A conceptual model for a FAIR DO fabric

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FAIR DO – Simplified Breakdown

- Core metadata outliving data
- Long-living Data
- PID
- Types & Machine-accessibility
- (Meta-)data
- Operations (machine-actionability)
Required tooling and storage

- Long-living (meta-)data storage
- Longer living Core MD storage
- PID System
- Types & semantics storage
- Operations (machine-actionability)

Clients → High-Level Interfaces → Validators →...
KIT Adaption

Choose any storage (legacy)

- High-Level Interfaces
- Validators
- PID “memory” & search
- Typed PID Maker

- Handle System (PIIDs + Core Metadata)
- ePIC Data Type Registry
- Operations concept WIP

Clients
Typed PID Maker

RESTful API (DOIP)

Typed PID Maker

Profile & Type Information

Persistent PIDs & Core Metadata

PID “memory”

Search index

Messaging to other tools

DTR

Handle.net

RDBMS

Elastic

AMQP

FAIR DO Lab and first tools

**FAIR DO Lab**: A docker-compose setup for experiments with the concept.

- **Search Index** (Elastic)
- **Sandboxed PID system by default**
- **Typed PID Maker**
- **Collection Registry**
- **Message Broker** (RabbitMQ)
- **FAIR-DOscope**

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**FAIR-DOscope**

Explore the facets of FAIR Digital Objects

Demo Server

https://demo.datamanager.kit.edu/
Summary

Choose any storage (legacy)

High-Level Interfaces

Validators

PID search & memory

Typed PID Maker

Handle System (PIIDs + Core Metadata)

ePIC Data Type Registry

Operations concept WIP

https://demo.datamanager.kit.edu/