National Data Service kicks off with the Materials Data Facility

Amber Harmon

In nearly every field of science, experiments, instruments, observations, sensors, simulations, and surveys are generating massive data volumes that grow at exponential rates. Discoverable, shareable data enables collaboration and supports repurposing for new discoveries — and for cross-disciplinary research enabled by exchange across communities that include both scientists and citizens.

The National Data Service is an international federation of data providers, data aggregators, community-specific federations, publishers, and cyberinfrastructure providers. It builds on the data archiving and sharing efforts underway within specific communities, and links them together with a common set of tools.

More than 70 representatives from organizations across the US and around the world gathered in June in Boulder, Colorado, US, to begin turning the vision — an infrastructure that supports data from all disciplines of science, engineering, and humanities, one where researchers can easily find, reuse, and publish data — into a reality.

Organized by the National Center for Supercomputing Applications (NCSA) [1] at the University of Illinois at Urbana-Champaign (UIUC) [2], US, the National Data Service (NDS) [3] consortium is an international federation of data providers, data aggregators, community-specific federations, publishers, and cyberinfrastructure providers. The NCSA is leading the effort, with help from the UIUC, the University of Chicago [4] in Illinois, US, and The University of Texas at Austin [5], US.

Participants at the kickoff meeting discussed the key capabilities and surrounding issues of a national infrastructure. These include how the NDS can fit into the publishing process and provide the links necessary to connect literature and data. They also looked at how the NDS can connect to and build on data infrastructure already in place within specific communities like the Research Data Alliance (RDA) [6] and data infrastructure projects like EUDAT [7], relying on partners to help ensure data service interoperability across global communities.

Video courtesy the National Center for Supercomputing Applications. [8]

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Links:
[1] http://www.ncsa.illinois.edu
[2] http://www.isgtw.org/feature/illinois.edu
[3] http://www.nationaldataservice.org/
[4] http://www.uchicago.edu/
[5] http://www.utexas.edu/
[6] http://www.isgtw.org/feature/data-without-borders-%E2%80%94-research-data-alliance
[7] http://www.eudat.eu/
[8] http://www.youtube.com/watch?v=BPT1FNFAvnc
[9] http://www.isgtw.org/
[10] http://www.isgtw.org/feature/national-data-service-kicks-materials-data-facility