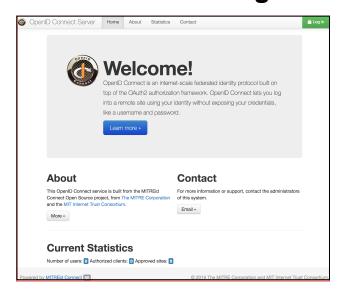
HEART Testing



What's this about?

From http://openid.net/wg/heart/,

The HEART Working Group intends to harmonize and develop a set of privacy and security specifications that enable an individual to control the authorization of access to RESTful health-related data sharing APIs, and to facilitate the development of interoperable implementations of these specifications by others.

Reference implementation

According to https://bitbucket.org/openid/heart/wiki/Home,

MITREid Connect is an open source reference implementation of OpenID Connect and OAuth 2.0 from the MITRE Corporation and MIT Internet Trust Consortium (ITC).

While MITREid Connect does not specifically mention HEART, we assume it's appearance under the "reference implementation" section of the HEART Working Group Wiki implies it supports full HEART compliance.

Endpoints

According to https://github.com/mitreid-connect/OpenID-Connect-Java-Spring-Server/wiki/Server-configur ation#endpoints, a HEART-compliant server should offer the following endpoints:

Authorization endpoint: /authorize

• Token endpoint: /token

• Token introspection: /introspect

• Token revocation: /revoke

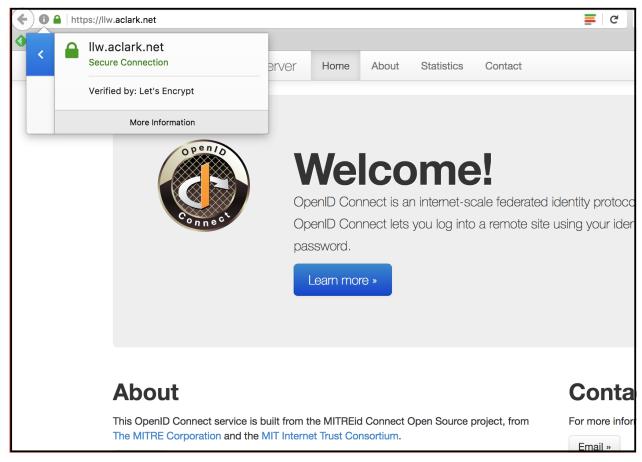
• JSON Web Key Set (public key): /jwk

• User info: /userinfo

• Provider configuration: /.well-known/openid-configuration

SSL

As SSL is a requirement, we have configured a free certificate from Let's Encrypt



Testing

Here we confirm our MITREid-Connect server offers the specified endpoints:

```
$ curl https://llw.aclark.net/.well-known/openid-configuration | jq
  % Total % Received % Xferd Average Speed Time
                                                       Time
                                                                Time Current
                                Dload Upload
                                               Total
                                                       Spent
                                                               Left Speed
100 2829 100 2829
                                 2540
                                         0 0:00:01 0:00:01 --:-- 2541
  "request_parameter_supported": true,
  "claims_parameter_supported": false,
  "introspection_endpoint": "https://llw.aclark.net/introspect",
  "scopes_supported": [
    "openid",
    "profile",
    "email",
    "address",
    "phone",
    "offline access"
  ],
  "issuer": "https://llw.aclark.net/",
  "userinfo_encryption_enc_values_supported": [
    "A256CBC+HS512",
```

```
"A256GCM",
  "A192GCM",
  "A128GCM",
  "A128CBC-HS256",
  "A192CBC-HS384",
  "A256CBC-HS512",
  "A128CBC+HS256"
],
"id_token_encryption_enc_values_supported": [
  "A256CBC+HS512",
  "A256GCM",
  "A192GCM",
  "A128GCM",
  "A128CBC-HS256",
  "A192CBC-HS384",
  "A256CBC-HS512",
  "A128CBC+HS256"
],
"authorization_endpoint": "https://llw.aclark.net/authorize",
"service_documentation": "https://llw.aclark.net/about",
"request_object_encryption_enc_values_supported": [
  "A256CBC+HS512",
  "A256GCM",
  "A192GCM",
  "A128GCM",
  "A128CBC-HS256",
  "A192CBC-HS384",
  "A256CBC-HS512",
  "A128CBC+HS256"
],
"userinfo_signing_alg_values_supported": [
  "HS256",
  "HS384",
  "HS512",
  "RS256",
  "RS384",
  "RS512",
  "ES256",
  "ES384",
  "ES512",
  "PS256",
  "PS384",
  "PS512"
],
"claims_supported": [
  "sub",
  "name",
  "preferred_username",
  "given_name",
  "family_name",
  "middle_name",
  "nickname",
  "profile",
  "picture",
  "website",
  "gender",
```

```
"zoneinfo",
  "locale",
  "updated_at",
  "birthdate",
  "email",
  "email_verified",
  "phone_number",
  "phone_number_verified",
  "address"
"claim_types_supported": [
  "normal"
],
"op_policy_uri": "https://llw.aclark.net/about",
"token_endpoint_auth_methods_supported": [
  "client_secret_post",
  "client_secret_basic",
  "client secret jwt",
  "private_key_jwt",
  "none"
"token_endpoint": "https://llw.aclark.net/token",
"response_types_supported": [
  "code",
  "token"
],
"request_uri_parameter_supported": false,
"userinfo_encryption_alg_values_supported": [
  "RSA-OAEP",
  "RSA-OAEP-256",
 "RSA1_5"
"grant_types_supported": [
  "authorization_code",
  "implicit",
  "urn:ietf:params:oauth:grant-type:jwt-bearer",
  "client_credentials",
  "urn:ietf:params:oauth:grant_type:redelegate"
],
"revocation_endpoint": "https://llw.aclark.net/revoke",
"userinfo_endpoint": "https://llw.aclark.net/userinfo",
"token_endpoint_auth_signing_alg_values_supported": [
  "HS256",
  "HS384",
  "HS512",
  "RS256",
  "RS384",
  "RS512",
  "ES256",
  "ES384",
  "ES512",
  "PS256",
  "PS384",
  "PS512"
"op_tos_uri": "https://llw.aclark.net/about",
```

```
"require_request_uri_registration": false,
  "code_challenge_methods_supported": [
    "plain",
    "S256"
 ],
  "id_token_encryption_alg_values_supported": [
    "RSA-OAEP",
    "RSA-OAEP-256",
    "RSA1_5"
  "jwks_uri": "https://llw.aclark.net/jwk",
  "subject_types_supported": [
    "public",
    "pairwise"
 ],
  "id_token_signing_alg_values_supported": [
    "HS256",
    "HS384",
    "HS512",
    "RS256",
    "RS384",
    "RS512",
    "ES256",
    "ES384",
    "ES512",
    "PS256",
    "PS384",
    "PS512",
    "none"
  ],
  "registration_endpoint": "https://llw.aclark.net/register",
  "request_object_signing_alg_values_supported": [
    "HS256",
    "HS384",
    "HS512",
    "RS256",
    "RS384",
    "RS512",
    "ES256",
    "ES384",
    "ES512",
    "PS256",
    "PS384",
    "PS512"
  ],
  "request_object_encryption_alg_values_supported": [
    "RSA-OAEP",
    "RSA-OAEP-256",
    "RSA1_5"
  ]
}
```