Heldig – Helsinki Centre for Digital Humanities
A Platform for Open Science & DARIAH Collaboration in Finland

Infrastructures and Networking for Open Science, Univ. of Helsinki, Aug 30, 2016

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Outline

- What is Heldig?
- Linked Open Data Science Service Project
- Heldig and European Research Infrastructures – Case DARIAH
What is Heldig?
What is Heldig?

- Major strategic profiling initiative of University of Helsinki
  - Focusing in Digital Humanities (DH): 7 faculties involved
- DH = Humanities + Social Sciences + Computer Science
- Resources
  - 8 new tenure track professors + personnel 2017-2020
  - Budget over 10 MEUR
    » Funded by Academy of Finland and UH
  - Existing resources in DH at UH
- Network organization
  - Coordinated by Faculty of Arts
  - Collaboration network includes Aalto University and other organizations involved in DH research and education
- Started Aug 11, 2016
Vision

Helsinki area is a leading international hub of Digital Humanities research, education, and development in 2020
Mission

Foster the use of computational methods in humanities and social sciences, open data science, and the deployment of the research results for societal benefit.
Strategic Focus Areas

- **Research**
  - Using and developing computational methods, tools, and services in DH research

- **Infrastructures**
  - Support for digitizing, enriching, and publishing data and knowledge that is needed in DH research and is produced by it

- **Education**
  - Providing DH education and data infrastructure for students, researchers, and application developers

- **Society**
  - Fostering the utilization of the research results in the society
Research

- Computational methodologies and tools for DH
  - digital humanities
  - data analysis in humanities and social sciences
  - digital social science
  - digital innovations in consumer behavior
  - big data learning analytics
- Digital humanities and globalization
  - global interactions
  - religion and digital world
  - Russian big data methodology
  - legal research on digitalization
- Open Science and Research
- 8 new tenure track professors in 7 faculties 2017-2020
Infrastructures

What?
- Digitization
- Language technologies
- Arts and humanities
- Foster Open Data and Open Source

How?
- Reusing others’ work
- Own development focus
  - Data as a service approach
  - Continues work at Aalto and UH on Linked Open Data infras
    » FinnONTO 2003-2012, Linked Data Finland 2012-, Linked Open Science 2015-
  - Extending work to language technologies, data mining, etc.
Education

- Develop the DH minor further at UH
- Extended focus: students + researchers + developers
- Technology support: Online interactive teaching materials
Society

- Digitalization and globalization
  - Studing digitalization as a phenomenon
- Open Research and Science
What makes Heldig special?

Heldig provides a new kind of platform for addressing the challenges of digitalization, based on multi- and interdisciplinary research and collaboration in humanities, social sciences, and computer science. By fostering collaboration and by sharing research infrastructures not only within the University of Helsinki but with other organizations in the Helsinki area and beyond, relevant research problems and data can be found, unnecessary duplicate work can be eliminated, and more resources be targeted to Digital Humanities research and education.
Linked Open Data Science Service

A Sort Project Summary
Vision
Open your data so that it links with the others’ data!

1. Everybody’s data is enriched for “free”
2. Redundant work is minimized by collaboration
3. Work can be shared in better ways
4. Data can be reused in different applications
Use Shared Infrastructure to Prevent Data Linking Problems!
”Intellectuals solve problems - geniuses prevent them”

Albert Einstein
Goals 2015-2016

- Linked Open Data (LOD) Service for Researchers
  - Data service and tools for data production
- Interactive Learning Materials about Publishing LOD
- Pilot Case Studies
  - WarSampo – Finnish WW2 on the Semantic Web
  - Reassembling the Republic of Letters
  - Biological observations

- Part of national Open Science and Research Programme
More info

- Project homepage
- WarSampo
  - http://www.sotasampo.fi
- Reassembling the Republic of Letters
  - http://www.republicofletters.net
Heldig and European Research Infrastructures
Case DARIAH
ESFRI European Strategy Forum on Research Infrastructures

- CLARIN – Common Language Resources and Technology Infrastructure
- DARIAH – Digital Research Infrastructure for the Arts and Humanities
- CESSDA – Consortium of European Social Science Data Archives
- ESS – European Social Survey
- SHARE – Survey of Health, Ageing and Retirement in Europe

- Lots of other infras in different areas
DARIAH – Digital Research Infrastructure for Art and Humanities

- European Research Infrastructure (ERIC) – 2014-2019
- Data, tools, education, dissemination, …
- Focus on Arts and Humanities
- Similar to CLARIN ERIC in linguistics
- 17 European countries as members
  - Sweden Switzerland, UK Co-operating
  - Where is Finland?
DESIR – Project
DARIAH ERIC Sustainability Refined
DESIR – New 3 Year Project Starting

- **Dissemination**
  - Events to promote DARIAH & initiate collaborations

- **Growth: new countries**
  - UK, Finland, Spain, Switzerland, Chech Republic, Israel

- **Technology**
  - Entity-based search
  - Scholarly content management
  - Visualization
  - Text analytic services

- **Robustness**
  - Organization, business plan, marketing
• Trust
  – Measure acceptance, promote trust and confidence

• Education
  – Promote use of DARIAH infra
## List of participants

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<thead>
<tr>
<th>#</th>
<th>Participant Legal Name</th>
<th>Country</th>
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<tbody>
<tr>
<td>1</td>
<td>DIGITAL RESEARCH INFRASTRUCTURE FOR THE ARTS AND HUMANITIES</td>
<td>France</td>
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<td>2</td>
<td>GEORG-AUGUST-UNIVERSITAET GOETTINGEN STIFTUNG ÖFFENTLICHEN RECHTS</td>
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<td>3</td>
<td>UNIVERSITEIT GENT</td>
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<td>4</td>
<td>UNIVERSYTET WARSZAWSKI</td>
<td>Poland</td>
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<td>5</td>
<td>FACULDADE DE CIENCIAS SOCIAIS E HUMANAS DA UNIVERSIDADE NOVA DE LISBOA</td>
<td>Portugal</td>
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<td>6</td>
<td>Centar za digitalne humanisticke nauke</td>
<td>Serbia</td>
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<td>7</td>
<td>GOTTFRIED WILHELM LEIBNIZ UNIVERSITAET HANNOVER</td>
<td>Germany</td>
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<td>8</td>
<td>INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE</td>
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<td>9</td>
<td>KING'S COLLEGE LONDON</td>
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<td>10</td>
<td>UNIVERSITY OF GLASGOW</td>
<td>United Kingdom</td>
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<td>11</td>
<td>Knihovna AV CR, v. v. i.</td>
<td>Czech Republic</td>
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<td>12</td>
<td>Helsingin Yliopisto</td>
<td>Finland</td>
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<td>13</td>
<td>INSTITUT SUISSE DE BIOINFORMATIQUE FONDATION ISB</td>
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<td>14</td>
<td>UNIVERSIDAD NACIONAL DE EDUCACION A DISTANCIA</td>
<td>Spain</td>
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<td>15</td>
<td>UNIVERSITY OF HAIFA</td>
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More Info about Heldig: