DARIAH AAI Update

FIM4R Meeting, Kopenhagen Jan 30, 2024

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Agenda – Introduction

- 1. DARIAH and follow up activities
- 2. Intro to DARIAH AAI 3.0 and its IdP Proxy Solution
- 3. Future of DARIAH AAI



DARIAH DARIAH and follow up activities

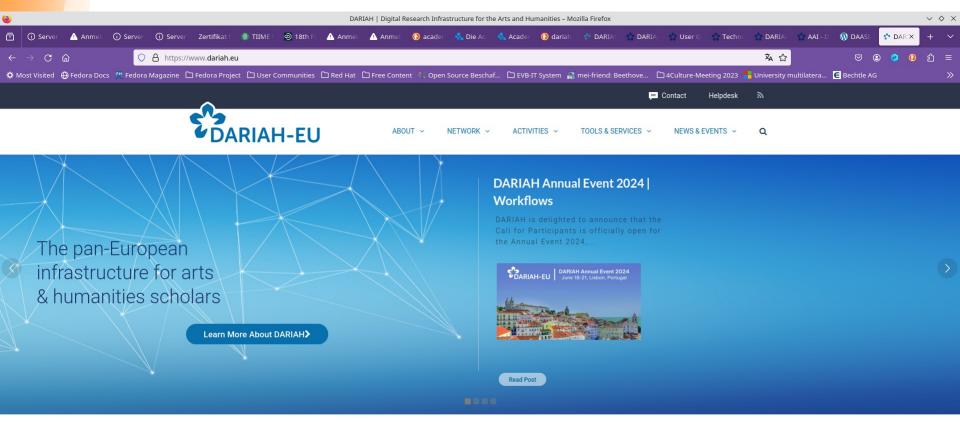


What is DARIAH-EU

- DARIAH: Digital Research Infrastructure for the Arts and Humanities
- DARIAH is a pan-european infrastructure for arts and humanities scholars working with computational methods. It supports digital research as well as the teaching of digital research methods.
- One of the few ESFRI research infrastructures for the humanities (ERIC is in working since 2014)
- DARIAH's mission is to develop, maintain and operate an infrastructure in support of ICT-based research practices Infrastructure is administration, software and storage services but also Curricula and Methodology
- Working with communities of practice: humanities scholars supporting their VREs
- See https://www.dariah.eu/



What is DARIAH-EU



Latest News





What is DARIAH-DE

- DARIAH-DE is the German national Part of DARIAH-EU
- Three project phases funded by the BMBF (2011-2019)
- supports the humanities and cultural sciences working with digital resources and methods in research and teaching.
- developing a digital research infrastructure for tools and research data
- developing materials for teaching and further education in the field of digital humanities (DH)
- In 2019 the DARIAH operational cooperation laid the foundation for the sustainable operation and the continuation of DARIAH-DE by concluding an operating cooperation agreement fundedby the single 16 partners
- See https://de.dariah.eu/en



Follow ups of DARIAH-DE

- Parallel to DARIAH-EU there was the ESFRI CLARIN-EU
 - The research infrastructure for language as social and cultural data offering data, tools and services to support research based on language resources
 - https://www.clarin.eu/
- The German Part of CLARIN-EU was CLARIN-D
 - a research infrastructure that helps researchers of Humanities,
 Cultural and Social Sciences with accessing, preparing and analysing of research data.
 - also offers information on a wide range of topics, including teaching material, help on data management plans and other, disciplinespecific support.
 - https://www.clarin-d.net/en/
- In 2019 DARIAH-DE and CLARIN-D merged to CLARIAH-DE

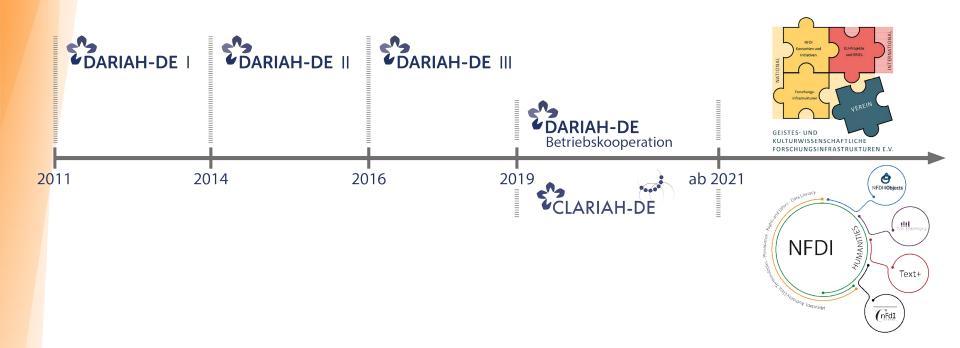


Follow-ups of DARIAH-DE

- CLARIAH-DE
 - is a contribution to the digital research infrastructure for the Humanities and other disciplines
 - existing offers and services are further developed and jointly made available in accordance with the FAIR principles Findable, Accessible, Interoperable and Reusable
 - Funded by the BMBF (2019-2021)
 - https://www.clariah.de/en/
- "With its offer, CLARIAH-DE provides building blocks for a national research data infrastructure (=NFDI) and is part of the NFDI initiative Text+ for language- and text-based research data."



Follow-ups of DARIAH-DE





Humanities NFDI consortia



Consortium for Research Data on Material and Immaterial **Cultural Heritage**, establishing a needs-based infrastructure for research data ranging from architecture, art history and musicology to theatre, dance, film and media studies. https://nfdi4culture.de



Utilize and Preserve **Text- and Language-based** Research Data preserve text- and language-based research data for the long term and enable their broad usage in the scientific community https://text-plus.org/en/



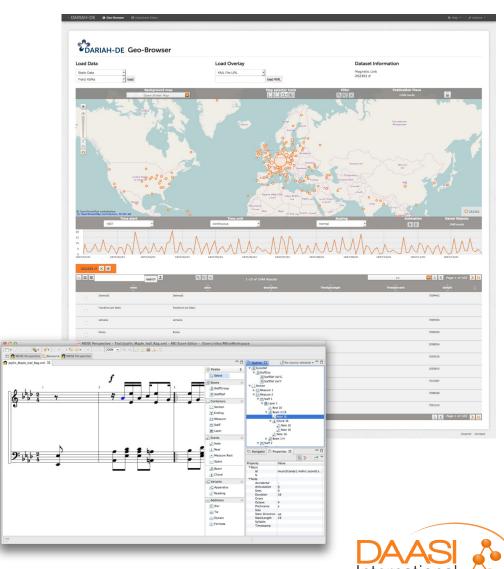
The consortium brings together partners united by a common set of interests, needs, and aims related to the distinct challenges faced by those disciplines that use historical formemorymethods or that rely on data requiring historical contextualization. https://4memory.de/

NFDI4OBJECTS

aimed at researchers and practitioners whose work focuses on the material heritage of around three million years of human and environmental history and is dedicated to the challenges of modern research data infrastructures. https://www.nfdi4objects.net/index.php/ep

Virtual Research Environments in the humanities





DARIAH AAI

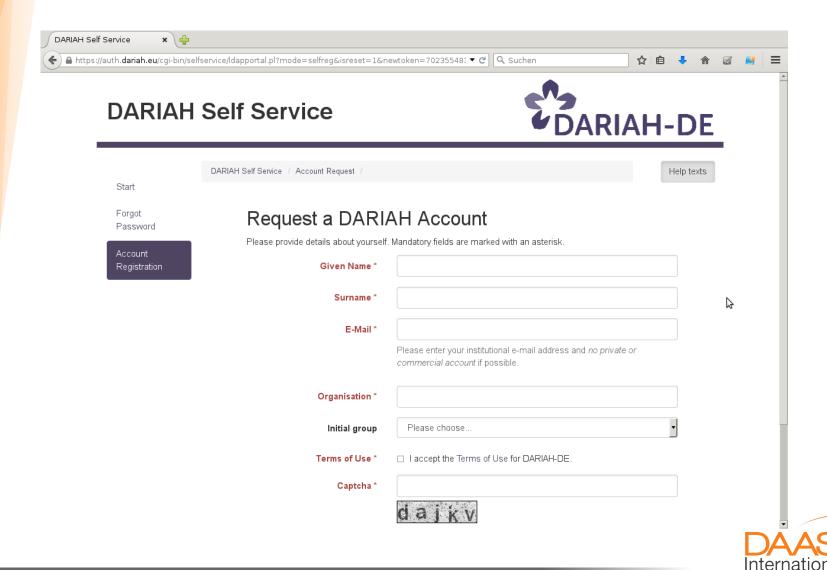


DARIAH AAI - challenges

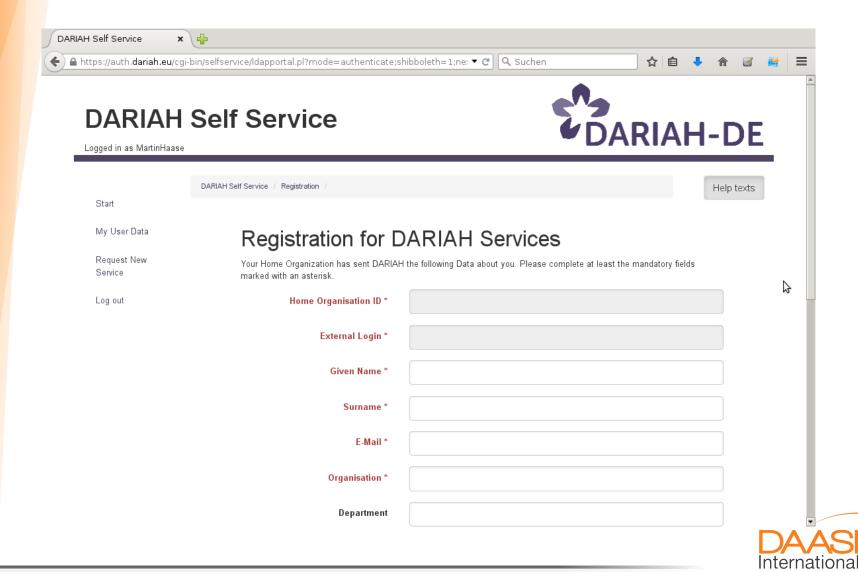
- Goal 1: users of DARIAH services (SPs) should authenticate via their home organization (campus IdP).
- Goal 2: certain DARIAH services only allow particular user groups.
 This should be configurable centrally by the respective admins, for all DARIAH services.
- Goal 3: DARIAH needs some user information
 - 3.a) she agrees to DARIAH Terms
 - 3.b) she is a researcher (e.g. her organization or e-mail)
- Goal 4: cope with a situation where users either
 - 4.a) have no campus IdP
 - 4.b) their campus IdP would not release Personally Identifiable Information (PII) to hitherto unknown SPs



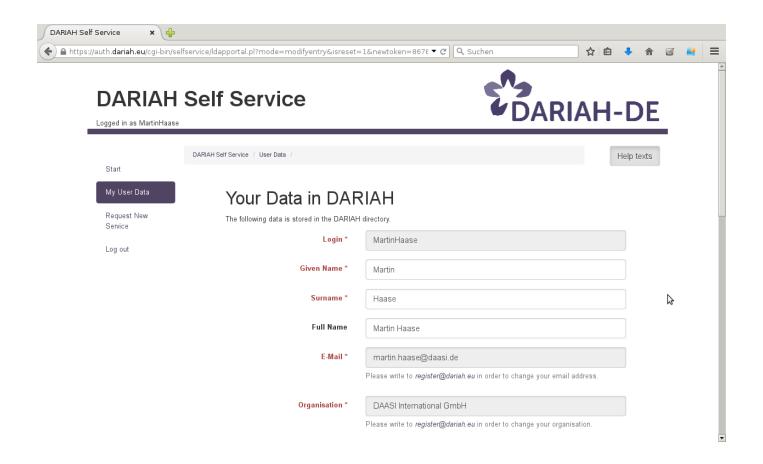
DARIAH AAI - Self Service



DARIAH AAI - Register Federation Users

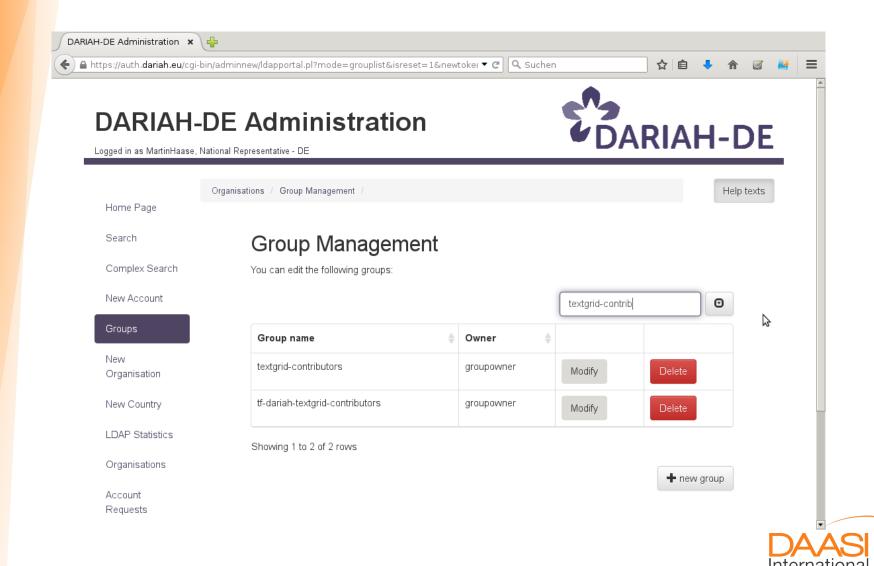


DARIAH AAI - Self Service

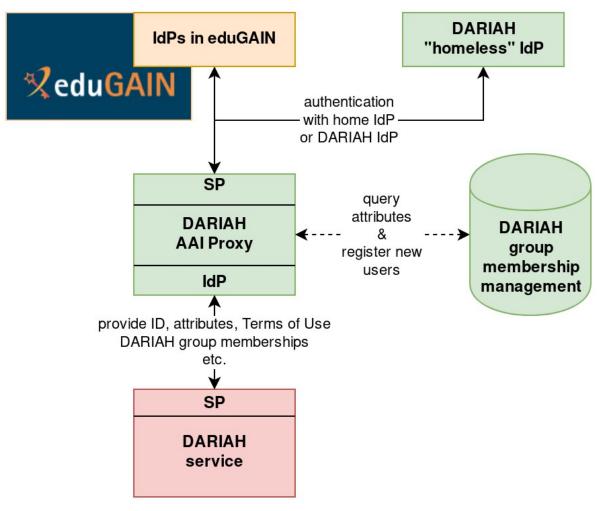




DARIAH AAI - Administration: AuthZ Groups



DARIAH AAI 3.0 - Overview





DARIAH AAI 3.0 (1)

- In the past, it was difficult to connect services to the DARIAH AAI.
- In mid 2018, DARIAH introduced a central AAI proxy that brokers between DARIAH services and eduGAIN.
- The proxy took over many tasks from the services, which makes it much easier to connect new services.



DARIAH AAI 3.0 (2)

- Almost any SAML SP library can be used in an application
- No registration of the SP in a federation needed anymore - just exchange SAML metadata with the proxy
- The proxy ensures Identity Provider (IdP)
 Dicovery and the connection to eduGAIN
- It provides a service with all IdP attributes, plus information from the central DARIAH directory



DARIAH AAI 3.0 (3)

- The DARIAH AAI Proxy is based on the open source Shibboleth IdP and SP software.
- It implements the Blueprint Architecture of the Horizon 2020 AARC project and consists of
 - an IdP component that is connected to DARIAH Services, and of
 - an SP component that is connected to all IdPs in eduGAIN.
- These two components are strung together, such that the AAI proxy forwards all data from eduGAIN IdPs on to DARIAH SPs.



DARIAH AAI 3.0 (4)

- Besides just forwarding IdP attributes, the DARIAH AAI proxy does a bit more to ensure DARIAH needs:
 - Check if an eduGAIN user is registered in the DARIAH directory, and send her to DARIAH SelfService if not
 - Check the DARIAH and possible Service-specific
 Terms of Use have been accepted
 - Enrich IdP attributes with central authorization group infomation to be used for access control in services



DARIAH AAI - SelfService

- Register users that authenticate via the eduGAIN meta-federation
- Let users agree to the general DARIAH and specific service Terms of Use
- Manage user's data in DARIAH
- Manage central authorization groups which services can use for access control
- For users that do not have an eduGAINIdP: apply for DARIAH accounts and manage passwords

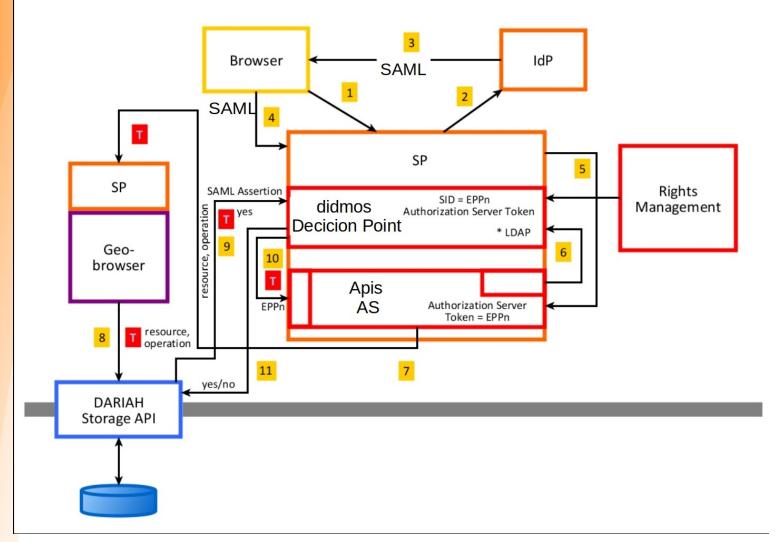


DARIAH AAI - Documentation

- Well documented at https://doc.de.dariah.eu/DARIAH-AAI-Documentation/
 - News
 - Intro to FIM
 - Info on user management
 - Infos for service developers
 - Attributes available in the DARIAH AAI
 - ...



PDP and object based authorization





FIM4D



- FIM4D Federated Identity Management for DARIAH
- WG on Authentication and Authorization Infrastructure for DARIAH
- Authenticate to DARIAH services with the password of a researcher's home institution leveraging eduGAIN
- FIM4D working group aims at
 - disseminating information about this infrastructure,
 - setting up a number of pilots to integrate services from different DARIAH countries into this infrastructure,
- Unfortunately this WG is dormant right now



The Future of DARIAH AAI



What happend to DARIAH AAI

- The DARIAH AAI is still in use,
 - It is based on didmos1, the follow-up didmos2 is one of the 4 offerings of IAM4NFDI
- The Shibboleth IdP was exchanged by SimpleSAMLphp due to more php Know-How of the guys in charge (This might change again)
- Text+ is moving to AcademicID, one of the 4 offerings of IAM4NFDI
- Text+ needs object based authorization which isn't imlemented in AcademicID
- Thus a central PDP will again be needed that could be implemented with didmos2



Thanks!

https://www.daasi.de

https://wiki.de.dariah.eu/display/publicde/DARIAH+AAI+Documentation

