

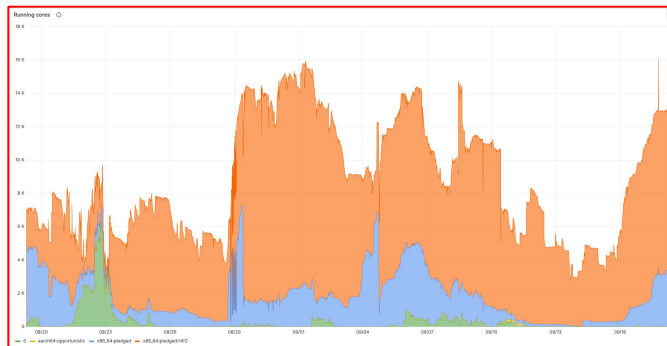
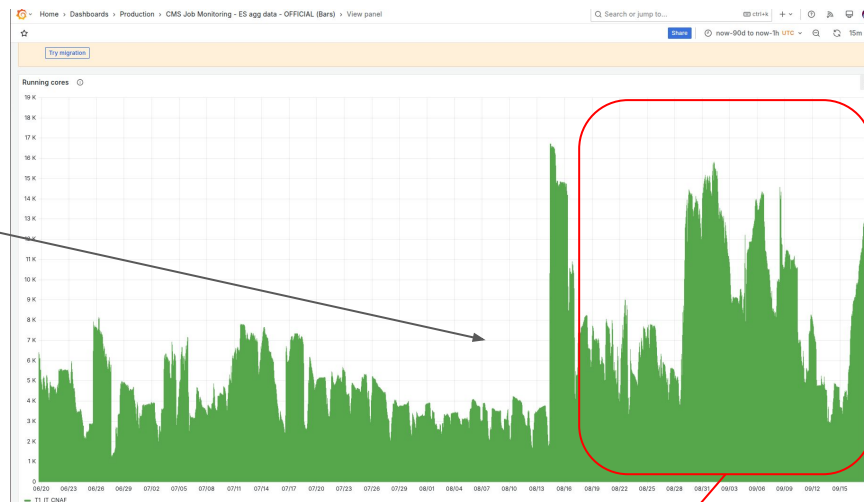
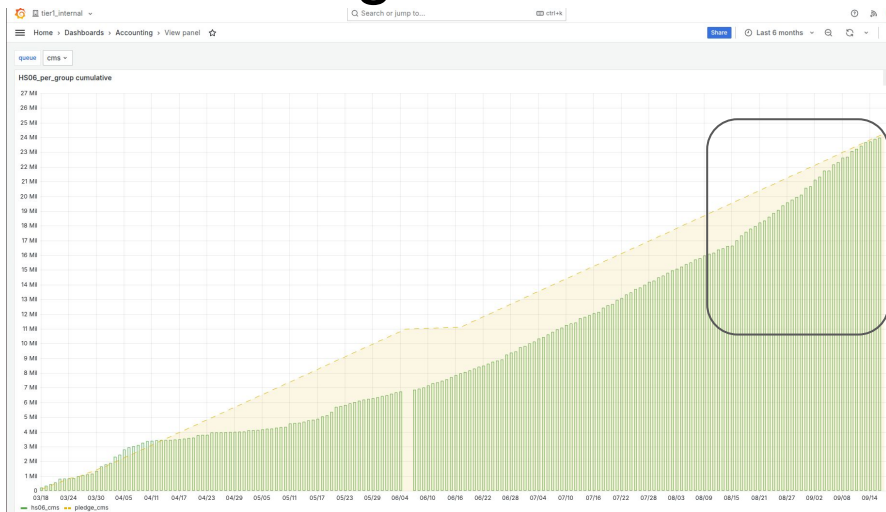
# CMS - CdG T1

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INFN-PG

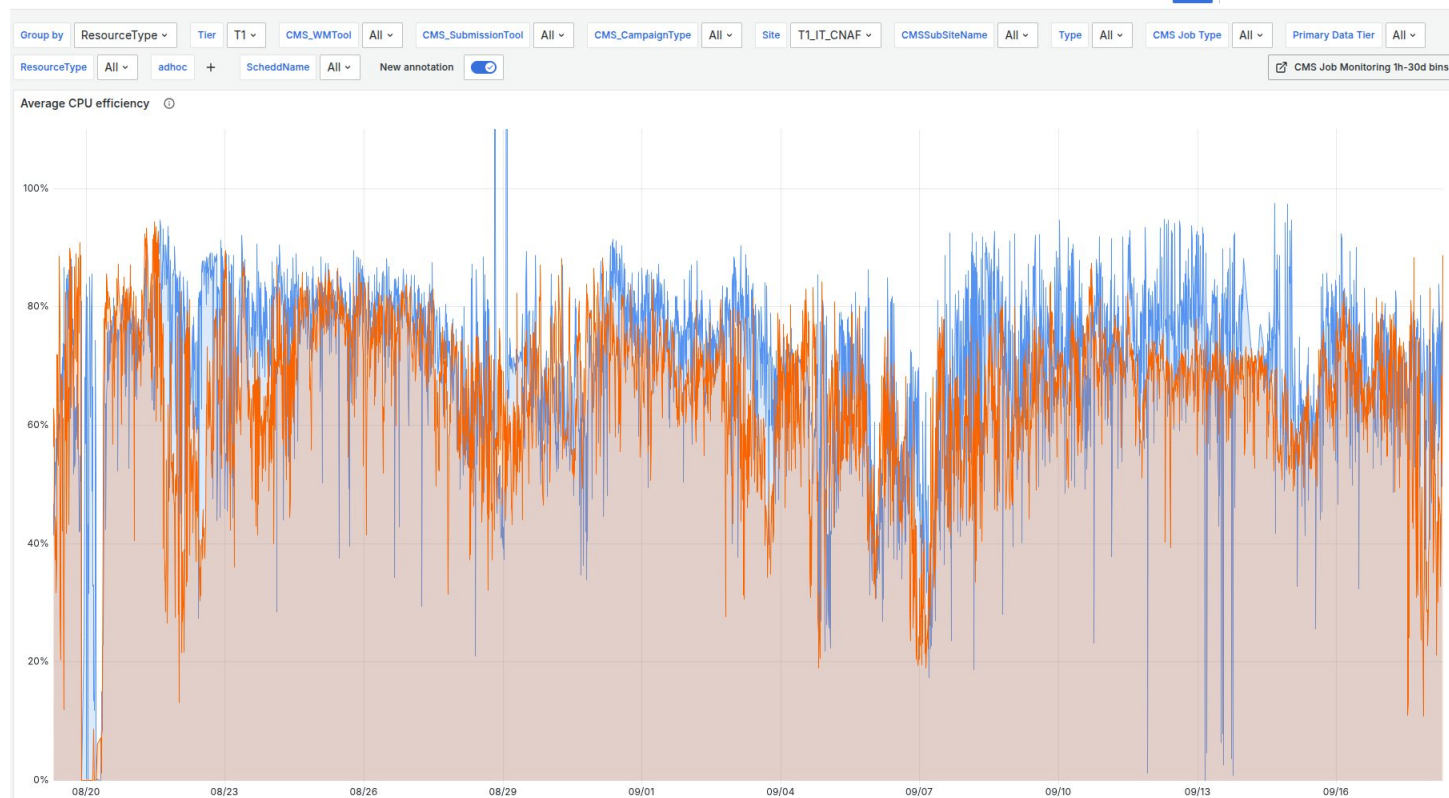
19.09.2025



# CPU Pledge e utilizzo



# CPU Efficiency





# Tape debugging story and current status: recap

During the past CDG (end of June)

### Tape write rate

**Tape overview**

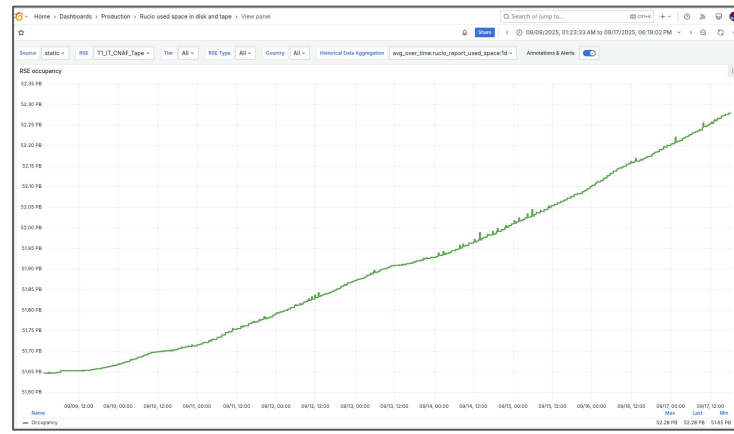
- Write rates at some tapes aren't enough to timely consume their backlog.
  - Caution: Transfer total generated on tapes aren't identical, thus the write rates can't be compared
- Tier-0 has only two tapes (FNAL & RAL) to use for the second copy for the rest of the year!
- Should CMS formulate a expected throughput from each tape system?

Tape	Write rate (GB/s)	Current backlog (PB)	Free Space (PB)	Notes
FNAL	4.01	6.1	82	Consumption of backlog got faster after CTX migration
CNAF	0.89	0.6	17.8	Consumption of backlog is slow due to low throughput
JNRP	1.88	0	12.7	It was good test month, but having issues nowadays
RAL	0.82	0.01	4.9	
MIT	0.35	1.25	3.75	
IN2P3	1.42	0.03	0.9	
KIT	1.62	0.08	0.8	
PIK	0.5	0.03	0.4	

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**Run3 targets**

VO	Reads (DT) GB/s	Writes (DT) GB/s	Reads (A-DT) GB/s	Writes (A-DT) GB/s
ALICE		0.8	0.3	0.8
ATLAS	0.2	0.9	0.8	0.5
CMS	0.1	1.2	1.9	0.2
LHCb		2.24 1.72	0.86 1.35	
Total	0.3	4.62	4.35	1.5



Thanks for the valuable support during August!!



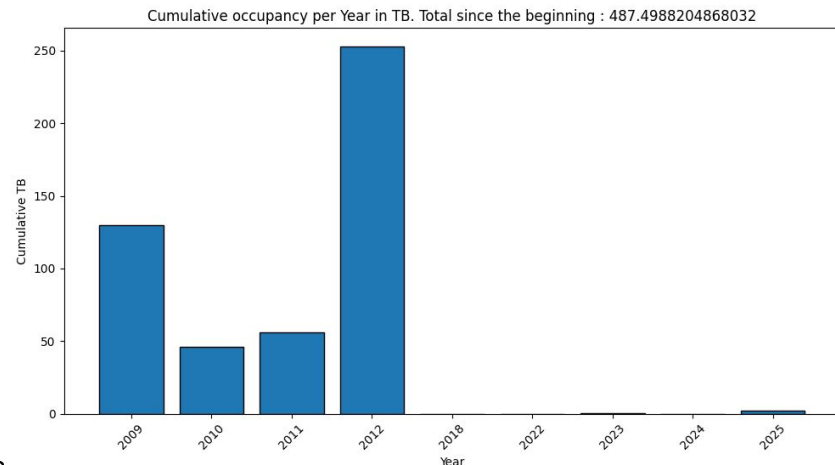
# Still something to do on CMS side...

## Consistency check

- Under To avoid dark/miss data on TAPE

## Waiting CMS to take action with problematic file

- File with missing checksum



# Altro tape



From last scrutiny meeting

## Richiesta straordinaria “Anticipo TAPE”



La richiesta “verbatim” →

due to procurement delays we will not be able to use the full tape pledge at one of the CMS Tier-1 sites. Due to this we are short on tape space and anticipate to be forced to stop writing a second RAW data copy after the next machine development period that starts September 1st.  
I want to check with you on the tape media situation at CNAF. Do you have additional media beyond the pledge you could make available to CMS (i.e. advancing part of next year's pledge)? It would help us a lot, since the archive polling issue at CNAF is resolved and you have a good archival bandwidth.

**NOTA:** Il CNAF è il secondo (dopo FNAL, escluso JINR) Tier 1 di CMS e la suddivisione del carico con in nostro Tier 1 contribuisce a ridurre la domanda di spazio presso FNAL

**Executive:** Qualora approvata la richiesta dei 12PB di TAPE per il 2026, modulo le disponibilità del CNAF, **potremmo anticipare qualcosa?**

RICHIESTE 2026				
T1	pledge 2025	pledge 2026	Incremento	Eur Delta
CPU (kHS06)	143	156	13	104000
DISK (TBN)	18460	21320	2860	286000
TAPE (TB)	57850	70200	12350	98800
				488800