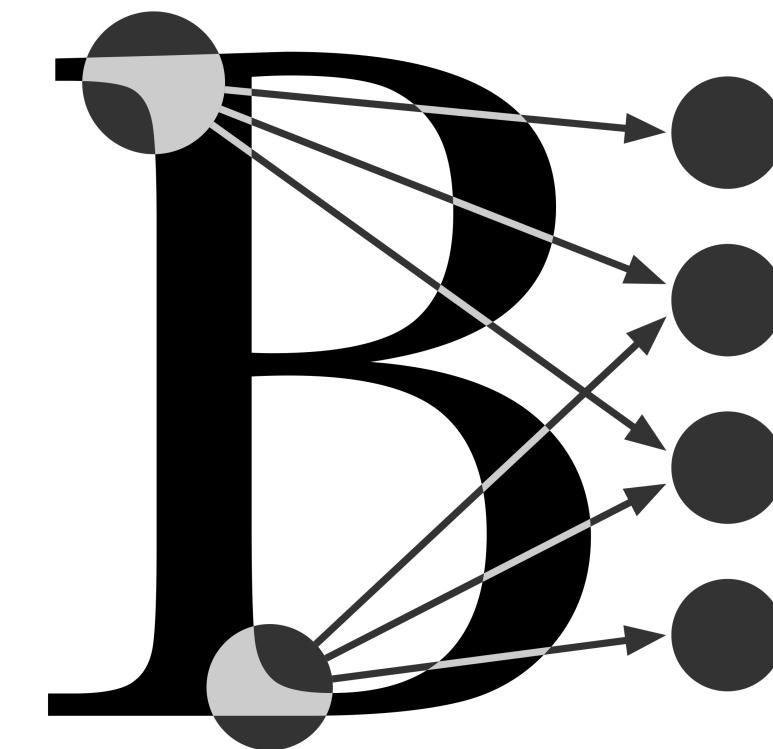


How to use Baskerville Portal

and the benefits it can provide to non-traditional HPC users



Dr Jenny Wong (she/her) - 17 March 2023

Baskerville

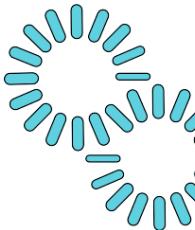
EPSRC Tier 2 HPC Facility

- Launched July 2021

- Consortium



UNIVERSITY OF
BIRMINGHAM



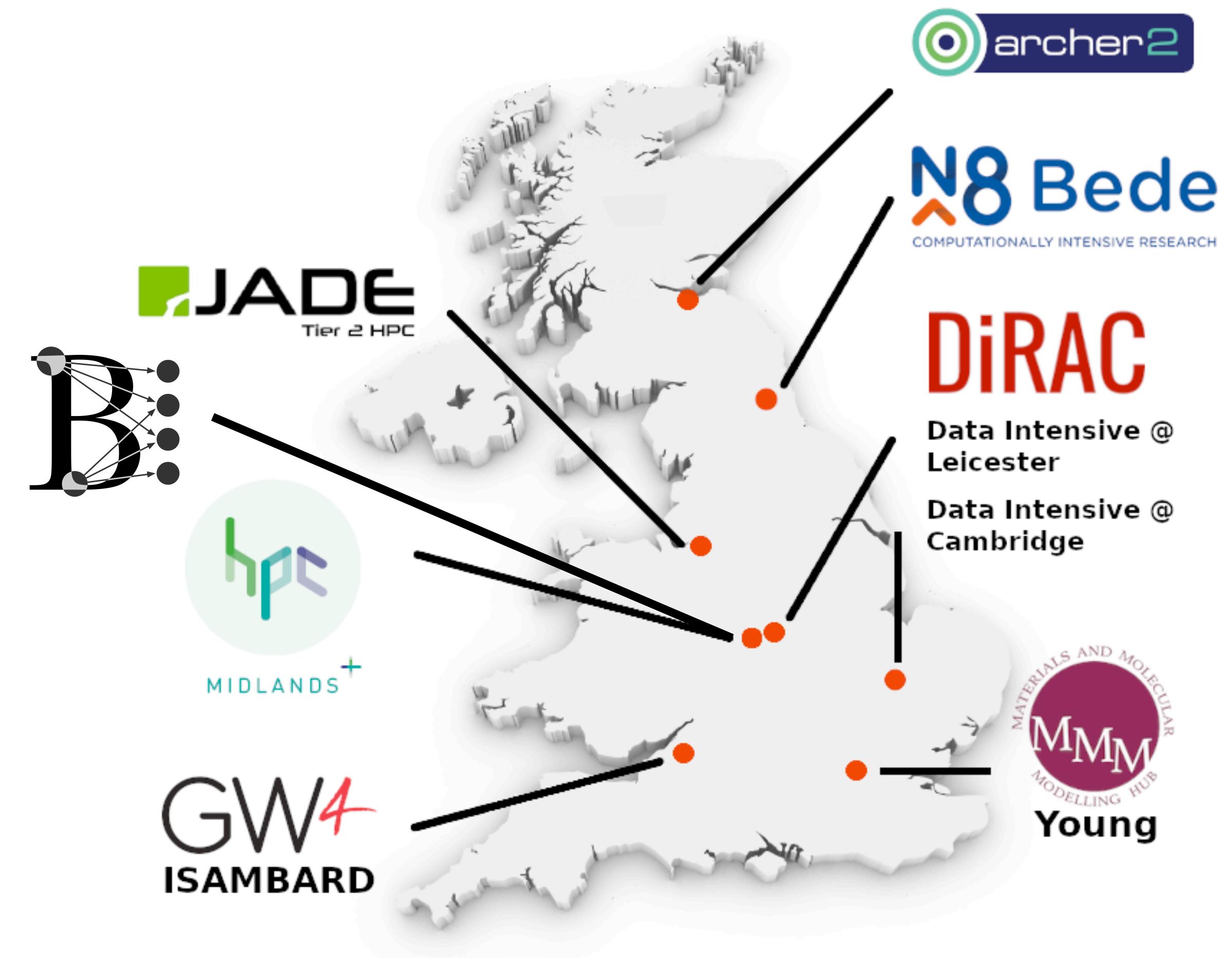
The Rosalind
Franklin Institute



diamond

The
Alan Turing
Institute

- Access also available via EPSRC
Access to HPC calls



System Architecture

52 Lenovo® Neptune™ liquid cooled servers, each with

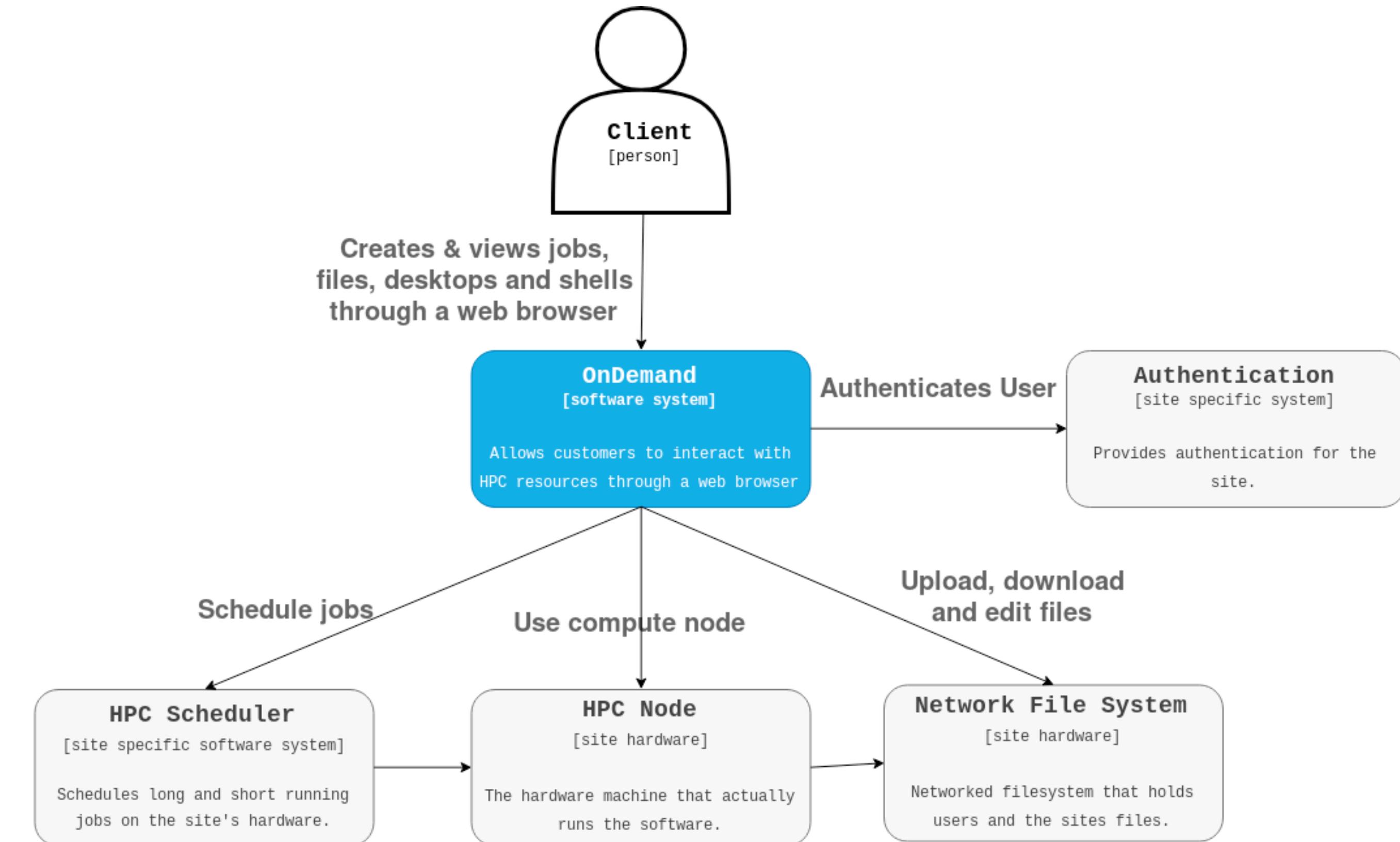
- 2 Intel IceLake CPUs with 36 cores each
- 4 Nvidia A100 40GB GPUs (6 nodes with 80GB)
- 512GB RAM
- 1TB NVMe storage

GPUs are meshed using Nvidia NVLINK, allowing direct GPU-to-GPU communication.

Baskerville Portal

Benefits for non-traditional HPC users

- Open OnDemand
- Accessible supercomputing
 - Web access without installing client software or using a command line interface
- Handles the following:
 - authentication
 - scheduling jobs
 - using the HPC node
 - uploading, downloading and editing files



<https://osc.github.io/ood-documentation/latest/architecture.html>



The Baskerville portal provides web-based access to the Baskerville Tier 2 system

This service is operated by Advanced Research Computing at the University of Birmingham and is funded by EPSRC
Grant EP/T022221/1

Thank you for listening!

Special Thanks

EPSRC Tier 2 HPC and World Class Labs Initiatives

UKRI Digital Research Infrastructure strategy

Consortium partners:

The Rosalind Franklin Institute

Diamond Light Source

The Alan Turing Institute

Technology partners:

OCF

Nvidia

Lenovo

University of Birmingham:

Prof Iain Styles

Advanced Research Computing