

# MDE-Thredds: A Django-based framework for managing THREDDS data server

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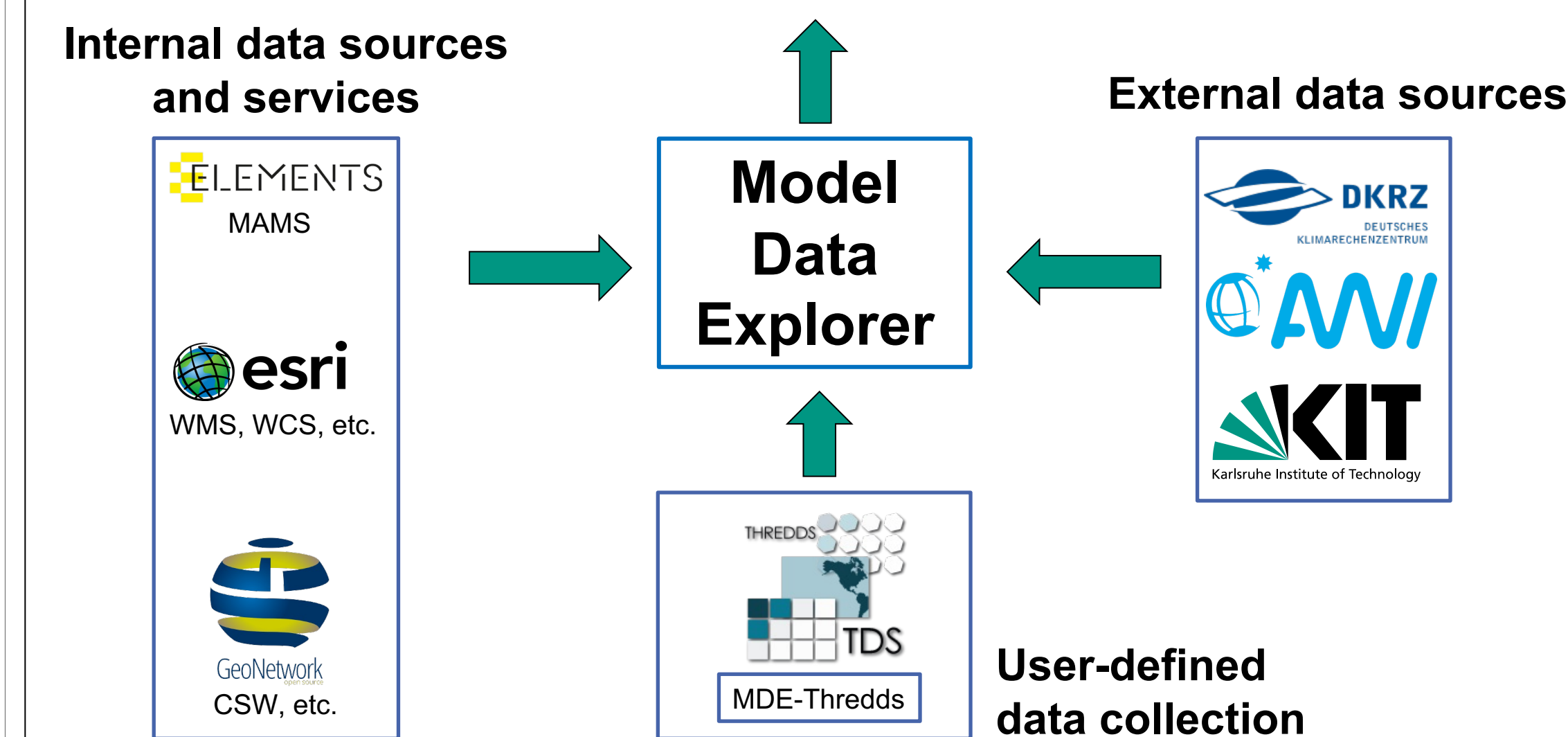
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## Introduction:

Within the Model Data Explorer, a cross-institutional project to simplify a FAIR publication of model data on the web, we develop a module to overcome these configuration issues and enable scientists to make their environmental research data available on the web. Our MDE-THREDDS module manages the configurations of the THREDDS data server (TDS) by providing a user-friendly web-interface for handling major components of THREDDS, including catalogs and web services. A flexible permission system enables scientists and other data producers to add and update their own datasets without the need for manually editing the underlying THREDDS catalogs. This permission system further allows server administrators to moderate and facilitate the publication of data on the web by scientists and other end-users and ensures a standardized and consistent THREDDS catalog configuration.

## Model Data Explorer (MDE) architecture:

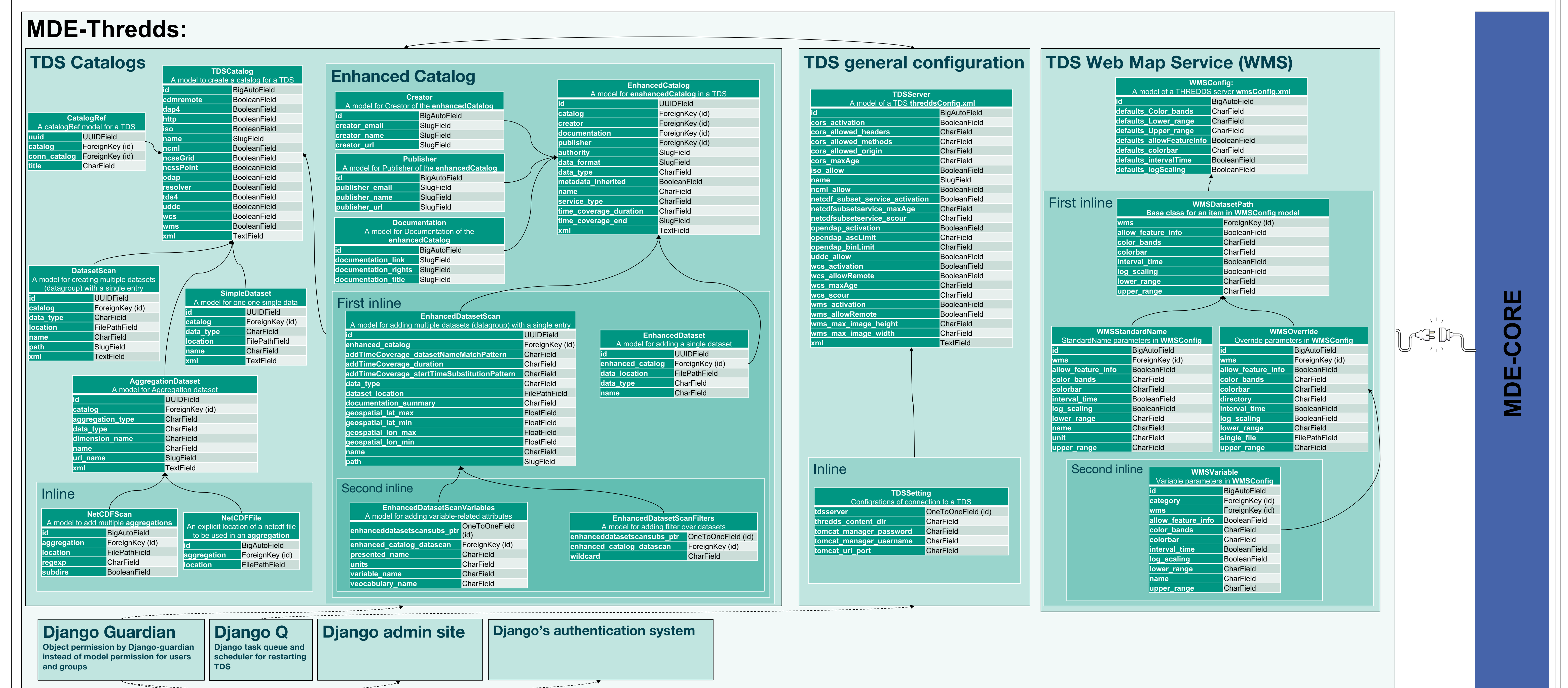
- Visualization / exploration of multi-dimensional 4D Model-Data
- Separated environments per projects, institutions, authors, etc. with all corresponding model runs
- Searching, filtering, Subsetting, exploration capabilities for Model-Data
- Integrated analysis and statistics platform for Model-Data



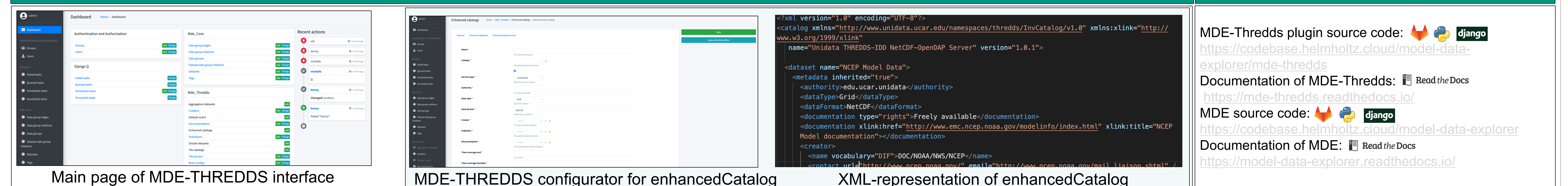
## MDE-THREDDS features:

- User-defined catalogs for datasets and datasets groups
- Management of multiple TDS instances in a single infrastructure
- User/ group permission management
- Tailor-made configuration tools for TDS interfaces
- Configuration of WMS (web map service)
- Creation of ISO19115 metadata







## MDE-THREDDS architecture:



## Interface of MDE-THREDDS



## MDE-THREDDS resources:

MDE-Thredds plugin source code:   <https://codebase.helmholtz.cloud/model-data-explorer/mde-thredds>  
 Documentation of MDE-Thredds:  [Read the Docs](https://mde-thredds.readthedocs.io/)  
 MDE source code:   <https://codebase.helmholtz.cloud/model-data-explorer>  
 Documentation of MDE:  [Read the Docs](https://model-data-explorer.readthedocs.io/)

MDE-CORE