

CDI Monthly Meeting 20170809

CDI Monthly Meeting - 20170809

The Community for Data Integration (CDI) meetings are held the 2nd Wednesday of each month from 11:00 a.m. to 12:30 p.m. Eastern Time.

WebEx:

<https://usgs.webex.com/> - Under the Meeting Center tabs, search for meeting name: "Community for Data Integration."

Audio:

USGS/DOI Dial In Number: (703) 648-4848 (for USGS and DOI offices)

Toll Free Dial In Number: (855) 547-8255 (for other offices and telecommute locations)

Conference Code: 47919# (same for both numbers)

Webex Recording

Webex recordings are available to CDI Members approximately 24 hours after the completion of the meeting. Please login to view the recording. If you would like to become a member of CDI, please email cdi@usgs.gov.

Agenda (in Eastern time)

 NOTE: Ask and up-vote questions during the call at [slido.com](https://www.slido.com), Event Code #L093

11:00a Scientist's Challenge follow up: Design, Usability, and Information Architecture

11:10a Welcome - Kevin Gallagher - Associate Director for Core Science Systems and Tim Quinn - Office of Enterprise Information Chief

11:15a Working Group Announcements

[All opening slides - challenge, welcome, and working groups \(pdf\)](#)

11:25a **CDI Software Development Cluster, code.gov, and software metadata** - Blake Draper, USGS, and Eric Martinez, USGS

Introducing the CDI Software Development Cluster: Software developers in the USGS are spread across all the mission areas and regions. Despite variations in the details of our work, developers have a lot of challenges, concerns and questions in common. The CDI Software Dev Cluster is a new group intended to foster discussion around software release protocols and policies, development best practices, software metadata, and 3rd-party software libraries used to support our work. We welcome full-time developers along with any interested parties to join the Cluster and help us build a robust community.

Bio: Blake Draper, bdraper@usgs.gov, Web Informatics and Mapping - Middleton, WI, Geographer, Software Developer

Software metadata abstract: Providing properly structured metadata is key to software discovery and reuse. This talk will introduce specific preliminary guidance regarding software metadata and highlight tangible benefits in doing so. Guidance is preliminary and open to feedback and/or discussion.

Bio: Eric Martinez, emartinez@usgs.gov, Geologic Hazards Science Center - Golden, CO, Computer Scientist, Software Developer, Developer Advocate

Presentation: Slides are available to CDI Members. Please login to download the slides. If you would like to become a member of CDI, please email cdi@usgs.gov.

11:45a **User Experience at the University of Tennessee and USGS** - Rachel Volentine, University of Tennessee, Knoxville

Abstract: The CCI User-eXperience Lab (UXL) provides a state-of-the-art lab environment located in the College of Communication and Information at the University of Tennessee in Knoxville, Tennessee. The User eXperience Lab provides an environment conducive to studying how users interact with a system and conducive to gaining insight into the system's usability. The UXL supports the work of several university, government, and corporate groups, including: Data Observation Network for Earth (DataONE), UTK Creative Communications, UT University Libraries, Oak Ridge National Laboratory (ORNL), Office of Science and Technical Information (OSTI), United States Geological Survey (USGS), and Atmospheric Radiation Measurement (ARM) Climate Research Facility.

Bio: Rachel Volentine received a Masters in Library and Information Science from the University of Tennessee in 2010. She has been the User-experience Lab manager since August 2013. She is responsible for scheduling, assisting, conducting, and training researchers in user-experience lab activities and research.

Presentation: Slides are available to CDI Members. Please login to download the slides. If you would like to become a member of CDI, please email cdi@usgs.gov.

12:30p Adjourn

Related links

1. CDI Forum Pages on Usability and Information Architecture
 - a. [User needs and user experience - what would you like to learn about? What would you like to share?](#)
 - b. [Scientist's Challenge 170712: Data-driven web design with A/B testing and experimentation](#)
 - c. [18F Design Presents — Language: Your Most Important and Least Valued Asset](#)
2. Software Development Cluster Page
 - a. [Software Development Cluster](#)
 - b. email cdi@usgs.gov to join
3. Software metadata
 - a. Metadata schema on code.gov: <https://code.gov/#/policy-guide/docs/compliance/inventory-code>
4. ESIP Usability Cluster and mailing list
 - i. <http://wiki.esipfed.org/index.php/Usability>
 - b. Listserv: <http://lists.esipfed.org/mailman/listinfo/esip-usability>
5. D3 Tutorial
 - a. https://esip.figshare.com/articles/Using_D3_js/5258548
6. OpenSensorHub
 - <https://opensensorhub.org/>
 - <https://youtu.be/0BfDQ0I5bv8>
 - <https://github.com/opensensorhub>
 - <https://www.youtube.com/channel/UCWYvZR4s2hzmOJyxj74EjnA>
 - https://figshare.com/articles/ESIP_2017_EnviroSensing_Cluster_Session_on_Tools_and_Strategies_for_End-to-End_Sensor_Data_Management/5244664

Presentation Q/A

Q: Where do you go to find out new information on UI-UX?

A: Journal of Usability Studies (<http://www.uxpajournal.org/>). UX magazine (<http://uxmag.com/>) - online magazine. Tobii has a huge website with white papers and free webinars. NNGroup website.

Q: So much specialized software and equipment for usability testing. How new are those things? How difficult is it to acquire that equipment?

A: Morea and Tobii are main. We buy support contract in addition to initial software. Constantly improving the software. We bought Morea in 2008. Tobii is a high quality eye-tracker. I recommend buying high-quality equipment. Biometric equipment is new for usability. People will tell you what they think you want to hear as opposed to what they are actually feeling.

Q: You have a whole lab set up for usability. Is there anything online that you can utilize that we can use?

A: There are online products, there is usually a cost to them. You can do manual types of testing with out the expensive equipment, for example using a prototype paper to do the test. Card sorting is a good easy task to do with users, of how they think the menus should be set up. There are ways to do usability without the cost of the lab.

Lisa B.: Do you do accessibility user testing in your lab?

A: Yes and no. We have a group that does accessibility. Heuristic evaluations, we keep it in mind, but we don't have an official rating for accessibility.

Allen: How do you select a representative selection of users? How do you figure out who your users are?

A: We do surveys in advance to find demographic info about users. There's a snowball effect when we ask users to provide recommendations for other users.

Sophie H: You talked about monitoring users (biometric). Can you talk about user consent forms and policies. Terms and conditions that you provide for the users to measure or monitor them.

A: If it's going to be published, we go through the IRB. If it is industry, we don't have a consent form, but we do let them know that they can opt out at any time and their info will remain anonymous and not shared with a broad audience.

Discussion through sli.do:

Announcements and Building Integrated Predictive Science Capacity:

- related to data integration pilots, I would like to see more involvement at the mission area level to identify key data assets.
- related to data integration pilots, I would like to see an evaluation of existing resources like NWIS that have the potential to be expanded.
- related to data integration pilots, I would like to see a strong focus on data model standards development that involves scientists and building communities.

Software Development Cluster and Software Metadata:

- Q: The descriptive fields you showed look pretty similar to the Dublin Core fields that are used to describe data and other items, do you know if they are related?
A: I am not familiar with the details of Dublin Core, but we did get our fields from code.gov.
- Q: Eric, can we ingest the json into ScienceBase, creating an SB item from which we could get a DOI for the code?
A: Setting up code.usgs.gov for official hosting platform for software. Mint DOIs against the code.usgs.gov. I don't think the intention of SB was to host the software.
Tamar Norkin: We recommend SB could be used as a platform for static code. Not versioned code - this should be hosted on code.usgs.gov. We also see code released with Data Releases and that is also fine.
Follow up: Wasn't thinking that code.usgs.gov (ed. Note: do you mean ScienceBase here?) would house the code, but SB item could point to code.usgs.gov, just as other SB items point to web services elsewhere.
- Q: So code.usgs.gov is our software repository and code.gov is the catalog/metadatabase folks would search? just trying to differentiate these platforms.
A: code.usgs.gov is USGS hosted repository, [https://code.gov/](https://code.gov) is government wide resource. Similar to the relationship btw USGS Science Data Catalog and [Data.gov](https://data.gov).
- Q: what about bitbucket (vs. code.usgs.gov)?
A: Bitbucket is in the process of being phased out.
- Q: What about github.io vs. code.usgs.gov?
A: GitHub is commercial platform. We can use commercial platforms for hosting code and data to facilitate broader discovery, however, we must maintain the software on a .gov domain. If you are working on GitHub under the USGS group, it will automatically be handled and replicated on code.usgs.gov.
- Q: Where should a project landing page, general intro doc be posted? is that a standalone "web page" or part of "software release" in IPDS?
A: You should, at a minimum, maintain a README.md file in the root of the repository. This file is displayed when browsing source code on most Git hosting platforms. You may use this to link to additional project documentation within or outside the repository itself.
- Q: I would be interested in whether software metadata is expected to be useful for developing richer metadata for model _application_ archives (like those in WMA).
A: The current and immediate goal is to develop a software inventory in compliance with federal regulations. An expected side-effect is increased visibility, reusability, and impact. Additional benefits are not precluded by developing such an inventory.
- Q: Is the review process for code the same for data? do you need to go through IPDS?
A: All USGS information products require review. You can read more about software types, reviews, releases, etc... on the [best practices page](#) while official policy is still being finalized. IPDS is a requirement for all approved software releases.
- How do we join the USGS Slack Team? A: See details at [Software Dev Cluster](#) page.
- Q: Can you see the usgs slack channel without signing up with slack? A: No, you need to be logged in.
- Q: Can slack be used for other projects? Or is it specific to this project? A: (Find someone to give response to this.)
A: Slack is and can be used for a variety of projects. Be aware this is currently an unofficial platform where all activity is logged on (potentially insecure) non-government systems. Sensitive, personal, or private information should not be shared on this platform.

Usability:

- usability.gov has a wealth of information and links to resources on these topics.
- <https://www.usability.gov/how-to-and-tools/guidance/hhs-usability-lab.html> HHS usability lab in DC free to Feds
- Through our USGS UT Coop, we have access to the UT Lab. We also can do remote testing via their LOOP11 product. Contact Mike Frame for more info
- Q: What was the link for the D3 page? A: https://esip.figshare.com/articles/Using_D3_js/5258548

Attendees

A WebEx Participant Report is available to CDI Members. Please login to download the report. If you would like to become a member of CDI, please email cdi@usgs.gov.