



LCG Workshop

Computing Fabric



The preparations for the MoU papers with the different Tiers have started, which will define the responsibilities and functionalities of the Tiers
CERN is a Tier0 and has also a Tier1, which is in the current planning nothing 'special', same as any other Tier1

e.g.

T0 : stores the raw data on tape, does the first pass reconstruction,.....

T1 : stores part of a raw data copy on tape, has x % of the ESD on disk, produces AODs, supports Tier2, access to repositories (software, data, calibration,etc.),

T2 : AOD analysis,

(just examples)

To do this some assumptions about the computing model need to be done, especially about the data flow e.g. :

→one copy of the raw data per experiment is at CERN , a second one is distributed online to all Tier1 associated with an experiment

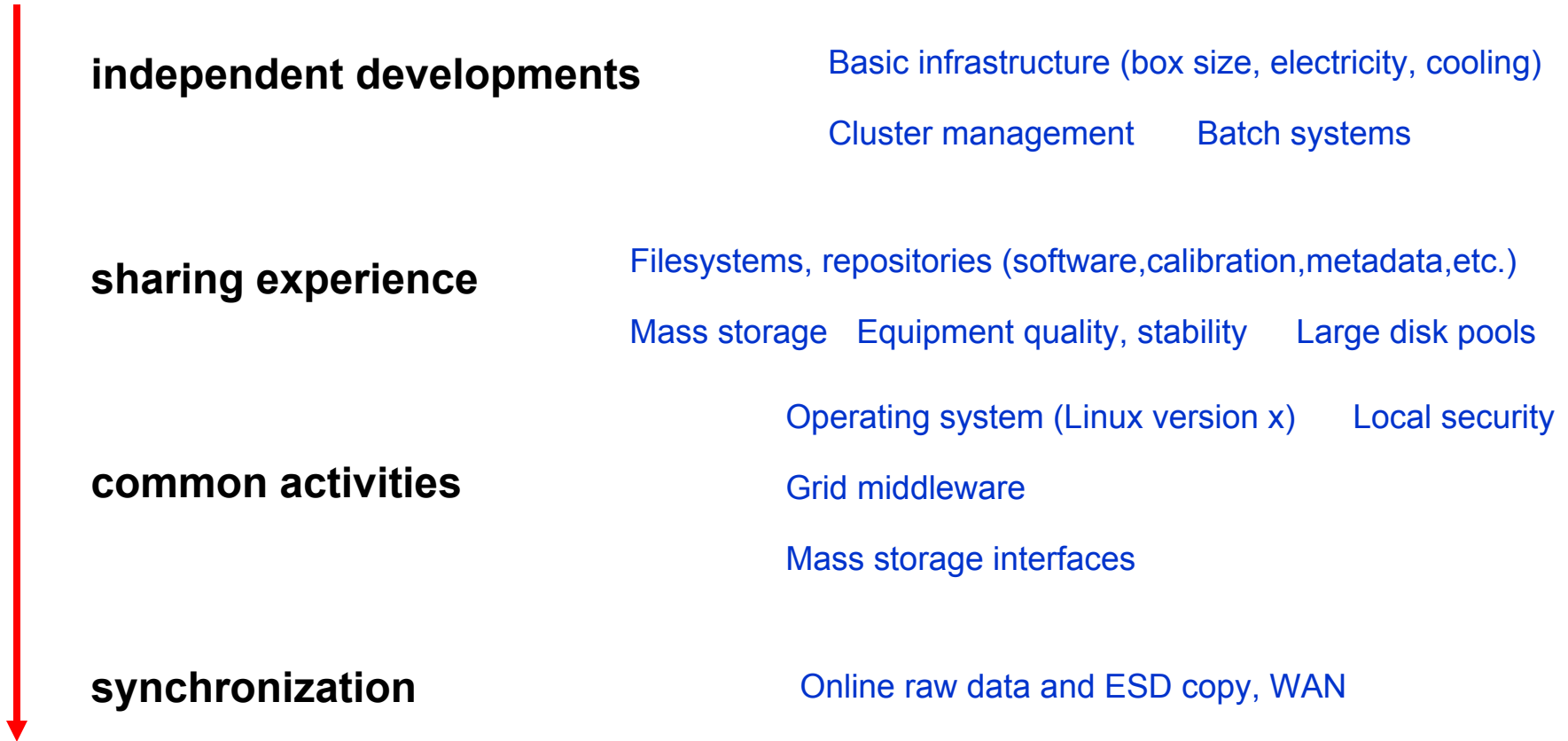
→the first pass of the reprocessing is done online at CERN and the EOD is stored and 2? copies are send to the Tier1

→re-processings are done at the Tier1 and a copy of each EOD version is send to CERN

→frequent AOD productions are done from the ESDs at the Tier1 centers, distributed to the T2 centers



'Technical' coupling of the Tier 0/Tier 1 centers



dependency level



some 'random' questions.....

Where does one have to have more collaboration efforts ?

Do we need dedicated WAN 'data challenges' between T0 and Tier1 centers and within Tier1 centers ?
within the GRID middleware framework or separate for bulk synchronous data transfers ?

GRID middleware \leftrightarrow Fabric interface
How much is the middleware effecting the choices of the fabric (OS, security, node monitoring, etc.) ?

Is HEPIX frequent enough to share experience ?

RedHat commercial versus HEP support, MySQL versus Oracle

Mixture of support for LCG, other experiments/sciences, LHC experiment specific software (e.g. Alien),.....