G-Node

G-Node Demos at NWG 2017

During the conference, the G-Node will be presenting their new data management service called GIN at the **Bernstein Network Information Booth**. GIN is a free service for storing, sharing, and publishing research data. It features versioned storage, multi-user access for collaboration, and publishing of data using persistent identifiers (DOI). The G-Node invites all conference participants to try out the new service: bring your data and discuss upcoming planned features.

Demo presentations will be given at the Bernstein Network Booth during the poster sessions on

Wednesday (13:00-14:30, 16:30-18:00),
Thursday (10:00-11:30, 16:30-18:00), and
Friday (10:00-11:30)

Walk-ins are welcome any time during the conference.

G-Node

German Neuroinformatics Node

Neuroinformatics for efficient data management in Neuroscience

Scientific progress depends increasingly on collaborative efforts that involve exchange of data and re-analysis of previously recorded data. A major obstacle to fully exploit the scientific potential of experimental data is the effort it takes to access both data and metadata for exchange with collaborators, or for further analysis some time after the initial study was completed.
To make data analysis, re-analysis, and data sharing efficient, data together with metadata should be managed and accessed in a unified and reproducible way, so that the researcher can focus on the scientific questions rather than on problems of data management. At the German Neuroinformatics Node, an infrastructure for cellular and systems neurophysiology is being developed to improve data access, data storage and exchange, and data analysis.

Hosted by:
LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

Funded by:
Federal Ministry of Education and Research

G-Node

Training Courses

http://www.g-node.org/training

Upcoming:

8th G-Node Course on Neural Data Analysis

Apply now!

July 31 – Aug 4, 2017, Munich

Organizers: Jan Grewe (U Tübingen), Fabian Sinz (BCM Houston)

http://www.g-node.org/dataanalysis-course

Advanced Course on Neural Data Analysis

Mar 26 – Apr 8, 2017, Jülich

Organizers: Sonja Grün (FZ Jülich), Martin Nawrot (U Köln), Thomas Wachtler (LMU Munich)

http://www.g-node.org/advanced-course

Advanced Scientific Programming in Python

Sep 2017, Athens

Organizers: Tiziano Zito (Berlin) and others

http://python.g-node.org

Tools and Services for Comprehensive Data Management from Acquisition to Publication

G-Node

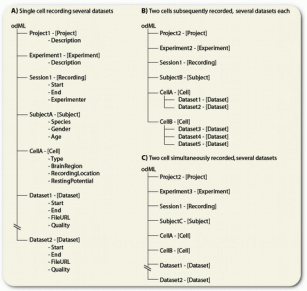
Data Annotation

Collect and manage all information about your experiment

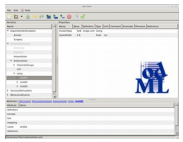
Information about experimental conditions and parameters is acquired from multiple sources and in diverse formats during an experiment.
odML offers a unified scheme to store all this information in consistent and machine-readable fashion, ensuring that all information is kept for easy further processing.

- Flexible structure, adaptable to specifics of the experiment
- Can carry any metadata – all information can be kept
- Machine-readable, facilitates automated collection of metadata in the laboratory
- Libraries and convenient tools available

Flexible structure



Editor

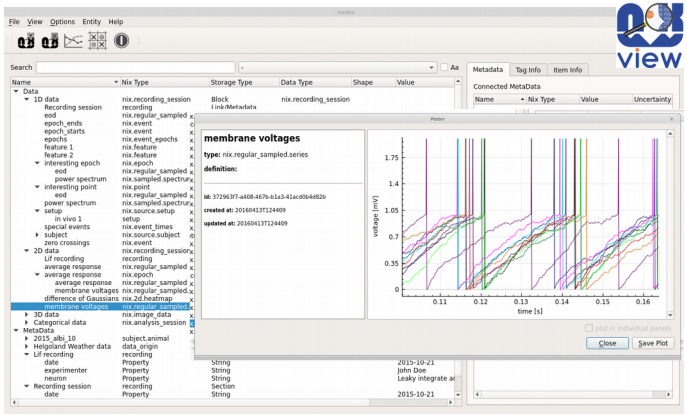


Spreadsheet interface
(by INM-6, FZ Jülich)

http://www.g-node.org/odml

Data Organization

Keep track of your data by managing data and metadata together in an open, versatile format



- Stores a wide variety of neuroscience data types
- Integrates metadata with the data
- Intuitive, coherent file structure
- Easy access and integration with data acquisition or analysis software
- Analysis results can be stored with the data
- Main platforms and languages supported

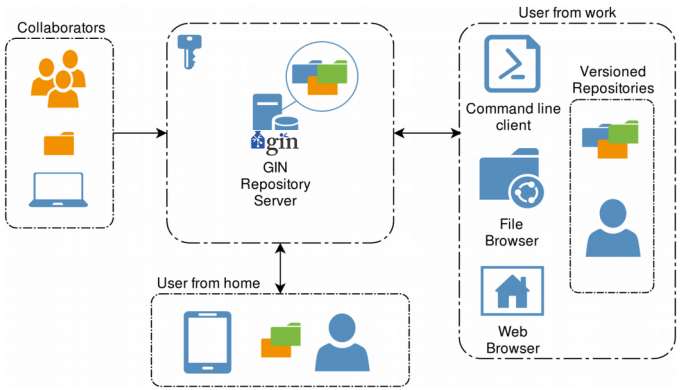
Java, C++, MATLAB, python, neo

http://www.g-node.org/nix

Data Storage and Sharing

Secure storage and access, easy collaboration and publication of your data

- Tracking of changes based on git
- Distributed data management via various client interfaces
- Secure access to your data from anywhere
- Access control or convenient data sharing with collaborators
- DOI Registration service for data publication



http://www.g-node.org/gin

Hosted by:

LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

Funded by:

Federal Ministry of Education and Research