



ALICE rates to tape in Run3

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Question

...we would like to start discussing the combined tape throughput tests. ... If you have material that is relevant to the discussion ... For example the table we have seen from LHCb with the needed rates per T1 and a description of the access pattern (“we need to reprocess the data of a given year during the EYTS”) ...

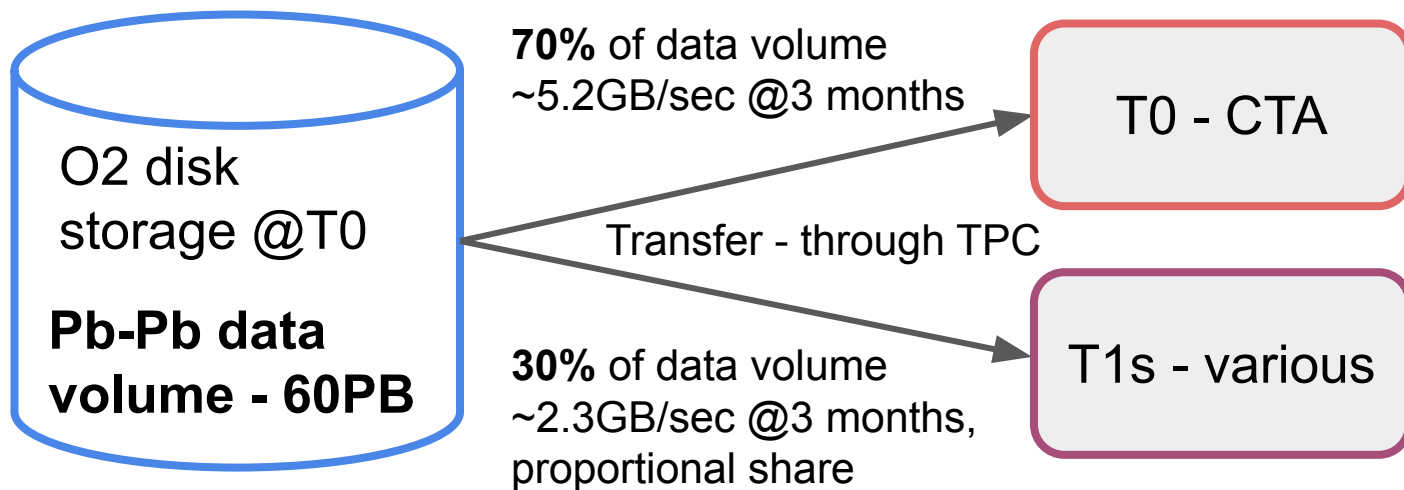
Maria and Simone

ALICE and tapes - use cases

- Custodial storage of Compressed Time Frames (CTF) - Run3 equivalent of RAW data
- Custodial storage of analysis container (AODs)
- Reading of CTFs during re-processing campaigns
 - Relatively low level during Run3
 - Most of re-processing requiring tape access - during LS3

Highest demand on tapes

- Copy of Pb-Pb data over 3 months after HI data taking (end of year)



Remark: @3 months are **after** the data taking is completed. Some transfer is possible during data taking, contingent on load on O2 disk storage

Tape traffic share per T0/T1s sites for Pb-Pb case

Site	Share of total %	~write traffic GB/s	Remark
CERN	70	5.2	Read rate \approx write rate, during LS3
CNAF	8.7 (29% of 30%)	0.67	
GridKA	6.3 (21% of 30%)	0.48	
RRC-KI	4.2 (14% of 30%)	0.32	
CC IN2P3	4.2 (14% of 30%)	0.32	
NDGF	3.3 (11% of 30%)	0.25	
KISTI	1.5 (5% of 30%)	0.12	Disk-based custodial storage
RAL	0.9 (3% of 30%)	0.07	Read rate \approx write rate, during LS3
NL-T1	0.9 (3% of 30%)	0.07	
TOTAL	100%	7.5	

ALICE and tapes - use cases (2)

- The Pb-Pb data copy is the highest demand tape use case
- All other activities - p-p data copy, AOD copy, tape reading will be at a significantly lower rate
- Tape recall - large volume during LS3