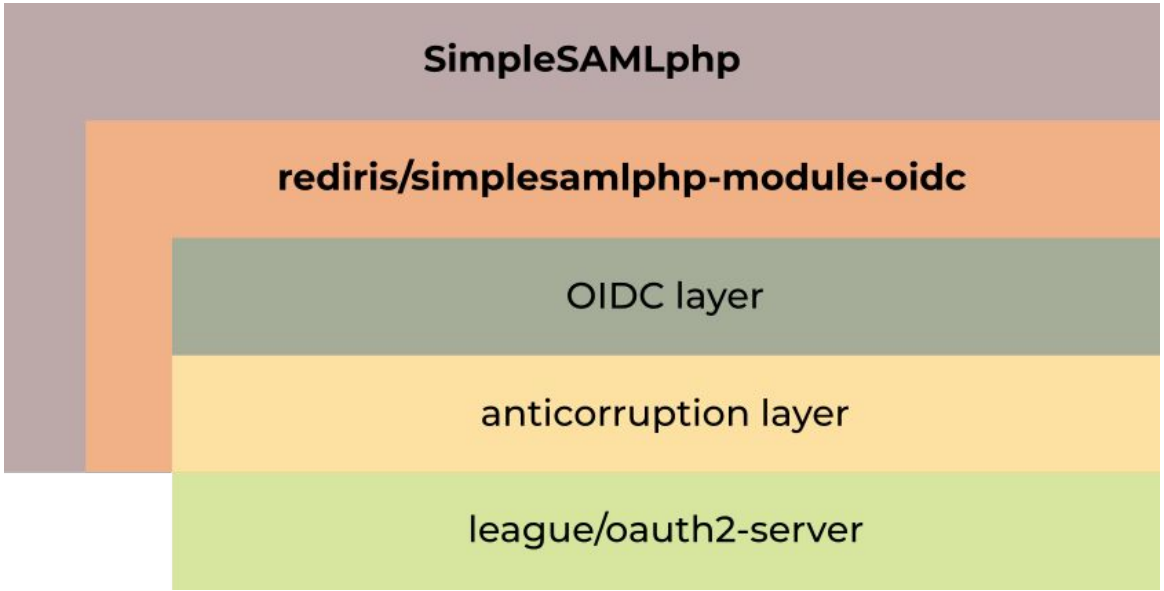
Background

- Existing module available
  - https://github.com/rediris-es/simplesamlphp-module-oidc
- Developed by University of Cordoba for RedIRIS, Spanish NREN.
- Basic flow support and not certified

Requirements

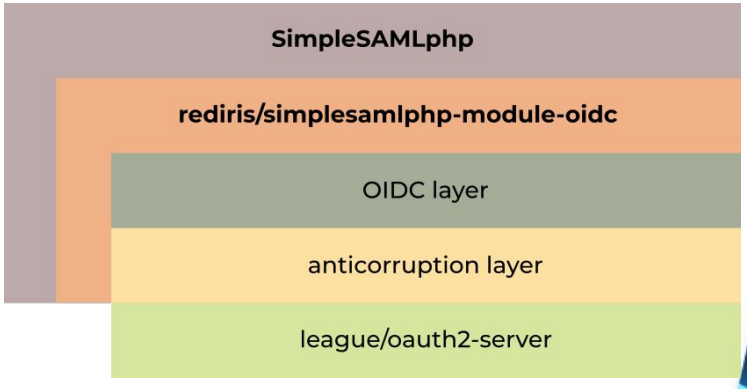
- Implement and certificate OP OIDC profiles:
  - Basic
  - Implicit
  - Hybrid
- Improve UI in SSP:
  - Users self RP registration
  - Custom scopes and claims configuration
- Other requirements
  - F-Tick support

Architecture

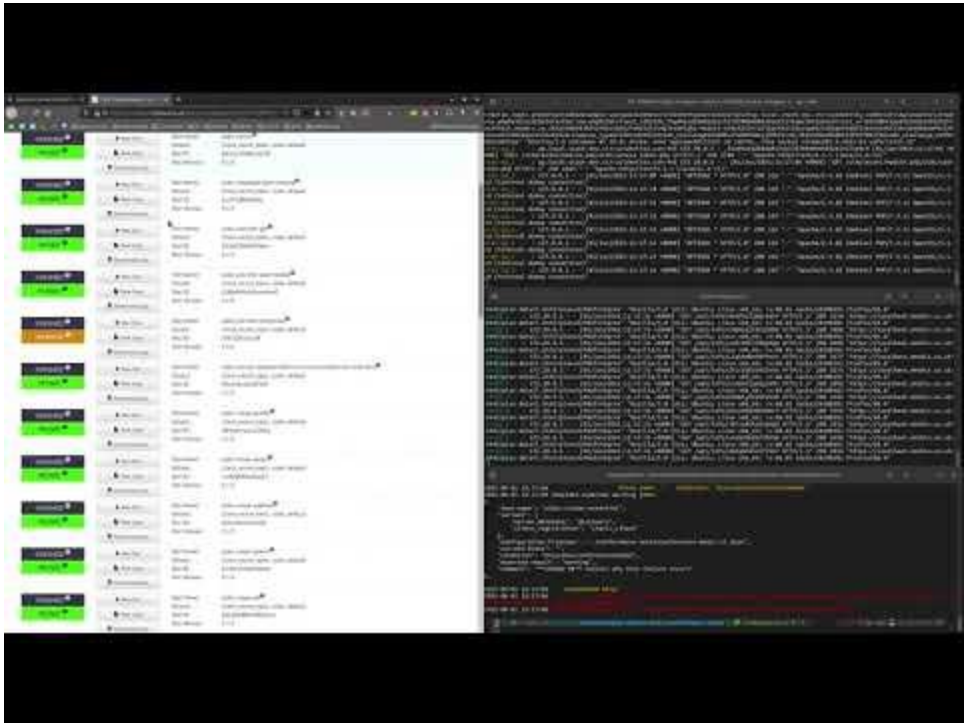


Architecture

- Build over OAuth2.0 library:
  - Not fully standard compliant
  - Added anticorruption layer using OOP
- Added OIDC layer to check profile request validation



Demo



Achievements

- Implement basic profile
- Implemented f-tick support
- Small UI admin changes
- Dockerized development environment
- Dockerized conformance test environment
- Workshop of using Symfony in SimpleSAMLphp

Next steps

- Implement implicit and hybrid profile
- Pass OpenID certification
- UI to self-registering RP
- UI to configure custom claims and scopes

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Thank you

Any questions?

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