



Input to WLCG ws:

**“Experiment workflows & data  
management tools and infrastructure”**

*CMS*

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# Experiment workflows & data management tools and infrastructure

Regardless of what happened in last 10 years, we have 10 years in front of us

- ♦ many driving factors will change a lot (and not so predictably), including the funding landscape, the available manpower, the role of other e-Sciences -

WM: Pursuing common resource provisioning and scheduling tools?

- ♦ e.g. in the past ATLAS/CMS did not manage to converge. Should we try again in the long term?

DM: {static, dynamic} data placement, {local, remote} data access

- ♦ An underlying point-to-point transfer service layer: will its need persist?
- ♦ A tool for experimental datasets replication at the application layer: differences prevailed over commonalities in Run-{1,2}. What in Run-{3,4}?
- ♦ Data locality: a stone before, sand now..

# Experiment workflows & data management tools and infrastructure

## Network evolutions

- ♦ Networking was a key for Run-1 success. Its high-performance and robustness are part of the enabling technologies for future evolution, flexibility and efficiency of our workflows. Awareness campaign by WLCG to FAs?
- ♦ Role of other e-Sciences?
- ♦ Network-awareness in the LHC applications? Or application-level tools and namespace moving into the network stack? CDN? NDN? ...
- ♦ Role of WLCG with network fabric experts

## Is the divide increasing?

- ♦ what if sites are not in LHCONE and inclusion does not happen because it is not perceived as a priority since nobody state it is?
- ♦ Constant forum to (re-)assess what "good WAN" means and make it become part of resource provisioning negotiations would be a value?