Source

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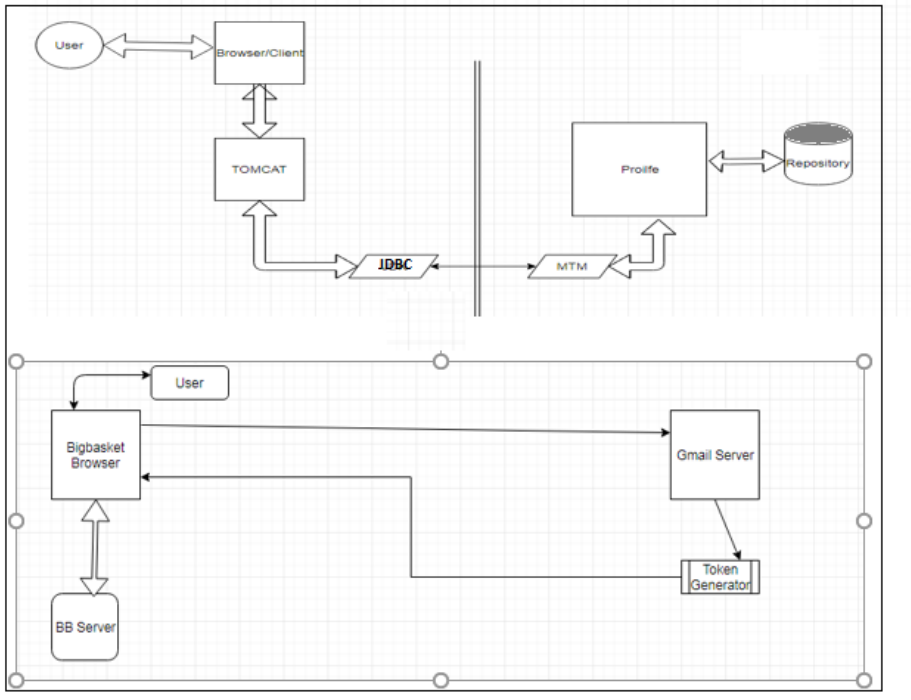
InnovateIN48 1MicroTeam WebSecureOpenIDConnectPro

This is a Java based application for authenticating and authorizing a user in a advanced and secure standard formatted way using JWT[JSON Web token]. When the user is authenticated you will see the result from a call to UserInfo and the contents of the id_token which was returned from OIDC.

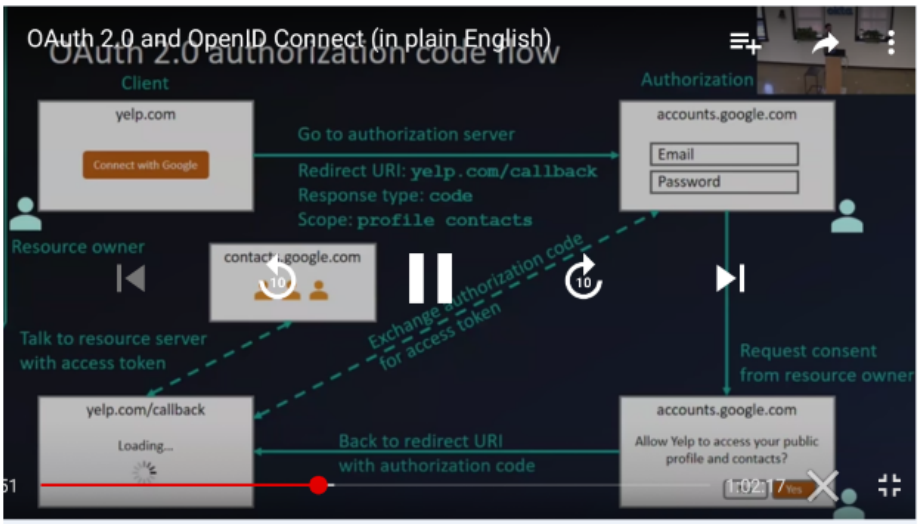
NOTE

This client uses the stable CURRENT-environment, which is set up with the BankID Preprod user-database. New test-users can be created self-serviced at https://local.test-users.no/

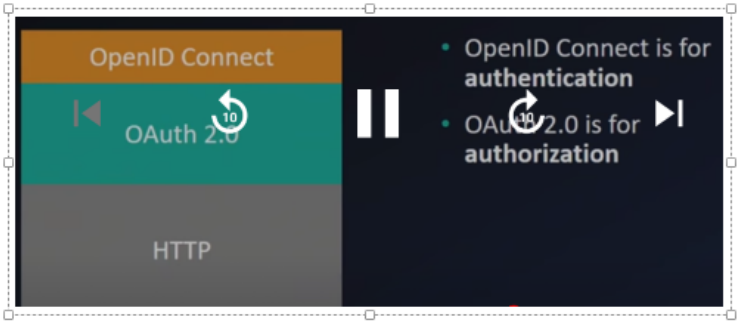
Current System and proposed model with simple example.



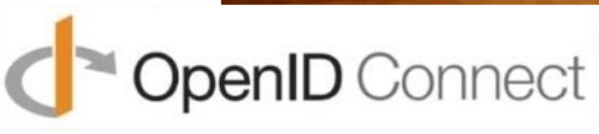
Proposed logical architecture



Layer and levels



Technologies used



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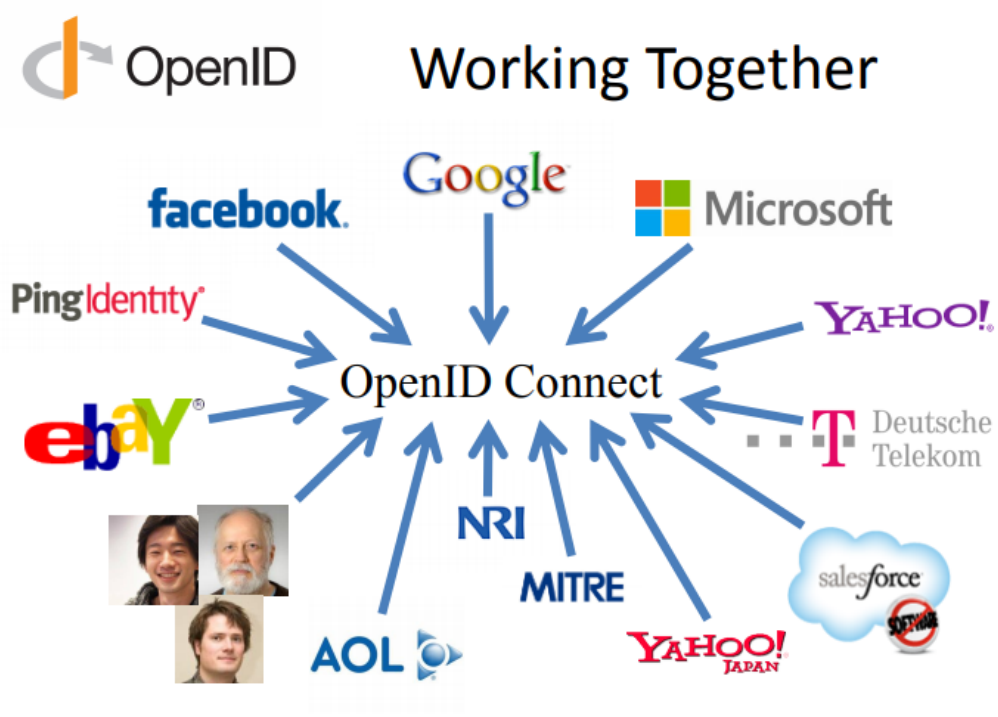
Working together



Process flow

The application exemplifies all steps of the OIDC authentication process.

Benefits of

•Spans use cases, scenarios – Internet, Enterprise, Mobile, Cloud •Spans security & privacy requirements – From non-sensitive information to highly secure •Spans sophistication of claims usage – From basic default claims to specific requested claims to aggregated and distributed claims •Maximizes simplicity of implementations – Uses existing IETF specs: OAuth 2.0, JWT, etc. – Lets you build only the pieces you need - Increased trust between parties - Secure and tamper proof sharing - Fraud prevention

1. Fetch configuration from OIDC. GET to a non protected URL, such as https://oidc-current.localhost.no/auth/realms/current/.well-known/openid-configuration The configuration contains information such as relevant endpoints, and public key for the id_token (JWT).
2. Redirect to the authentication URL.
3. Handle the callback from OIDC. The callback contains an attribute *access_code* which needs to be exchanged with the *access_token* (POST to OIDC)
4. Fetch user info. Finally we use the *access_token* to fetch a protected resource, in this case the user info provided by OIDC.

Build and run

To be able to run the application you will need to edit the client_id and client_secret in the Configuration.class.

```
class Configuration {

    /**
     * Client_id and secret must be inserted here for the application to work.
     *
     */
    public static final String CLIENT_ID = "<insert client_id>";
    public static final String CLIENT_SECRET = "<insert client password>";
}
```

Run with maven and jetty

```
mvn clean install
mvn jetty:run
```

Dependencies

This example application uses the following libraries

javax.servlet-api for web gui

jersey-client used in all integration

oauth2-client oauth2 support in jersey

org.json.json for json parsing

nimbus-jose-jwt for handling the json web token

jetty-maven-plugin for running the application locally with a dynamically created ssl-certificate.

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