Baskerville

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EasyBuild User Meeting 2024

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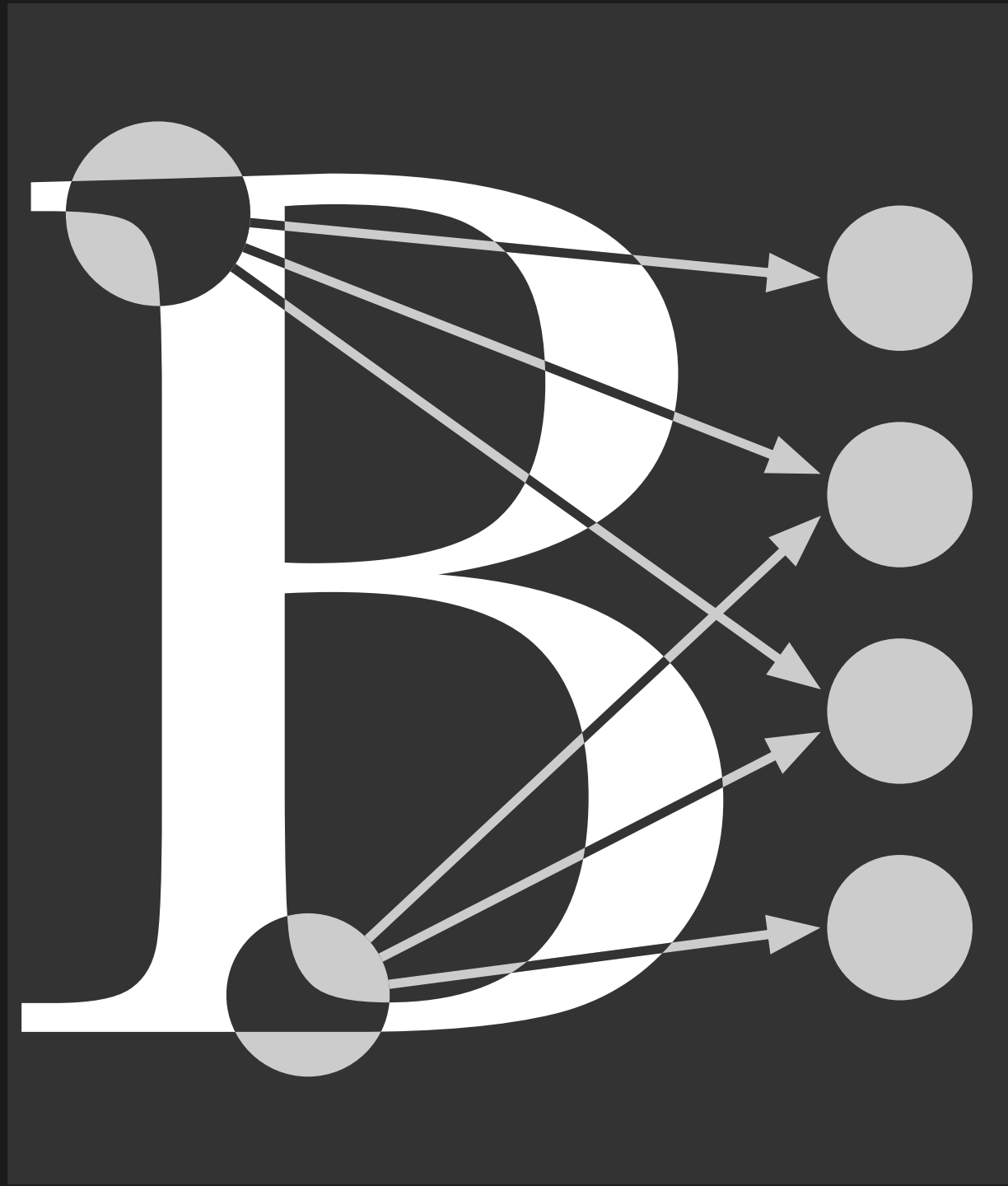
Baskerville hardware

UK Tier 2
52 nodes:

- IceLake CPU / 512GB
- 4x A100 GPU - 40GB (46) and 80GB (6)

5PB storage



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Baskerville Consortium

EPSRC and UKRI funded

World Class Labs scheme (EP/T022221/1)

Digital Research Infrastructure programme (EP/W032244/1)

Technology Partners

- NVIDIA
- Lenovo
- OCF

Research Partners

- University of Birmingham
- Diamond Light Source
- Rosalind Franklin Institute
- Alan Turing Institute

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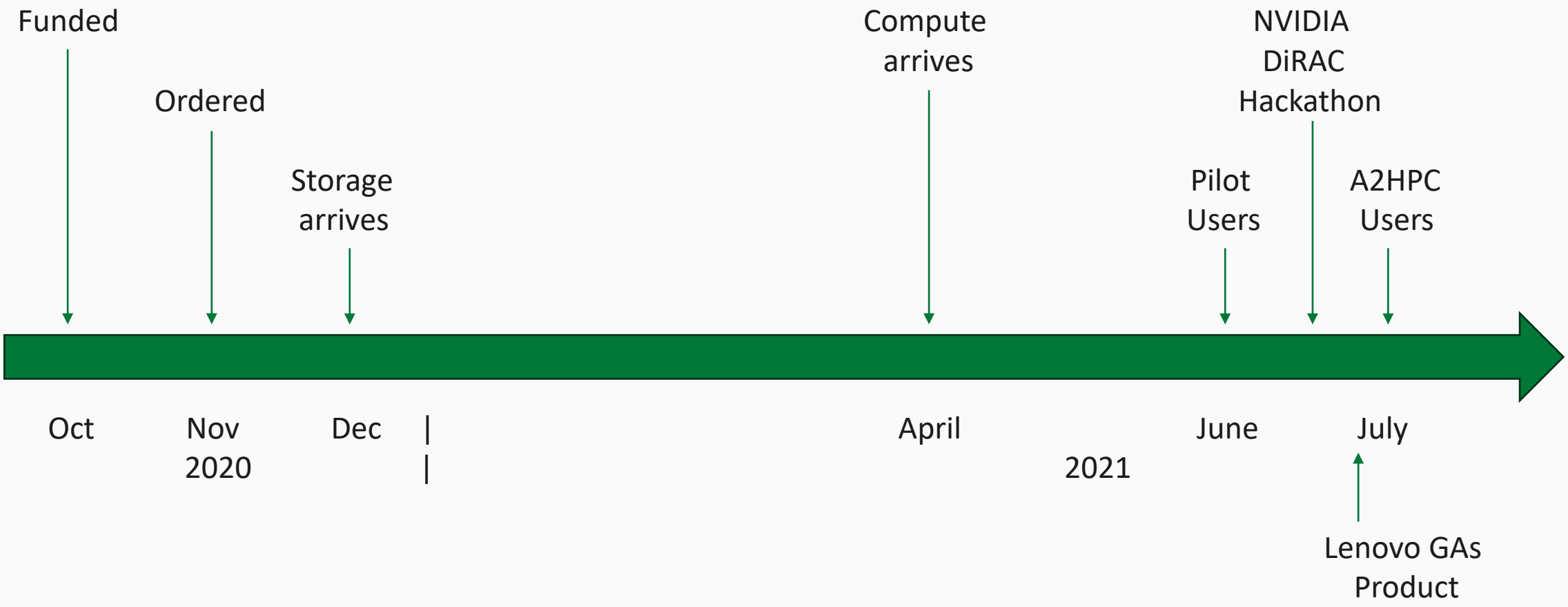
Timeline



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Deploying software

EasyBuild

- Short turn around
- Limited availability system
- Targeted expected use GPU software
  - PyTorch
  - TensorFlow
  - GROMACS
- ~200 software packages installed within a month
- ReFrame tests

EasyBuild

Process

- Development:
  - Interactive job
  - Source bash script to setup EB development config
  - Build existing, from PR, or create new easyconfig(s)
  - Issue or merge request in our Gitlab repository
- Live
  - Interactive job
  - Source bash script to setup EB live config
  - Build live
  - Post-EB process
    - Lmod spider cache
    - Add to our website

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Beyond ssh and user submitted batch jobs

Open OnDemand Portal

- 2-3% jobs – day to day
- But heavily used for training
  - up to 22% during some periods

Globus

- Easily transfer data back and forth
- Trigger for automated workflows

Questions?

Thanks to the team at UoB and our consortium partners.

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