

# WCDS Infrastructure for Geospatial Data

Maarten Storm (project leader Geodesk, team Applied Spatial Research), Victor Mensing (former project leader DUIN, WOT N&M)

### Background

In this WCDS pilot it has been investigated if Yoda can be used as a central storage for the geospatial data that is being provided by the Geodesk and the DUIN project of WOT N&M (Statutory Research Tasks Nature & Environment). The target audience consist of employees and students of WUR and of employees of PBL Netherlands Environmental Assessment Agency.

# **Objective**

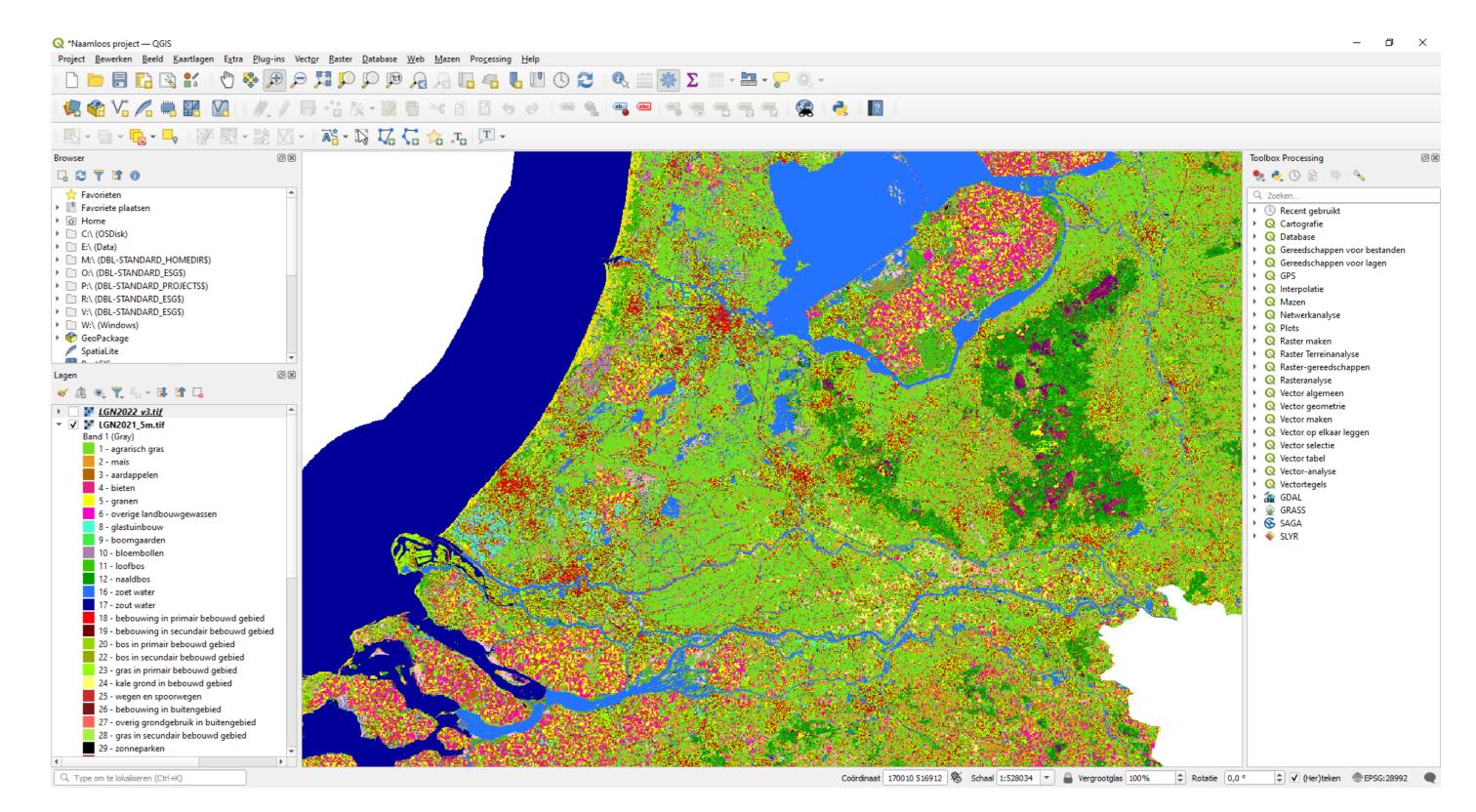
At this moment the geospatial datasets are provided on shares on the W:-drive. This works fast and easy, but it is not accessible for most of the students and employees of PBL.

In this pilot Yoda is compared to the W:-drive, looking at functionality, usability, efficiency and speed.

#### **Method**

Out of the about 2500 datasets which are currently provided, four representative datasets have been selected for this pilot. Selection

## **Results download**



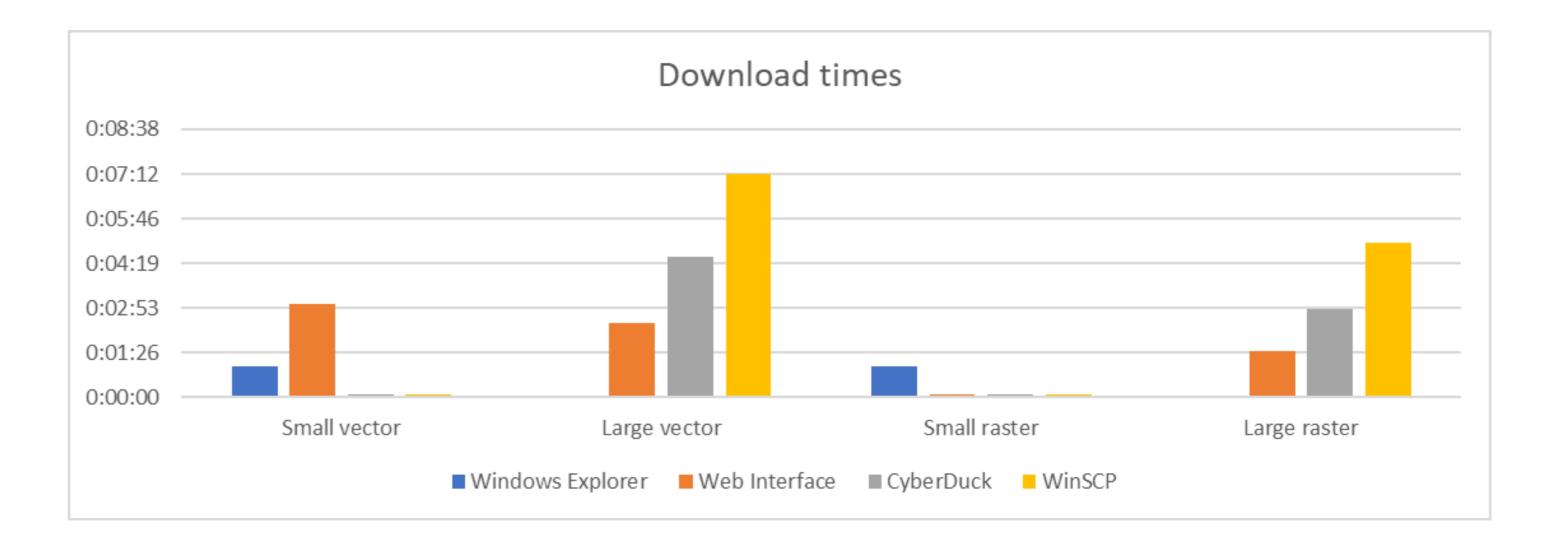
One of the selected datasets (LGN2022) opened in QGIS.

- Downloading large datasets using Windows Explorer is not possible.
- Geospatial datasets can consist of multiple files. Downloading from the web interface is only possible file by file, not all at once.

criteria were:

- Type of dataset (vector or raster)
- Data storage size (small or large)
- Commonly used dataset
- These datasets have been uploaded to en downloaded from Yoda using four applications:
- Windows Explorer (Windows 10 Enterprise)
- CyberDuck 8.2.3
- WinSCP 6.1.2
- Yoda v1.8 web interface https://yoda.wur.nl/
- Upload times 0:43:12 0:36:00 0:28:48 0:21:36 0:14:24 0:07:12 0:00:00 Small vector Small raster Large vector Large raster

- Downloading large datasets takes several minutes.
- CyberDuck seems to be the best solution for downloading data.



## Conclusions

- Yoda is not as user friendly as the W:-drive
- Especially larger dataset (several GB) take a lot of time to use.
- Windows Explorer is experienced as the most user friendly option, but this doesn't work for larger datasets.
- Yoda won't be used by Geodesk and DUIN for internal distribution of geospatial data. It could be a solution to share specific datasets with other organisations.

# **Results upload**

■ Windows Explorer ■ Web Interface ■ CyberDuck ■ WinSCP

- The most user friendly tool for uploading the data is Windows Explorer, but uploading larger datasets using Windows Explorer is not possible. It resulted in an error message and incomplete files on Yoda.
- Uploading data using Windows Explorer or the web interface was slow
- WinSCP and CyberDuck was faster, but it still took several minutes for the large datasets.
- Using CyberDuck there was an error with the first upload attempt.

#### **Further research**

- Compare sharepoint with Yoda and W:-drive
- Synchronizing metadata in Yoda with metadata in Geonetwork (which is being used as portal to search for geospatial datasets) -> this is a new WCDS project.

#### Acknowledgements

We want to thank Paul Giessen from PBL for testing Yoda and sharing his experiences.

Wageningen University & Research P.O. Box 123, 6700 AB Wageningen Contact: maarten.storm@wur.nl T + 31 (0)317 48 19 10



https://www.wur.nl/en/research-results/research-institutes/environmental-research/facilities-tools/geodesk.htm