

> Present model

- Data are pre-distributed – Jobs go the data
- Originally assumption: WAN connection (very) limited
 - > Turns out to be not really true

> CMS started already testing WAN file access via xrootd

- See some contributions at Bari workshop
<http://indico.cern.ch/conferenceOtherViews.py?confId=114281&view=standard>
- DESY with very small participation

> NFS4.1 with pNFS

- Available in recent D-Cache and future DPM
- Interesting option for WAN file acces
- Some activities planned between RWTH and DESY

Analysis optimization



➤ Many “application failures”

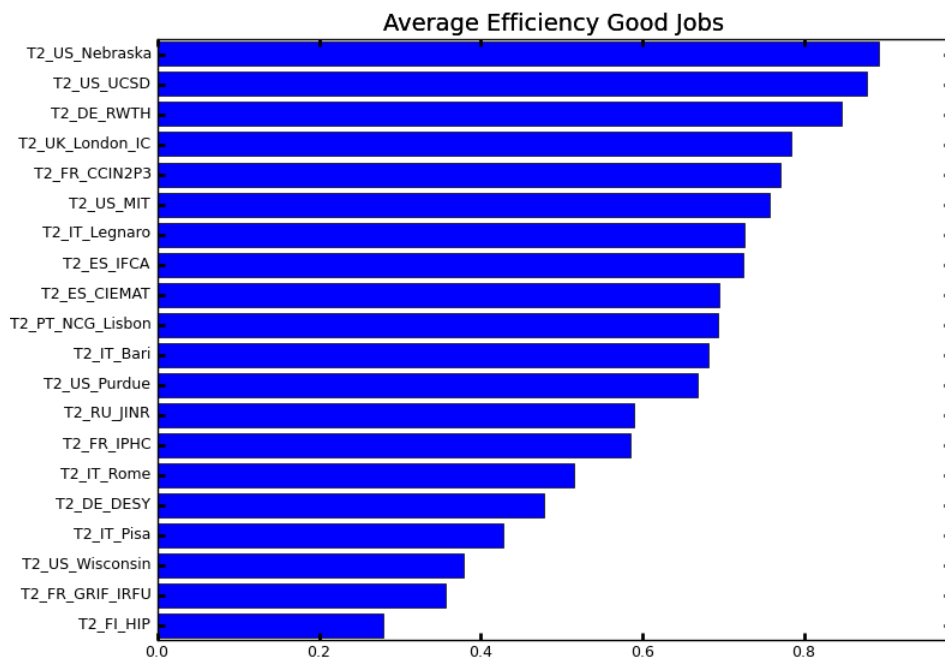
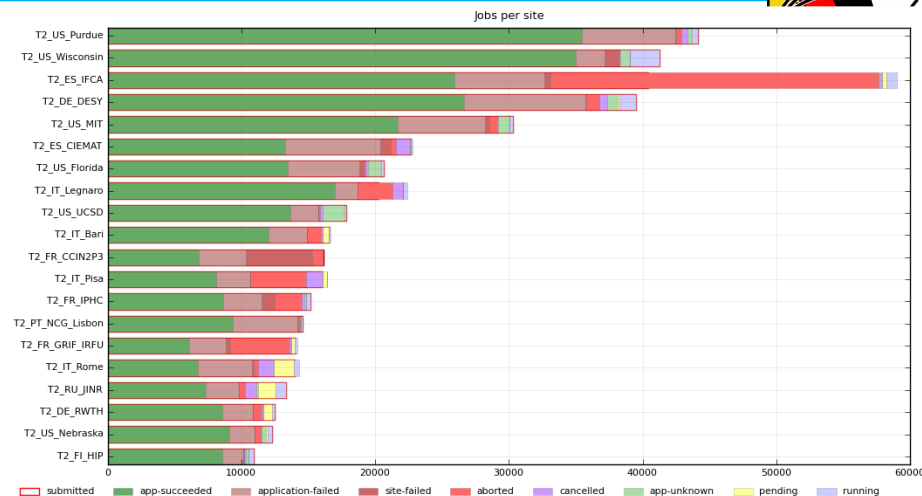
- More robust tools needed
- Knowledge and support are vital

➤ Rather bad CPU efficiency

- Frame work issues
- Site setup to be optimized

➤ Requires person power

- Systematic evaluation of products
- Detailed understanding of experiment software and analysis tools



➤ Multi-core CPUs

- Make use of many cores in one executable “multi thread”
- Incorporate such jobs into the experiment frames and the Grid middleware
- Work started for Reco and special tasks (e.g. alignment)
Not much done for analysis (?)

➤ GPU (Graphic processors)

- Very powerful for special tasks
- High learning threshold to get started

➤ Cloud technology (a buzz word not to missed nowadays)

- Run existing applications work flows in existing (commercial) Clouds
- Operate Clouds our self
- Link Grid and Cloud infrastructures

