#### An Observation on Small VOs

- We have a new wave of experiments looking at distributed computing (IRIS+).
- Often they work with a "local" admin to get working at one site.
   (NOVA / CLAS12 / VIRGO), this works and is sometimes all that's needed. Also the GridPP VO.
- If they go to the next stage (multi site use) existing VO expanding in UK (NA64, MoEDAL). New VO starting from scratch (euclid).
   Need to think and work harder here to make this more successful.
- Work tends to come in waves. Sites stop working in between.
   Experiments get depressed with Grid ("Grid does not work").

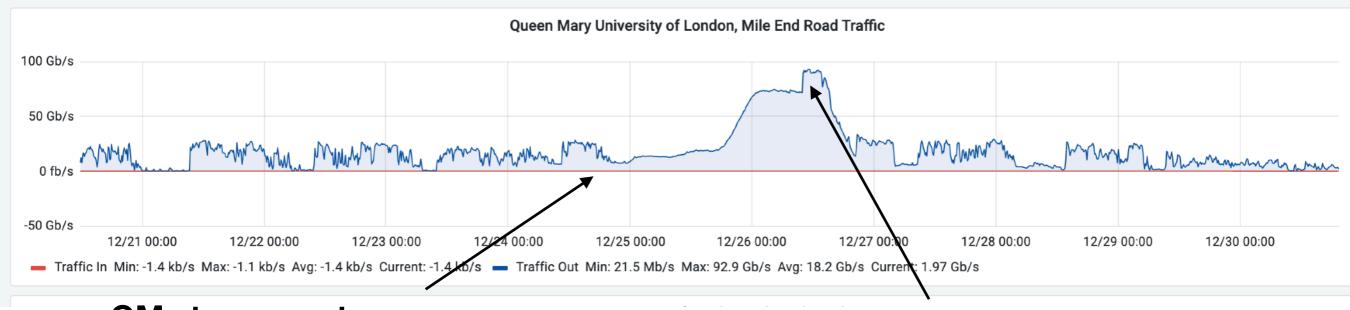
# **UK** monitoring

- In the past we had UK grid monitoring, nagios, Steves' tests.
   Mostly retired now.
- With more UK use of grid for resources do we need to look at improving what we do here.
- We have Perfsonar mesh. Don't need to redo ops test.
- Thinking more VO specific test like the CERN ETF tests. Or evolve Steves tests.

# HepSysman

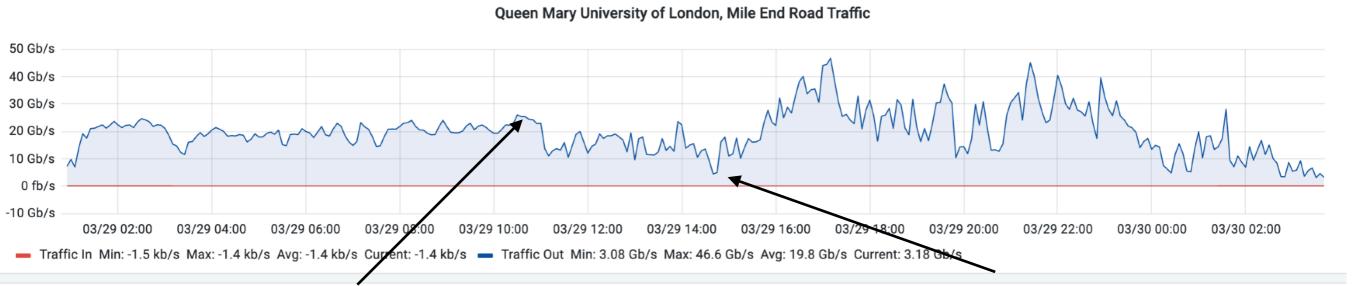
- Last meeting in May 2019 in RAL (<a href="https://indico.cern.ch/event/721692/">https://indico.cern.ch/event/721692/</a>)
- A good place to talk shop, network, see what others are doing.
   Find solutions or hits of solutions
- Do/Can we restart these meetings? June?
- Topics: Migration from el9; Security; Strategies to cope with central IT; data centres; kubernetes; juperterhub;....

#### I need more network



QM storage gets grumpy with a failed disk.
Offline for ATLAS

CMS streams data to QM 96.2Gb/s



One Webdav endpoint 20-30Gb/s

Three webdav Endpoints ~ 50Gb/s (need tuning)

### Any other issues?