



Wageningen Data Exchange Service

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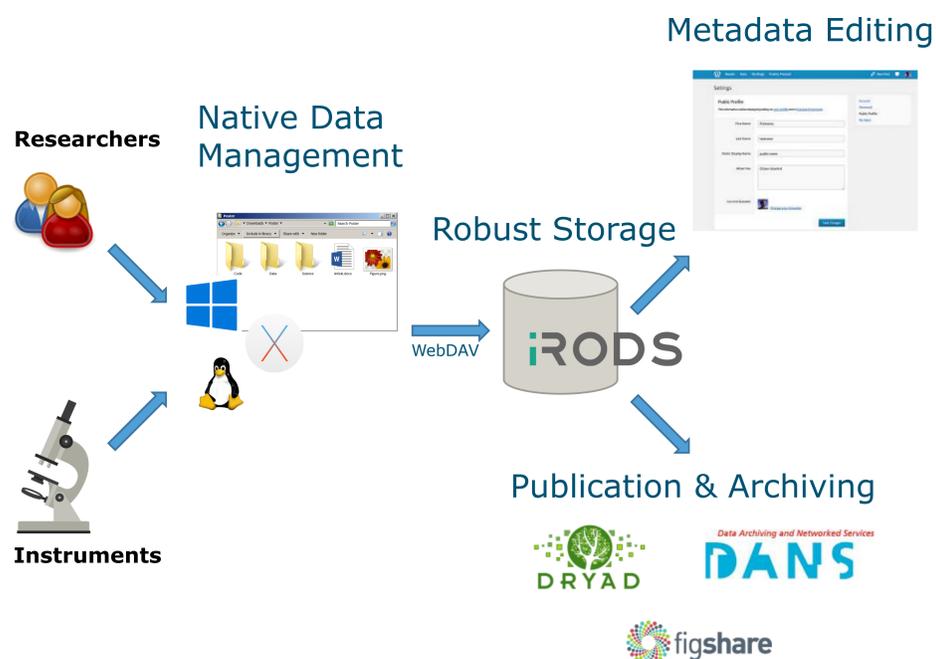
Background

Data exchange is a leading problem in science today. Many valuable man-hours are being lost to 'data wrangling' which is the storing, moving, converting and filtering of datasets in order to use it for research. To unlock the potential of data, it must be presented in a way that can be quickly and easily adapted to the needs of the user. With the increasing call for making data more FAIR, not only basic data storage but also metadata management, standardization and archiving must be handled by researchers. Currently no system exists that covers this entire research data lifecycle within WUR.

The Data Exchange Service will be a platform that provides the user with a simple options to store and organize files on local network shares, while also providing a portal interface that will allow the user to add rich metadata and share files between users or even share files with the world (publishing). This will support users in every phase of research, from gathering data to analysis, and allows for FAIR data publishing.

Using existing open source tools, frontends will be created with (meta)data management functionality which are base on mature data technologies such as iRODS. The goal will be to facilitate a large multi user platform that won't interfere with daily research, but will be present at the moment the researcher needs it. Key features to achieve this are a native interface extensions (WebDAV), pre-populated metadata based on user and role, and an interoperable metadata schema for archiving and publishing. Combined, this platform will allow WUR to reach its FAIR goals for 2020 and further.

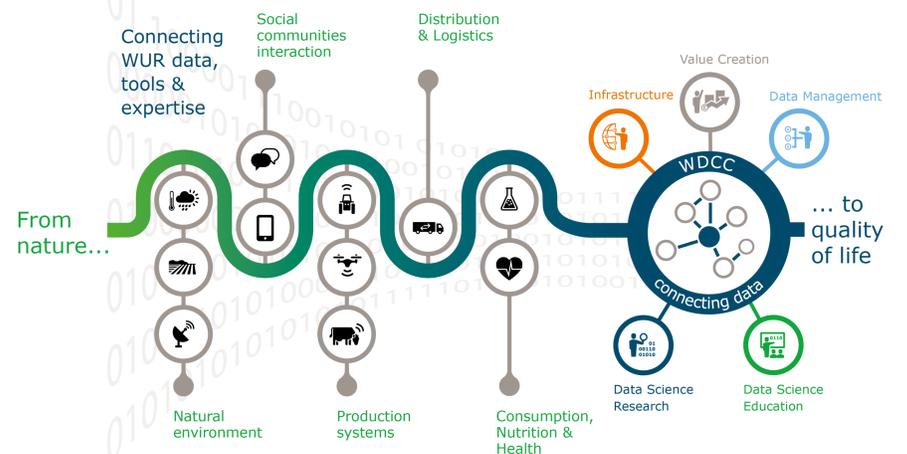
Vision



Microscope icon from superawesomectors via DeviantArt, metadata screenshot from Duncann Hull via Flickr

About the Wageningen Data Competence Centre

The WDCC is established to support developments in the field of (big) data and data science at Wageningen University & Research. WDCC brings education, research, value creation, infrastructure and data management together. The WDCC facilitates developments in these fields and serves as an internal and external contact point. This way, WUR works on new applications 'To explore the potential of data to help improve the quality of life'.



Key Benefits

- Data generation and entry in a native environment
- Data is structured from the moment of generation
- Metadata is automatically populated
- Management of Permissions and Roles to protect confidential data
- (Meta)data structure allows for easy publishing and archiving

Project roadmap

What	When
Stakeholder input workshop	October 2018
User stories & functional requirements	October 2018
Design & Architecture	November 2018
MVP Delivery	November 2018
Testing and iterative prototyping	December 2019

