

# HIBALL

HELMHOLTZ International BigBrain  
Analytics & Learning Laboratory

WP4 Architecture, Status and Plans  
Prof. Dr. – Ing. Morris Riedel

9 July 2020 | Steering Board Meeting



UNIVERSITY OF ICELAND  
SCHOOL OF ENGINEERING AND NATURAL SCIENCES  
FACULTY OF INDUSTRIAL ENGINEERING,  
MECHANICAL ENGINEERING AND COMPUTER SCIENCE

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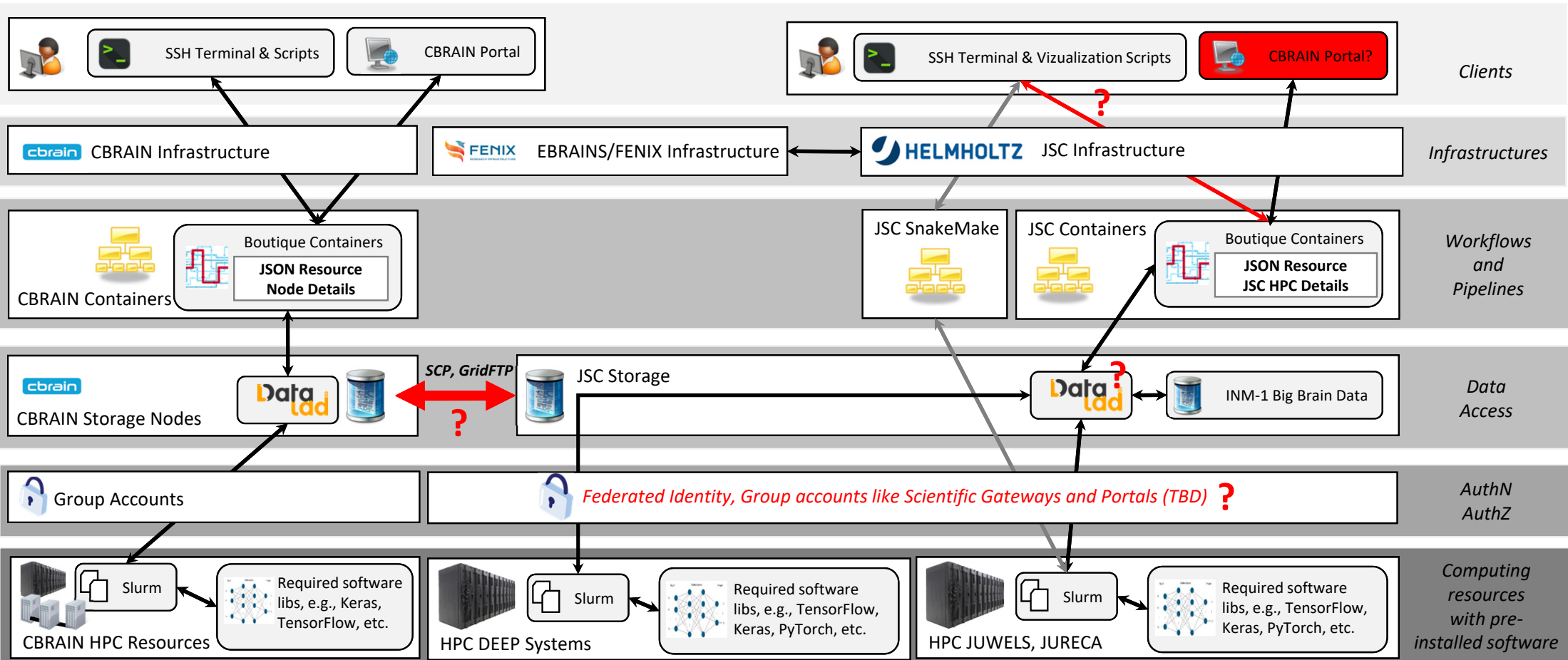
CIFAR



McGill



# Draft Architecture of Joint Infrastructure



# Involved Technology Research & Next Steps



- SnakeMake
  - Workflow management system for scalable data analysis (e.g., used at Juelich these days)
- DataLad
  - Versioning system built on Git and integrates into python
- Boutiques
  - Cross-platform tool for automatic publishing, integration, and execution of command-line applications
- Next Steps
  - Pétur Helgi Einarsson hiring @Juelich/Uolceland, joining efforts of Chadi and Morris
    - PhD student already a publication in neuroscience: <https://www.nature.com/articles/s41592-020-0799-7>
  - Refine the draft architecture with details on protocols and data access (~Q3/2020)
  - WP4 Meeting ~start of August
  - Review by practical users of architecture: Initial installations starting afterwards from August



# References



- [1] SnakeMake: <https://doi.org/10.1093/bioinformatics/bts480>
- [2] DataLad: <https://www.datalad.org/>
- [3] Boutiques: <https://doi.org/10.1093/gigascience/giy016>
- [4] Helmholtz HIBALL Project: <https://bigbrainproject.org/hiball.html>
- [5] CBRAIN: <https://mcin.ca/technology/cbrain/>