

A blockchain-based Consent Management System for life science data management

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One of the main obstacles in collecting data for life science today is the compliance with GDPR. Among the others, the requirement of managing the Informed Consent in a lawful, transparent and auditable way is one of the open issues that Trusted Research Environments must address. Today many hospitals and research organizations exploit some kind of Consent Management System (CMS), usually purchased as a SaaS product by a commercial provider. This solution suffers from some drawbacks like the need to trust a third party about the correct management of consent data.

To overcome the trustworthiness issue, we have designed and developed an open-source, blockchain-based Informed Consent Management System which offers patients and data subjects the possibility to provide, modify or deny their consent of using their personal datasets in some research, without the need of any intermediate authority in the middle.

In this talk we'll describe the rationale and the main design choices we made. We'll provide details about the technology exploited and about our proof-of-concept deployment on INFN DataCloud environment.

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