Thorgate

The KYC flow as a microservice to the Eesti.ee system

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1. - Overview

Unlike the first document, the goal of this document is to describe a version where the KYC flow would be a separate microservice rather than a completely integrated part of the Eesti.ee system. The definitions, terms and ideas used in this document are created to provide a generalistic bird's-eye view of how the KYC process could work as a separate microservice rather than a part of the system core or a standalone system. The whole document is written in English as it makes it easier to describe the IT-related terms.

2. Table of contents

3. - Definitions

Obliged Entity

Obliged (for example a bank) or any other entity, who has to, due to KYC regulations have reasonable interest for the KYC data

Data Register

Governmental or other database, where data about persons is being handled or stored (for example. Äriregister, Rahvastikuregister)

KYC Microservice

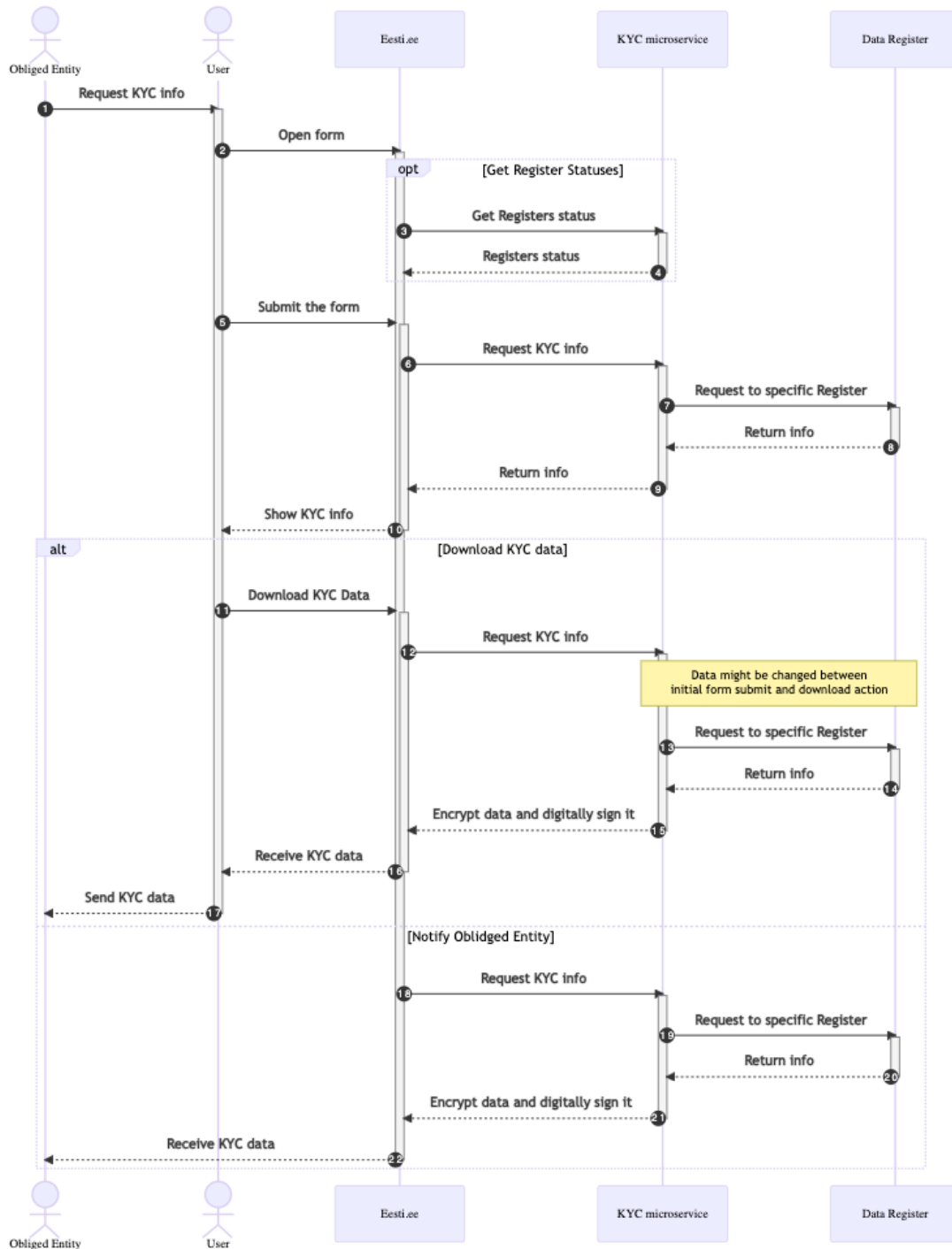Holds the business logic related to communication with different data-registers

KYC Profile

Profile is a dataset which defines the data from one or multiple data registers. Profile itself does not contain any personal data

Query Log

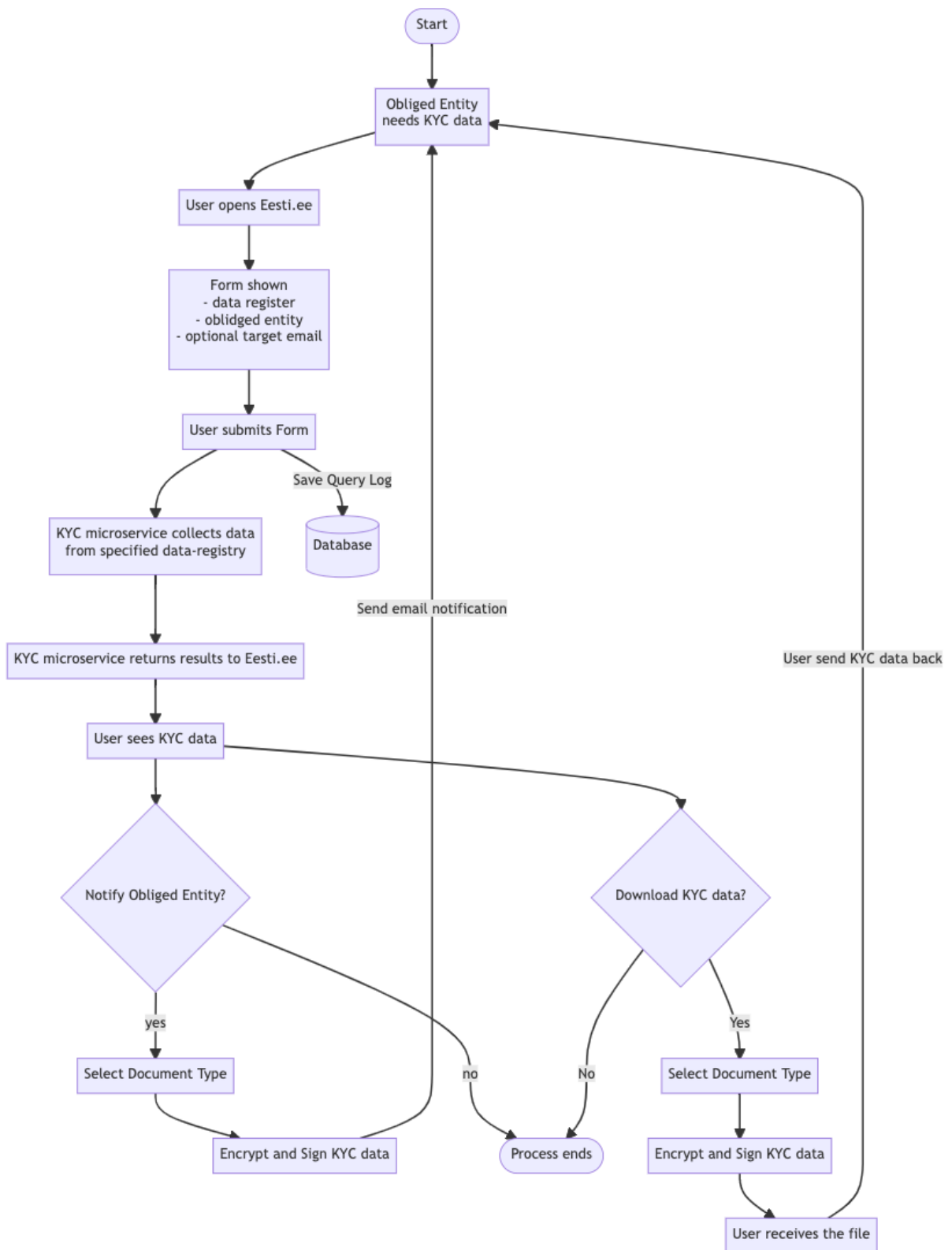Saved information regarding who, for whom and when requested data from the data-register

4. - Overview

1. Obliged Entity makes a request to a User to provide the needed KYC information
2. User logs in into the Eesti.ee and starts the process by visiting the page/clicking the button
3. Before displaying the form, the Eesti.ee system optionally can ask the KYC microservice for a list of data registers that can be currently queried
4. The list of such registers are returned to Eesti.ee and the User can then select the suitable data-source in the form

5. User selects the desired data source and the obliged entity that requested this information
6. Query is submitted to the KYC microservice to fetch KYC data from the data register
7. KYC microservice knows how to communicate with different protocols for different data-registers and makes a request for PII (Personally Identifiable Information)
8. PII is returned to the data-register in a specific format
9. KYC microservice formats the data into a unified format that can be processed by Eesti.ee
10. Eesti.ee displays the requested information to the User along with a link to download it
11. User initiates the download action
12. Eesti.ee makes a request to the KYC microservice again as the data might change between User seeing the information and it being downloaded
13. KYC microservice makes a request to the chosen data register
14. Data from data-register is returned in its specific format
15. KYC microservice formats the data, generates file in machine-readable format, encrypts it and sign it with a digital signature
16. Eesti.ee provides a link to the user which they use to download end file
17. User provides signed file to Obliged Entity
18. In alternative approach, if the user pre-filled target email, the Eesti.ee system requests KYC data from microservice
19. Microservice makes a call to specified data-register
20. Data-register returns the KYC data back to microservice in its own format
21. KYC microservice formats the data, generates file in machine-readable format, encrypts and signs it with digital signature
22. KYC microservice sends the file to Obliged entity

5. - User Flow

6. Domain model