IMAS Access Layer

Bartek Palak (PSNC) bartek@man.poznan.pl

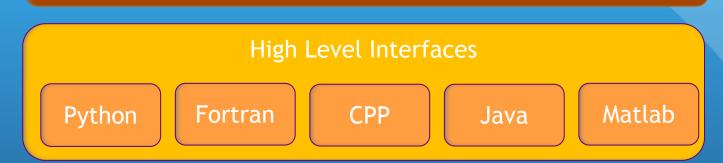
September 20th, 2021

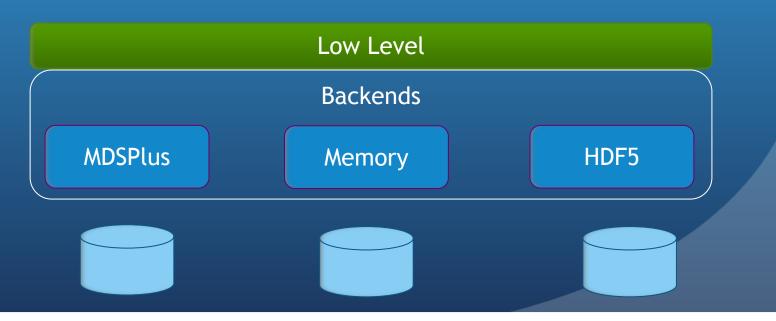
Access Layer (AL)

- Data access library
- Implemented to allow IDS access for the users/applications
- Provides mechanisms for reading, writing and manipulating IDS data objects,
- AL operates only at the IDS level (!)
- AL allows "atomic" operations such as:
 - put or get data (IDS),
 - access to single time slices of data (IDS)

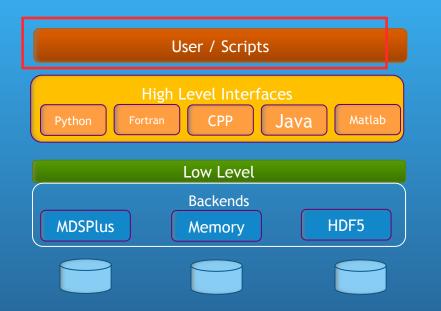
Access Layer Architecture

User / Scripts



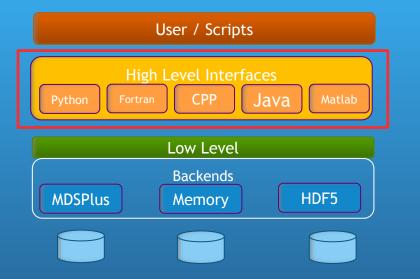


AL: Application Layer



- The layer of:
 - User programs
 - Dedicated tools

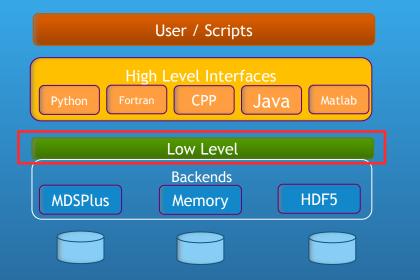
AL: High Level Interfaces



Methods exposed by HLIs:

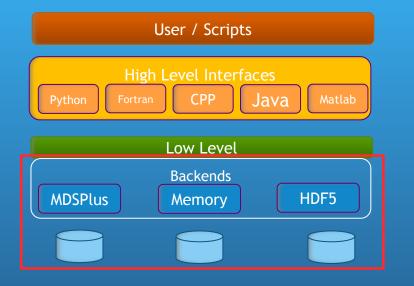
- Operations on data base entry
 - CREATE
 - OPEN
 - DELETE
 - CLOSE
- Operations on IDSes
 - PUT
 - GET
 - PUT_SLICE
 - GET_SLICE
- Examples

AL: Low Level



- Provides unstructured data access to the underlying databases/backends
- Implemented in CPP
- Publish C API

AL: Backends



- A set of plug-ins
- Allows for interaction between an abstract Low Level layer and physical storages
- Available backends:
 - Memory Backend
 - MDSPlus files
 - HDF5 files
 - ASCII files (testing purposes)

Questions

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