

# System description - Contract system

February 5, 2020

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## 1 System Description Overview

The contract system is used to record agreements of data sharing between a data consumer and a data producer. A data consumer requests a specific piece of data by making an offer to the contract system, which the contract system then publishes the request through the event handler which allows any data producer to easily see every data request. If a data producer chooses to accept or reject the data consumers offer, this is relayed back to the contract system which in turn relays it back to the data consumer which made the request.

## 2 Behaviour Diagrams

Fig. 1 shows how the contract system interacts with other systems. The only core system interaction which has been included in Fig. 1 is the publishing of events through the event handler as it is a vital part of the contract system.

The contract system receives a contract offer from a data consumer. If the offer is valid the contract system publishes the offer through the event handler.

The contract system can be contacted by a data producer with either an accept or a reject message to a published contract offer. This messages is then relayed back to the data consumer who made the offer.

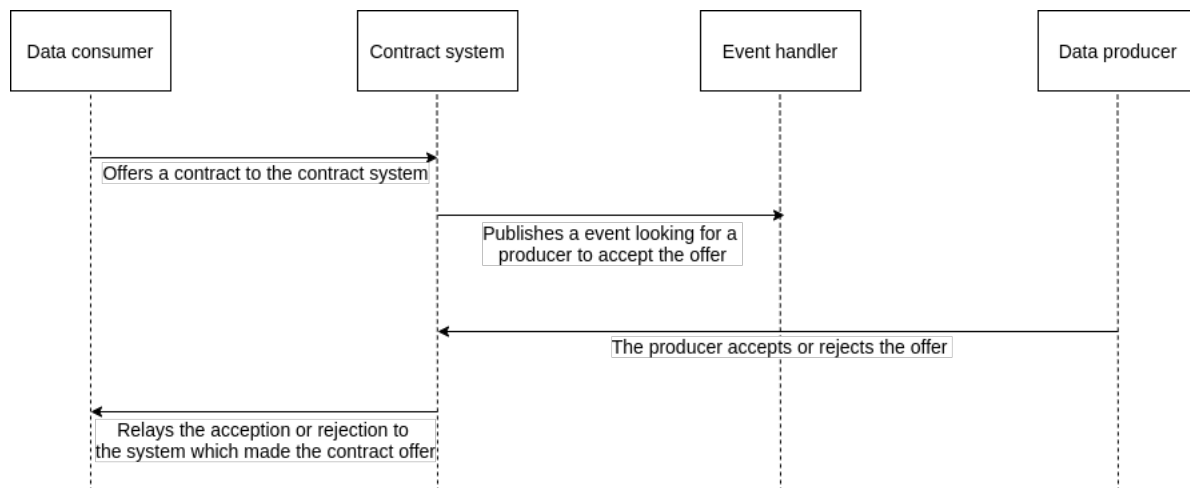


Figure 1: Behaviour diagram of the contract system

## 3 Application services

Table 1 shows which services the contract system produces and Table 2 shows which services the system consumes. The path to the IDD's will be linked in respective table.

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### 3.1 Produced Services

Service	IDD Document Reference
offer-contract	Interface_Design_Description__IDD__offer_contract.pdf
accept-contract	Interface_Design_Description__IDD__accept_contract.pdf
reject-contract	Interface_Design_Description__IDD__reject_contract.pdf

Table 1: Showing the contract systems provided services.

### 3.2 Consumed Services

Service	IDD Document Reference
accept-relay	Interface_Design_Description__IDD__accept_relay.pdf
reject-relay	Interface_Design_Description__IDD__reject_relay.pdf

Table 2: Showing the contract systems consumed services.

## 4 Security

This system is a work in progress which means only basic security exists, such as SSL and basic token security. Currently it is possible to get data from a data producer which an consumer has bought by guessing the identifying hash.