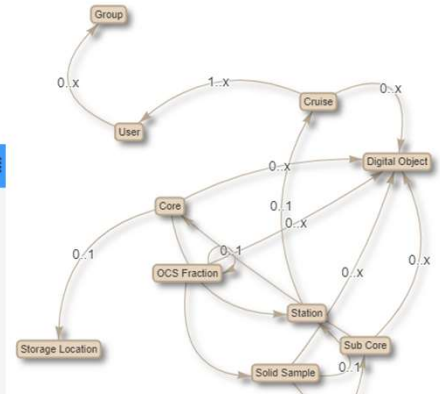


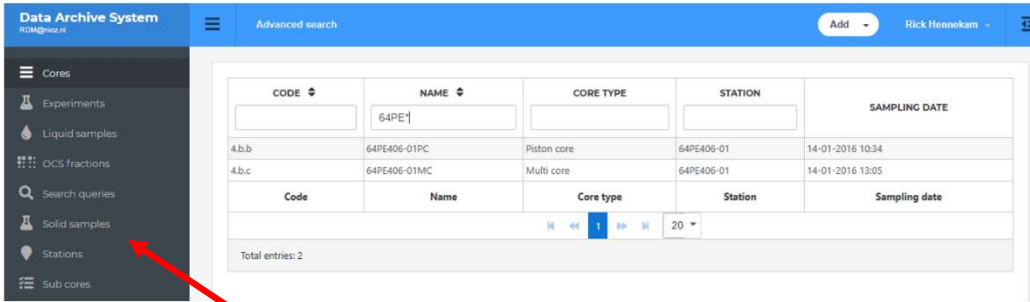
DAS (Data Archive System) is an Institutional Archive for the long-term storage of data, both Raw (instrumental and manual) and user Processed. The research data itself is secured on a file system. The associated meta data is entered in a DB to serve the searching and retrieval of research data from the file system via DAS. Research Data can be combined to datasets, be registered with DataCite automatically using a Digital Object Identifier (DOI) and be exposed and accessed from a dataverse on the institutional data portal.

## Architecture

The DB is organized on Attributes and Relations customizable per User, enabling a high flexibility.



Environment graph of attributes and relations for a sea-going research group. Relations can be 1-to-1, 1-to-many, and many-to-1, mandatory or facultative.



CODE	NAME	CORE TYPE	STATION	SAMPLING DATE
4.b.b	64PE406-01PC	Piston core	64PE406-01	14-01-2016 10:34
4.b.c	64PE406-01MC	Multi core	64PE406-01	14-01-2016 13:05

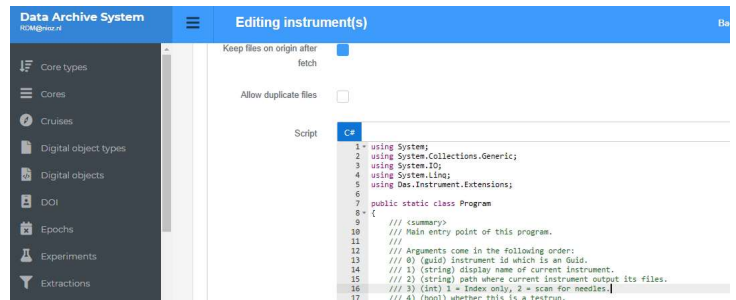
Attribute-based menu

## Storing Data

Data can be stored as Digital Objects and be associated with specific attribute(-s) manually or automated.

When automated, a script is used to harvest data from analytical instruments at user-defined intervals.

Files are coupled to the correct Value of an Attribute using a unique code fed to the instrument before analysis.

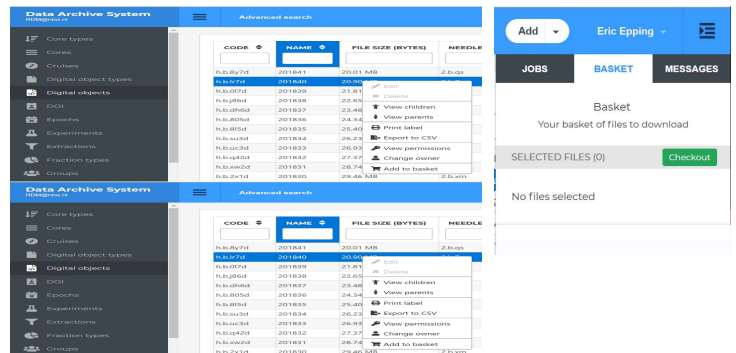


```

1 # using System;
2 using System.Collections.Generic;
3 using System.IO;
4 using System.Linq;
5 using Das.Instrument.Extensions;
6
7 public static class Program
8 {
9     // Summary
10    // Main entry point of this program.
11
12    // Arguments come in the following order:
13    // 0) (guid) Instrument Id which is an Guid.
14    // 1) (string) display name of current instrument.
15    // 2) (string) path where current instrument output its files.
16    // 3) (int) 1 = Index only, 2 = scan for metadata.
17    // 4) (bool) whether this is a testrun.
    
```

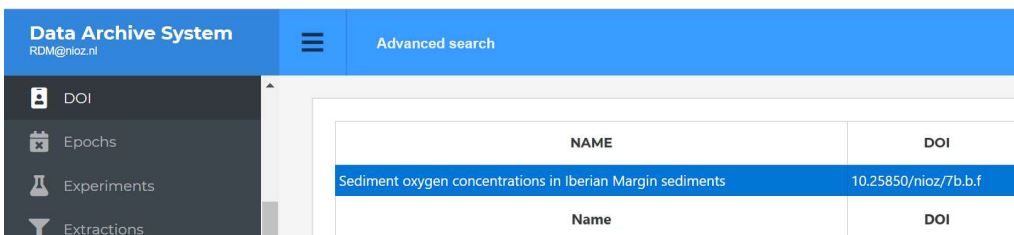
## Ownership and Sharing

The User creating the Digital Object owns the object and controls access by other Users. Data can be downloaded by non-owners upon email request and consent of the Owner.



## Exposure and public access

Any set of data files can be assigned a DOI, which is automatically registered with DataCite and creates a data landing page on NIOZ' Dataverse for public access.



NAME	DOI
Sediment oxygen concentrations in Iberian Margin sediments	10.25850/nioz/7b.b.f

