

CFMM MRI Data Storage and Distribution Security Information Sheet

Overview

The Centre for Functional and Metabolic Mapping (CFMM) provides services to ensure the secure authentication and authorization of MRI data for DICOM data storage and distribution. The data security infrastructure is physically managed within Western University and safeguarded through strict access control policies. The CFMM ensures data security measures align with institutional policies to maintain confidentiality and integrity.

Secure Authentication and Authorization

- Access to MRI data storage and distribution services is restricted to designated research personnel and requires authentication with Western University credentials.
- Access control is implemented at the Project level and managed by Principal Investigators (PIs).

Data Storage and Management

- MRI data are securely stored on the **Western Computational Brain Sciences (CBS) storage cluster**, a large-scale computational and data storage service for Western University researchers.
- CFMM ensures data security and privacy using industry-standard protocols.

DICOM Data Accessibility and Encryption

- PIs control project-level access through the **CFMM Study Management** web application (<https://dicom.cfmm.uwo.ca>) and can delegate access to other registered users through a secure, TLS-encrypted (HTTPS) web administration application.
- User data is externally accessible via a **dcm4chee DICOM archive** via a web server, **DICOM Query/Retrieve SCP**, and **DICOM Web REST API**, all secured with TLS encryption (512-bit and stronger RSA keys, SHA-2 hashing).
- User identities (username/password) are stored externally on Western's Microsoft Active Directory servers.

For further information or support, please contact the CFMM (cfmm@uwo.ca).