# TIB Data Manager

Angelegt von Angelina Kraft, zuletzt geändert am 19. Jan 2018


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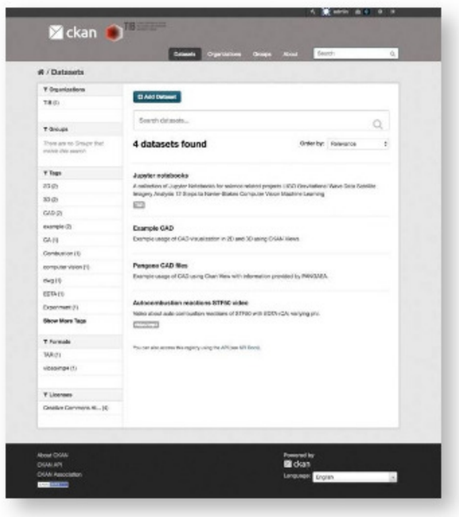

**Further information**

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**Category**

Scientific Data Management, Research Infrastructure, Linked Data, Data Science, Open Science

**Technology Readiness Level**

4

## About

How to find and evaluate relevant research data? The TIB Data Manager prototype was developed to support the aspect of better re-usability of research data. The prototype supports the management and access to heterogeneous research data publications and assists researchers in the selection of relevant data sets for their respective disciplines.

The prototype currently offers the following functions for the visualization of research data:

- Supports data collections and publications  with different formats
- Different views on the same data set (2D and 3D support)
- Visualization of Auto CAD files
- Jupyter Notes for demonstrating live code
- RDF Description of data collections

The prototype is based on the web-based data catalog software CKAN (Comprehensive Knowledge Archive Network). The file specific viewers were implemented using CKAN plugins to render existing viewers for the datasets included in the CKAN instance. An overview of the plugins is available in the Plugins folder (CKAN/Plugins).

## Visualization of research data sets

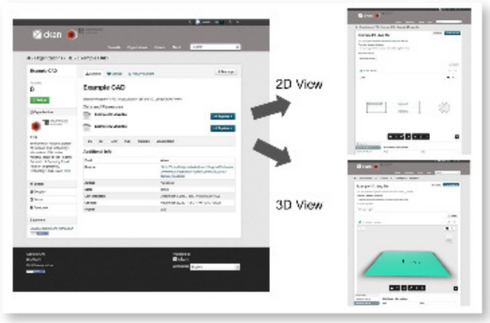


Figure 1: Visualization of a CAD data set in 2D/3D

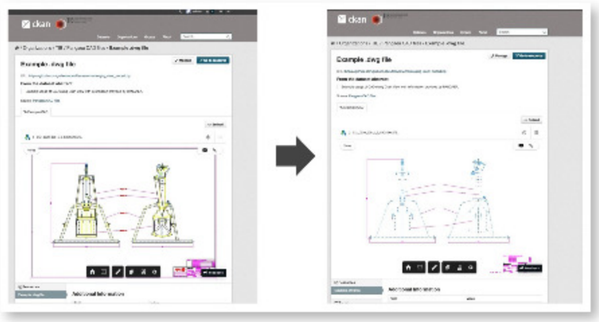

Figure 2: Visualization of an AutoCAD dataset (. dwg) with different functionalities (layer function, measurement function, etc.)

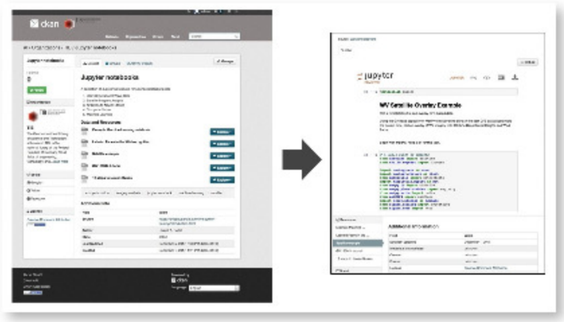

Figure 3: Visualization of a data set with Jupyter Notes

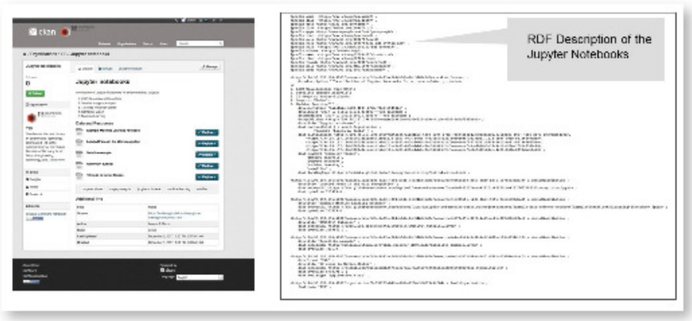


Figure 4: Visualization of a data set with RDF Description of the Jupyter Notes

## Expected impact and applications

In the research data landscape, there is a high demand for a sustainable and meaningful handling of a main product of scientific work - research data. Since digital data production has increased rapidly in recent years and an end to this growth is not foreseeable, the availability of these growing volumes of data must be ensured not only for current research but also for future generations. The TIB Data Manager was developed to provide scientists with a tool to improve the usability of research data.

The TIB Data Manager is a data management system that makes it possible to check the contents of research data sets for their potential application to the respective domain - without having to download them beforehand. The TIB Data Manager enables the visualization of different research data formats and thus supports the 'screening' of data sets for their potential benefits. As a visualization and management tool, the TIB Data Manager can be implemented on top of classical research data repositories, which often focus on the (long-term) archiving and publication of research data.

As an open source tool, the TIB Data Manager offers developers and data managers in public and academic research as well as in industry a wide range of possibilities for expanding and connecting established and developing research data management systems. The German National Library of Science and Technology advises universities, research institutions and industry on the use and implementation of the TIB Data Manager and continues to develop the system in view of the constantly growing number of scientific file formats.

## Prototype installation

Coming soon