KYCID: KYC-as-a-Service

Degree programme : BSc in Computer Science Thesis advisor : Prof. Dr. Emmanuel Benoist

Some services are legally subject to identity verification (Electronic Know You Customer, eKYC) in order to comply with regulations. This thesis develops KYCID, an identity verification service that allows third parties to perform eKYC via OAuth2 (authorization delegation protocol).

Context

KYCID is a web service that enables third-party services to outsource the ID verification procedure, which includes the verification of the phone number or the ID documents of a user. Goals

The objective is to implement and to test an eKYC process and to make it production-ready, secure and usable by a technical profile.

Furthermore, it is necessary to integrate GNU Taler Exchange by configuring the OAuth client present in the software in order to demonstrate the application of the project.

Results

The web service implementation includes the following features: a robust login system, email verification with a code sent, phone number verification via SMS and verification of identity documents by administrator approval (e.g. passport and ID card). It also has an OAuth API for third parties to use for their own applications.

Conclusion

The project is working well and could be extended by incorporating the following elements: a security audit, the use of AI to detect fraud, visual enhancement (frontend), an observability system (logging, metrics, alerting).



Screenshot of ID document + face selfie challenge





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