



Integrating INSPIRE with Citizen Science and EO authentication systems

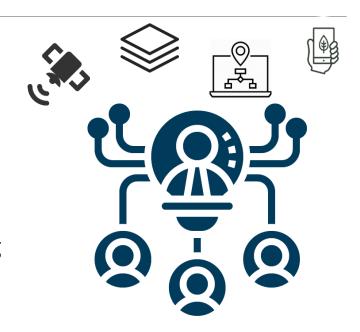
MENTOR(S): VALANTIS TSIAKOS (ICCS), ANDREAS MATHEUS (SECURE DIMENSIONS)



Challenge Aim

Enhance geospatial and/or INSPIRE enabled web-based or mobile application so as to connect to either Citizen Science and/or Earth Observation data;

Improve accessibility to protected resources while also enabling their direct consumption and utilisation by third party applications.



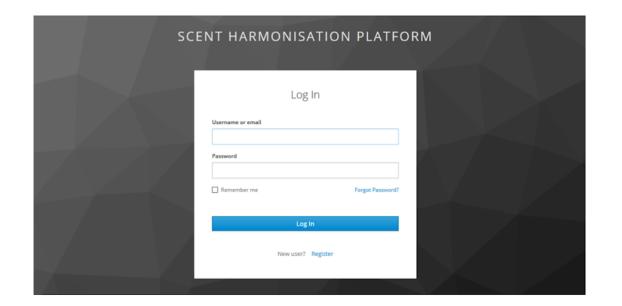






Background

- Existing infrastructure from Citizen Observatories (SCENT, LandSense) and EO projects (NextGEOSS)
- Identity Access Management system of SCENT Harmonisation platform (http://scent-harm.iccs.gr/)
- OpenID Connect / OAuth2 principals



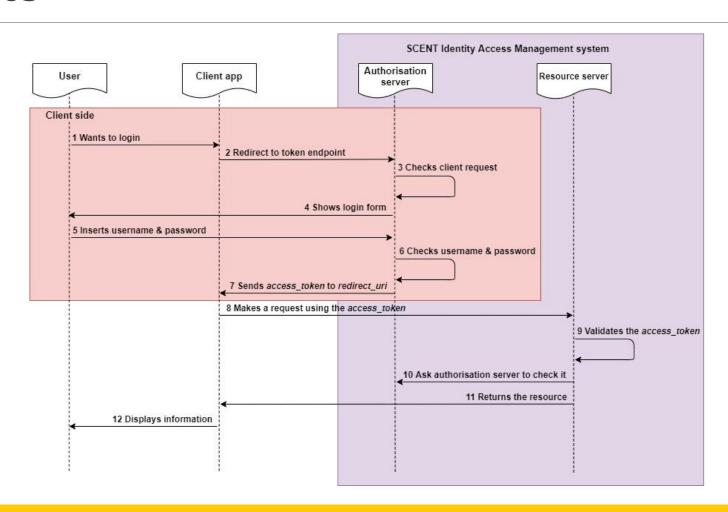


Results

- Front-end JavaScript applications were able to connect with the SCENT Harmonisation platform Identity Access Management system by applying Implicit Grant Type of authorisation.
- Following the user log in, the access token is issued immediately allowing users to access and use protected resources and operations. In addition to the access token, an ID token is also issued from the Authorization Server.
- The ID token takes the form of a JSON Web Token (JWT) which is a JSON payload that is signed with the private key of the issuer (SCENT Identity Access Management) and can be parsed by the third-party application.

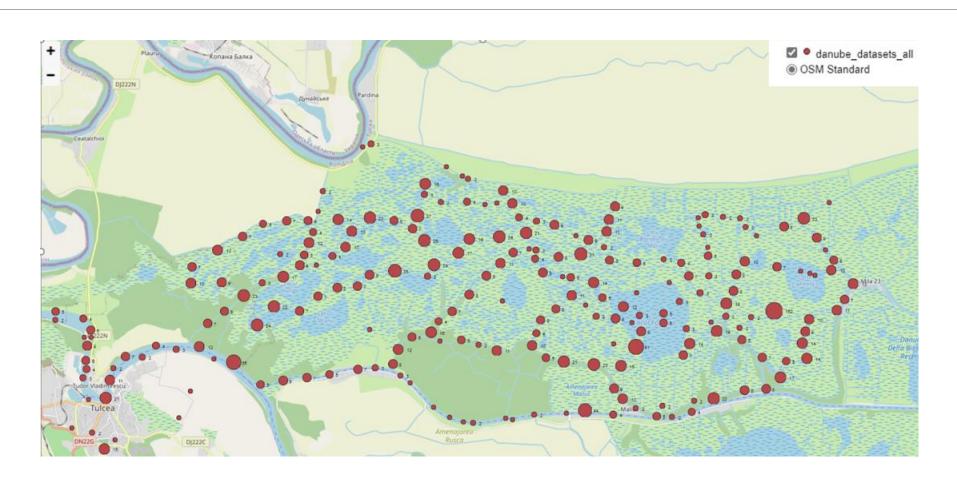


Results





Results





Conclusion

- > Tackle fragmentation of citizen-science projects and resources;
- Exploitation of protected resources when having different systems across multiple organizations (projects) trusting/connecting to a single third-party Identity Provider;
- ➤ Use of OAuth 2.0, an open industry-standard protocol for authorization, that can ensure interoperability and scalability between various related applications and scenarios.