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# Humanities At Scale – Creating A Network Of Expertise And A Sustainable Infrastructure For Digital Humanities Projects In Europe

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Digital Humanities (DH), as a growing field, generates lots of innovative new tools and methods to enhance work in humanities disciplines. To ensure a sustainable digital European infrastructure for long-term availability of digital research data and tools the [DARIAH](#) infrastructure (Digital Research Infrastructure for the Arts and Humanities) aims at the development of a strong cooperation and information exchange between research communities and institutions in the arts and humanities. The ambition to extend this community and create a European-wide network of expertise was one of the reasons to initiate the new Horizon 2020 project Humanities at Scale ([HaS](#)).

The project coordinated by DARIAH-EU aims to evolve the DARIAH community, offer training and information material, set up a number of training workshops and develop core services within a sustainable framework. Within this framework a research infrastructure to connect DH research tools, services and data will be established and the challenge is to build technical systems to support this.

The poster will highlight and answer the following questions from a technical perspective:

- How can a decentralized framework (architecture of participation) of tools and services be developed and maintained?
- Which kind of technologies are useful to establish a sustainable framework for DH-tools and -services?
- What is needed to integrate externally developed tools into such a framework?

The DH community, as a network of expertise, created and still creates a lot of important tools and services - often only in a specific project context or for one particular research question. To make these tools and services accessible, re-usable, and open for DH, HaS is building a sustainable technical framework which will advance the creation and enhancement of digital tools. This will improve applications, enlarge possibilities for publication and enable long-term preservation of research data and digital methods. Just hosting digital tools is not sufficient. Code and server configuration require constant maintenance and ongoing development - an elementary issue for a decentralized and unified infrastructure. Thus, within the HaS project, researchers and developers get conceptual and technical support for their tools and services to enable a better integration into the community.

Furthermore, projects in the Digital Humanities need key central services. They often must spend a large proportion of their available resources on basic infrastructure components. To investigate demands regarding service requirements and tools a [survey](#) was conducted in summer 2016. Its aim was to get an overview of the currently used services and tools and the ones, which will become relevant in the future. The survey design enabled a gap analysis focusing on the following three kinds of tools and services:

- Development services such as [Git/SVN](#), [Chili](#) or [Open Project](#). They support developers in code hosting, code review, the development of workflows and documentation. They improve the organization and quality of code and the workflows for writing it.
- Hosting services comprise virtual machines, storage and repository solutions, configuration management tools and monitoring environments. They provide basics for a sustainable development and ongoing operation of DH services.
- Collaboration tools support the whole area of DH. Collaborative writing and managing of

digital content in a content management system are major ingredients of everyday's work.

To connect all services and tools HaS will define requirements to enhance the integration.

Besides these enabling, generic tools, the DARIAH community is also producing highly specific research tools that we need to take into account. That will be organized as a bottom-up process, drawing information from existing tools that have been contributed to DARIAH or tools which are offered as candidate contributions. In order to harvest their characteristics, HaS is building a contribution registry, called the DARIAH Inkind Tool. It should not only collect technical specifications, but also generate an overview of what is available in terms of research capabilities. And last but not least, the registry will be used to assess the cost and value of the DARIAH contributions. The existence of the Inkind [registry](#) will enable the DH community to muster a lot of information about each tool, such as documentation, use-cases, application descriptions, data examples, research scenarios and particular training possibilities.

The general aim of the poster is to present the results of the project to the community to get important feedback. This includes the chance to present the participants of the poster-sessions a live-demo (German and English) of the contribution registry. All in all, the presentation will provide insights on how we face sustainability from a technological view.