GeTS: Göttingen eResearch Toolbox Series

Electronic Note Keeping

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Jens Dierkes
Göttingen eResearch Alliance
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<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
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<tr>
<td>11.00-11.30</td>
<td>Introduction, Collection of discussion topics</td>
<td>Jens Dierkes/Harald Kusch</td>
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<td>11.30-12.00</td>
<td>Chemotion Karlsruhe</td>
<td>Nicole Jung</td>
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<td>12.00-12.15</td>
<td>Labfolder: MPI-BPC AG Stark</td>
<td>Erik Schliep</td>
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<td>12.15-12.30</td>
<td>RSpace: SFB 1002/1190</td>
<td>Harald Kusch</td>
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<td>12.30-12.45</td>
<td>Break</td>
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<td>12.45-13.30</td>
<td>Discussion tables</td>
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<td>13.30-14.00</td>
<td>Summarizing discussion</td>
<td>Jens Dierkes/Harald Kusch</td>
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<td>14.00-14.30</td>
<td>Optional: Live demonstration(s)</td>
<td>Harald Kusch</td>
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Paper versus Digital

**Paper based lab notebook**

- Hand written
- Documentation of experiments
- Documentation of (published) results
- Functions (possibly) in proof security
- Is archived in the lab (>10 years)
- Is used chronologically (e.g. daily work of scientist)

**Electronical lab notebook (ELN)**

- Documentation of experiments and crosslinking of SOPs
- Documentation and crosslinking of results
- Crosslinking of publications
- Simplified readability
- Enables searchability
- Enables capturing of standardized descriptive data (e.g. templates, default values)
- Enables adapted structuring: chronologically, project- or experiment-based
- Enables location independent access
- Automatic centralized data backup
Challenges: Academic research environments

- No routine workflows (basic research)
- Dynamic working structures (heterogeneous methodology)
- High dynamics of interdisciplinary team composition
- Data management/access policies rarely defined
Examples: ELN categories

- Cross-Disciplinary
  - Google Keep, Evernote, OneNote
  - MediaWiki
  - Sharepoint

- Discipline-, Technique-specific
  - Academic (natural) science (eCAT/Rspace, Labfolder)
  - Chemical analytics (ChemTrove, E-Notebook)
  - Proteomics (OpenLAB, NuGenesis)
  - Inventories (LabGuru)
  - Patents
Discussion Groups

Top 4 Topics

• 78% Connectivity of lab documentation (machines, data sources,...)
• 73% Lab (data) organization and representation in ELNs
• 62% Requirements Hardware/IT infrastructure
• 40% Pros & Cons of ELN solutions
Discussion Groups

Documentation

https://etherpad.gwdg.de/p/Göttingen_eResearch_Toolbox_Series
https://etherpad.gwdg.de/p/GeTS_ELN

For the discussion groups:
https://etherpad.gwdg.de/p/GeTS_ELN_Connectivity
https://etherpad.gwdg.de/p/GeTS_ELN_LabOrga
https://etherpad.gwdg.de/p/GeTS_ELN-INF
https://etherpad.gwdg.de/p/GeTS_ELN_ProsCons
This map charts the most popular cosmic locations as measured by the number of SkyView image requests since June 2007. Brighter colors indicate more views. Credit: NASA/SkyView/Thomas McGlynn

Research Bazaar
@ Data Science Summer School
July 12 2017, 14:00 – 18:30h
Historical Building SUB, Alfred-Hessel-Saal
Göttingen, Germany

Present your research through the lens of data science
Exchange ideas, insights, experiences by connecting with
International participants of the summer school
Researchers on the Göttingen Campus
All this in a bazaar-style setting!

Register your contribution by June 30
via email to ds3-oc@lists.uni-goettingen.de
and visit https://goo.gl/Awc4PJ for further information

Part of International Short Term Programs Göttingen

/eResearch Alliance
Göttingen