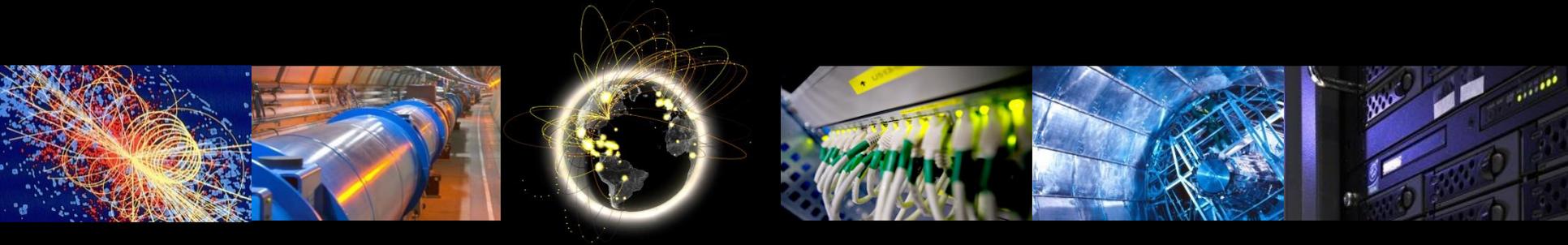


Lisbon WLCG Workshop report

Ian Collier
STFC Rutherford Appleton Laboratory

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Introduction

- Two days in devoted to medium term (Run 2-3) and longer term (Run 4) concerns
- ~140 people registered
- More of a discussion format rather than just presentations
 - Structured with series of short talks supporting discussion
 - (Informal) feedback from many said this was useful
 - Some aspects probably needed a bit more preparation to be more successful

Introduction contd.

- Almost no direct discussion of network issues
- This possibly/probably reflects that network capacity & performance continues to improve faster than other areas
 - The network is functioning well (enough) with capacity steadily increasing
 - The pain points are the ‘end of Moore’s Law’ for CPU & storage
- What follows is the areas that had the network ‘in the background’ so to speak.

Security

- An emerging focus on monitoring & logging network flows
 - Security Operations Centre capabilities using big data tools to aggregate and manage volume of data
- New working groups
 - Focusing on making SOC capability more readily installable at more sites
 - (Also a group looking at developing the trust and traceability model.)

Compute & Data discussion

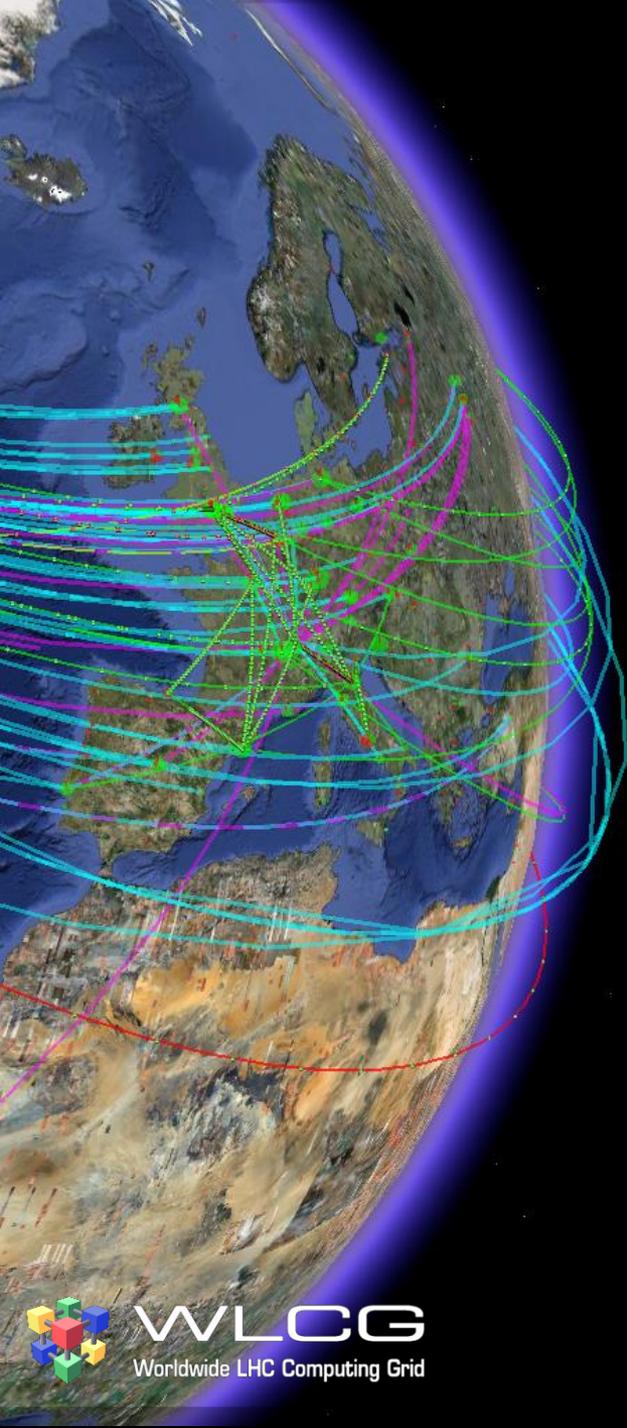
- Data
 - Roles of smaller sites (or with little support effort)
 - cataloged cache (eg dpm)
 - proxy cache (eg xroot)
 - boinc (no operator, no shared storage)
 - Some common questions
 - estimated impact on T1 (eg wan stageout)
 - Federation of storage, desired by some experiments
 - Prefer to have a single storage endpoint to aggregate resources across several sites
 - Maintain redundancy and replica locality
- Compute
 - Significant effort going into use of private & public clouds
- Underlying assumptions here about network bandwidth & reliability
 - There may be significant network requirements that emerge, but they were not discussed at this meeting

Outcomes – Longer Term

- 3 areas of work proposed – 2 of interest here:
 - Performance evaluation/modelling
 - Different granularities/scales:
 - Application on a machine
 - Site level: bottlenecks, large-scale performance
 - Overall distributed system
 - » At which level?
 - » Are data models and workflows appropriate?
 - This area may produce new networking requirements
 - Prototyping ideas arising from other activities

Details

- Lisbon WLCG Workshop agenda and talks:
 - <https://indico.cern.ch/event/433164/>
- Workshop summary from March GDB:
 - <https://indico.cern.ch/event/394780/>
- Past & future GDB meetings
 - <https://indico.cern.ch/category/6890/>



- Questions?