
Towards DARIAH-PL e-infrastructure

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Abstract of the answer to the call for proposals

In January 2021, DARIAH-PL consortium (www.dariah.pl) started a large-scale national project to build Polish e-infrastructure for the arts and humanities, named Dariah.lab. The main goal of the project is to develop and deploy innovative tools and services for multi-context visualization, analysis and interpretation of heterogeneous datasets using linked data, machine learning and alike. Dariah.lab will support development of various branches of creative industries, regional tourism, visualisations as well as advanced management of multimedia digital resources. The project consortium consists of 16 institutions and is led by Poznan Supercomputing and Networking Center (www.psnc.pl).

Conceptually, Dariah.lab is composed of five key interconnected laboratories (each of them having multiple building blocks) for source data, data enrichment, semantic supervised discovery, analysis and interpretation as well as visualisation. Through these laboratories potential users will have access to, e.g. tools for (3D) data acquisition, services for data repositories, knowledge extraction and consolidation mechanisms, data analytics services as well as advanced (3D/geo) visualisation.

Dariah.lab will be composed of multiple components having various forms, e.g. resources, services, software or physical equipment. In many cases, these components will be interconnected or dependent on each other, creating together a complex ecosystem to support art and humanities research. To achieve that, Dariah.lab needs a clear and easy way to make its components available to the end-users - it needs proper interfaces in regard to technical, operational or organisational aspects.

Despite all the complexities of the aforementioned e-infrastructure, we still envision it to be available via a common and single access interface, as a "one-stop shop", where both public and private bodies can find useful components.

Currently, the Dariah.lab interface is an abstract entity, which is browsable/searchable via well known taxonomies (e.g. TaDiRAH, ACM CCS) as well as geographical location and institutional attribution. It has information on the scenarios that are supported, links between the components, supported input and output formats as well as the datasets that it produces or uses. The interface not only has an online (web-based) implementation, but it is also exposed as a dataset for further processing. As a result, it can be easily integrated into existing catalogues, inventories or marketplaces.

In the presentation we would like to explain what the main components of the DARIAH-PL e-infrastructure are and how they are aligned with the expectations of the end-users.

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