New GPU Cluster

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2016 5 nodes, 20 GPUs plus Google cloud
Oct 2017 over 300 students in MLP

- No Google Cloud
- Normal cluster procurement (6+ months)
- Requirements capture & Design
- Install racking/network/power
- Equipment tender/bid/selection process
- Build, install, acceptance test, tune scheduler and filesystem
- Beta test program
- Commission
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Dec 2017 “It would be nice if all students had their own GPU”

- This Time it's a bit different
  - Requirements capture (4 hours), use existing filesystem (gluster), lower power GPUS 8 to a box
  - Fit cluster in existing spaces where we have power (3 racks on 3 sites)
  - Reduce procurement process down to 2 weeks for nodes
  - Place order 20/12/2017
  - Nodes start to arrive 19/1/2018, first power on 20/1/2017
Rack #1 (nodes 1-9)
Node with 8 GPUs
Rack 2
Cluster Organisation
Oct 2017 “over 100 students”

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Likely Problems

- Hardware is new and unknown
- Filesystem is reliable but not speedy (Transit van)
  - Slow on metadata queries
  - Think about using libgfapi
- Things will break at the joins
Problems/Issues

- Contact support
  - [https://www.inf.ed.ac.uk/systems/support/form/](https://www.inf.ed.ac.uk/systems/support/form/)
  - Have screen captures, logs, example code when reporting issues.
  - Feel free to cc me in the answer
  - iainr@inf.ed.ac.uk

- Help desk at AT 5.08 2pm