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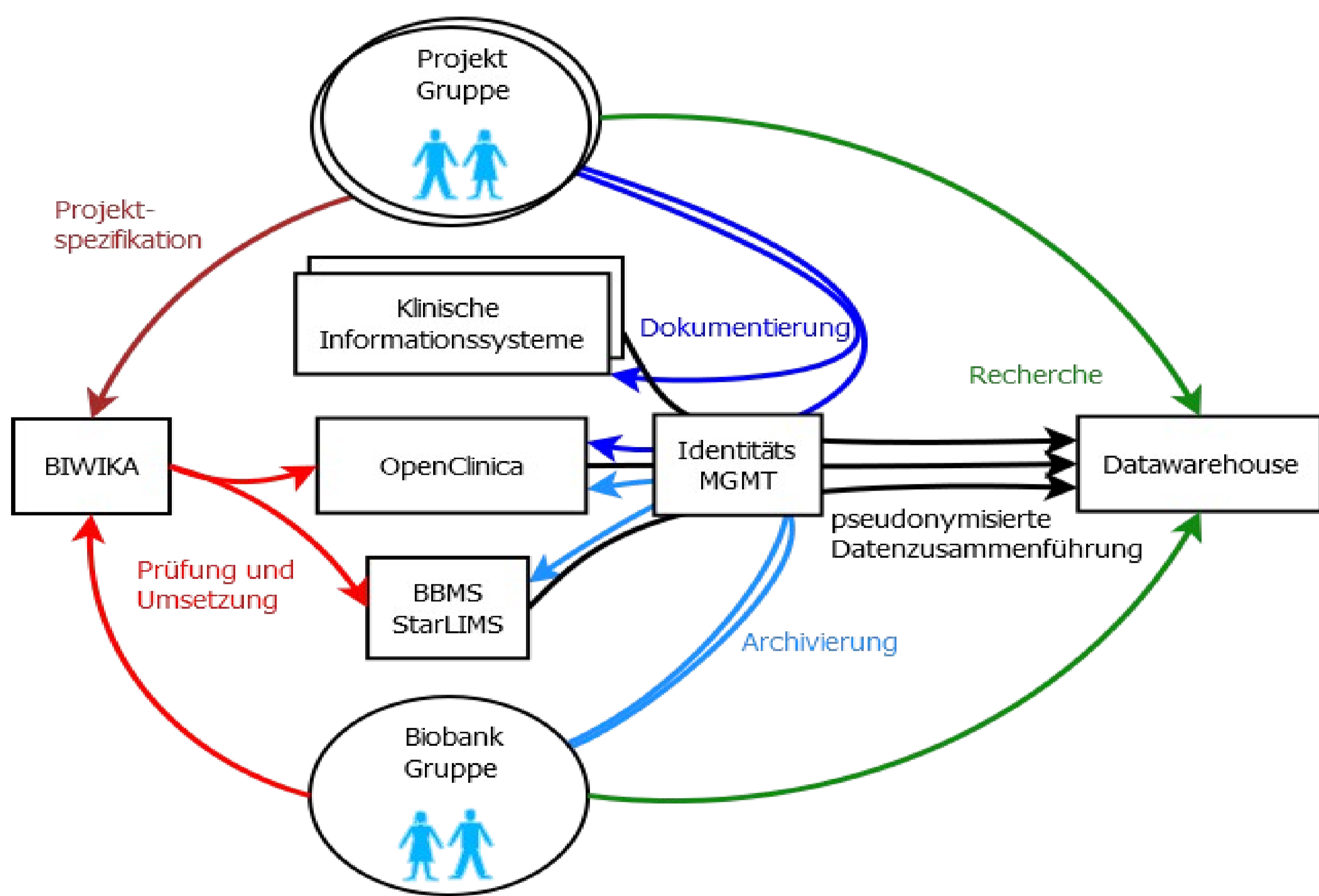


Introduction

The project RWTH Aachen centralized BioMaterialBank (RWTH cBMB) aims to realize a professionally managed Biomaterialbank with respect to sample processing and information management. The identity management service represents a key system in the information management infrastructure administrating personal identifiable data and identifiers of the probands. The system must be highly secure and steadily available.

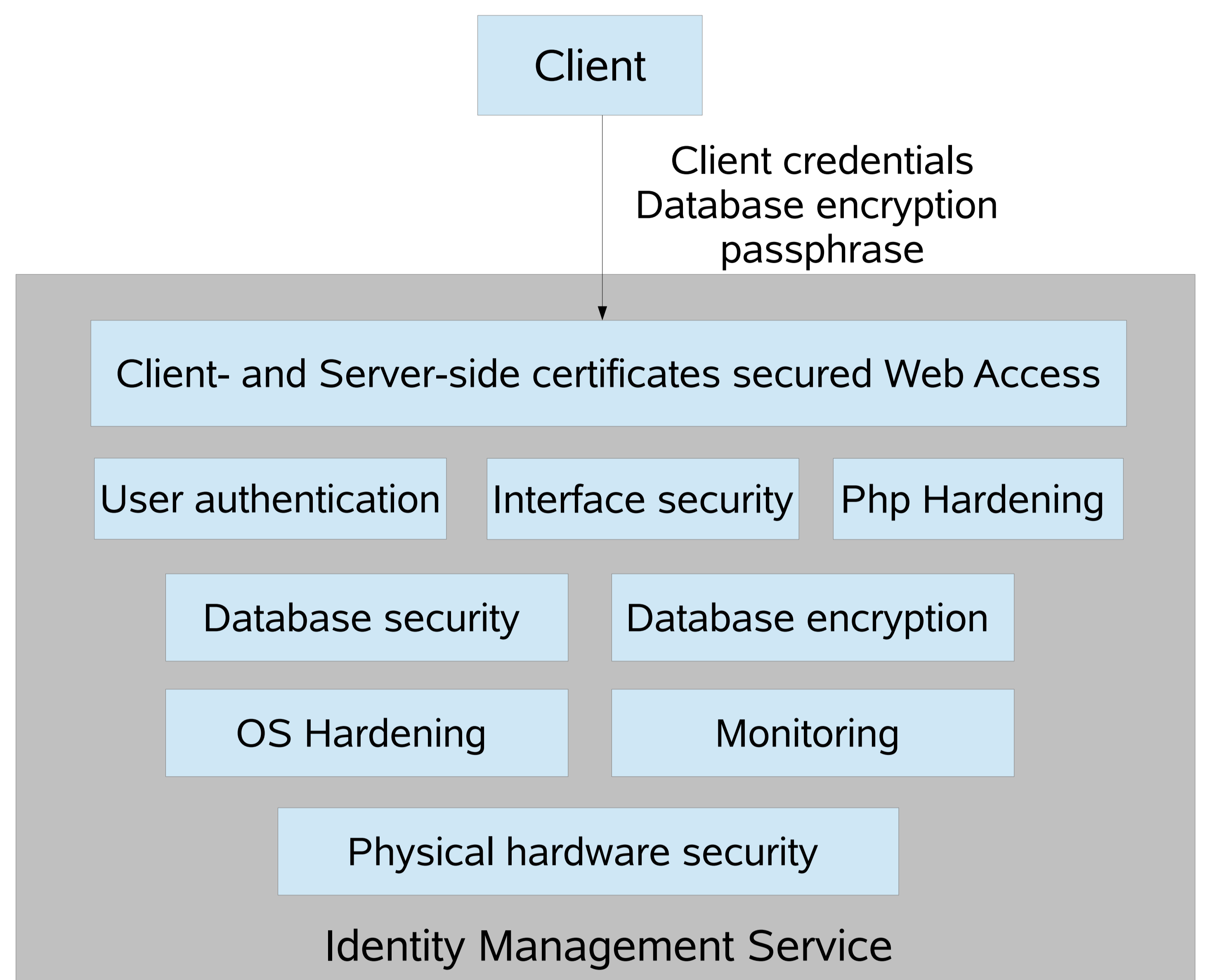
Identity Management

Personally identifiable information of the probands is pseudonymized and stored in an encrypted database. Besides, arbitrary many personal identifiers from other clinical information systems may be referenced.



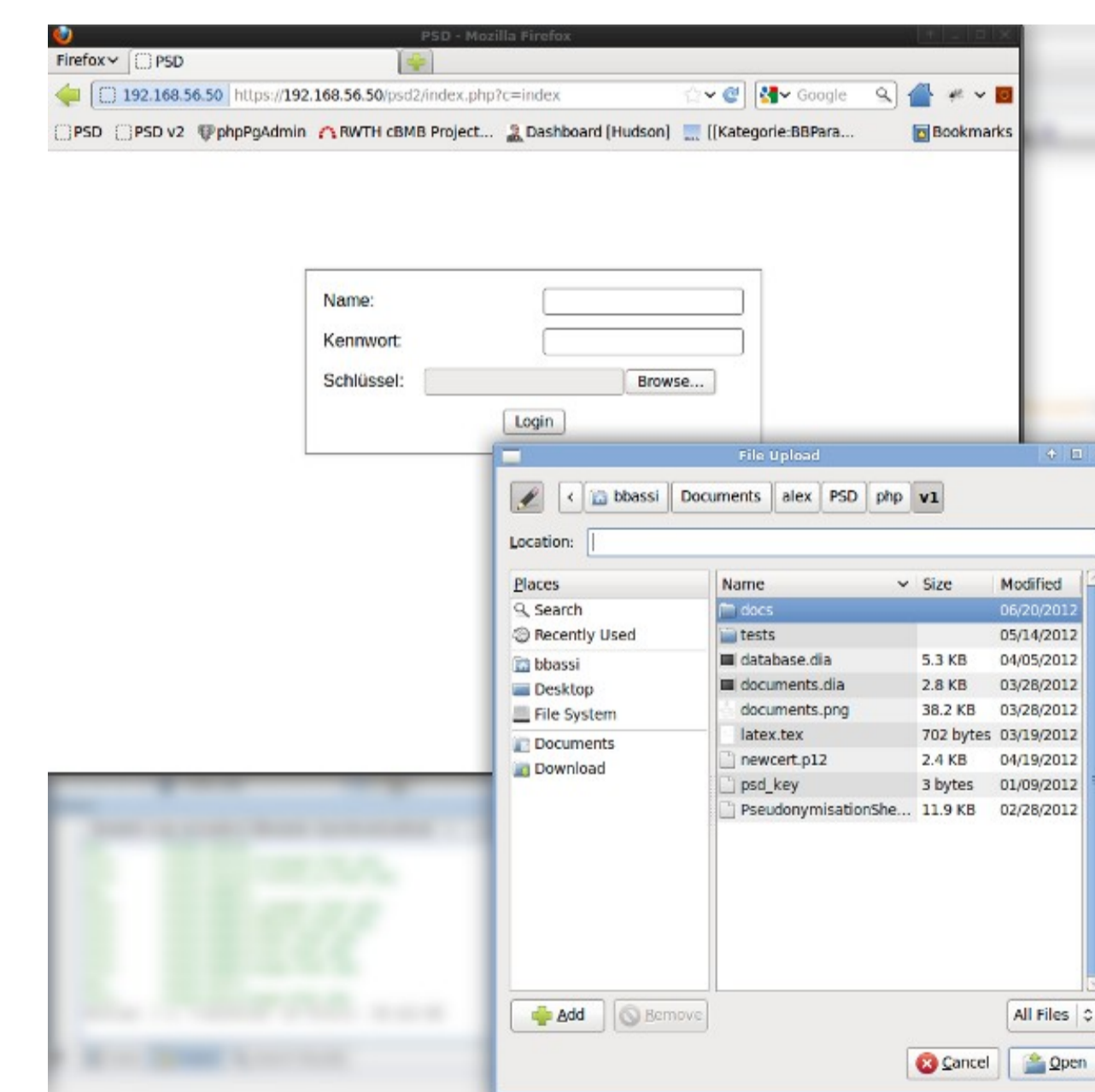
Multilevel Security Model

Several security layers ensure the protection of person identifiable data. Each layer uses several security technologies to realize a highly secure system architecture.



Server Protection Features

Server security features have been implemented in order to prevent unauthorized access. Several tools help to detect and respond to malicious activities and attacks. They include constant logging, monitoring of suspicious client behaviour and automatic blocking in case of intrusion.



Biobank Case Record Submission

A biobank case record submission form has been realized in order to conveniently add records and create barcode labels. A document-oriented database allows to reference arbitrary many additional identifiers for each biobank case in a comfortable way.

The screenshot shows a web form for submitting a biobank case record. It includes fields for 'Projekt', 'Patient Name', 'Patient Vorname', 'Patient Geburtsdatum', 'Patient ID', 'Fall ID', 'Eingang ID', 'Sub ID', 'myID', 'myID2', 'Aliquots', 'Materialtyp', 'EV vorhanden', 'Einsendendes Institut', and 'Kommentar'. There are also buttons for 'Anzeigen', 'Ändern', and 'Löschen'.

Samples Management

Samples management interface allows searching for samples using parameters filter. Database queries are performed using hashsum matching.

