

# DICOM Database Option

## Improves Data Organization

When working in the PMOD environment, the user typically analyses images and generates derived information such as volumes-of-interest, regional statistics, kinetic model fits, functional maps, spatial reorientation parameters, and many more. When saved as simple files, these data tend to get difficult to relate correctly. The PMOD database option relieves the user from organizing the data himself. He needs not any more bother about directory paths and embed all descriptions into file names. Rather, the data are saved transparently, and the system keeps track from which study the saved information was derived from. When looking for information at a later time, powerful database queries can be employed.

## Bundled with DICOM Server

The DICOM database option is a huge benefit for users working in a DICOM network. The DICOM server included in this option allows to receive images directly from the modalities or the PACS, or query DICOM servers in the network. The received images are efficiently organized by the database, and can be tagged with a project description and/or a diagnosis. Based on the demographic and descriptive informations studies may be quickly located using structured queries. Additionally, due to stored access information, the loading performance is much faster than with images loaded from collections of DICOM part 10 files.

### Database Advantages

- Dramatic speed-up when working with DICOM image data
- Unified interface for all types of data such as images, volumes-of-interest, statistics, kinetic model fits, etc.
- Clear relation of derived data to origin
- Structured queries to locate information

### DICOM Database Server

- Receives DICOM objects over the network from modalities or PACS (DICOM server)
- Queries other DICOM servers to retrieve images (DICOM Query/Retrieve)
- Organizes efficient access to DICOM images
- Can operate as a format conversion server (eg DICOM Secondary Capture to JPEG)
- Serves as central data repository for multiple PMOD installation
- Allows assignment of data to user-defined projects

Database User Interface

